Environmental Impact Statement

SSD 10424 - Saint Ignatius' College Riverview

2-60 Riverview Street and Tambourine Bay Road, Riverview

Prepared for Saint Ignatius' College Riverview

Prepared by Ashleigh Smith
Willowtree Planning Pty Ltd

November 2020

Document Control Table			
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Contact	Ashleigh Smith, Associate		
Version and Date	Prepared by	Checked by	Approved by
Version No. 1 – 23 October 2020	Ashleigh Smith Associate	Ashleigh Smith Associate	Thomas Cook Director
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CLAUSE 4.12(8) CERTIFICATE

Declaration Form	**Submission of Environmental Impact Statement (EIS)** prepared under the *Environmental Planning and Assessment Act 1979* Clause 4.12(8)
EIS Prepared By	
Name	**Ashleigh Smith, Associate**
Qualifications	**BA (Hons) MPIA**
Address	Suite 7, Level 7, 100 Walker St North Sydney NSW 2060
EIS Reviewed By	
Name	**Thomas Cook, Director**
Qualifications	**Bachelor of Planning, UOW**
In Respect Of	State Significant Development Application
Development Application	
Applicant Name	St Ignatius' College Riverview
Address	2-60 Riverview Street and Tambourine Bay Road, Riverview
Land to be Developed	2-60 Riverview Street and Tambourine Bay Road, Riverview Lot 10 DP 1142773
EIS	An Environmental Impact Statement (EIS) is attached.
Certificate	I certify that I have prepared the contents of this EIS and to the best of my knowledge: ▪ it is in accordance with Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*, ▪ contains all available information that is relevant to the environmental assessment of the development, activity or infrastructure to which the statement relates, and ▪ that the information contained in the statement is neither false nor misleading.

Signature		
Name	Ashleigh Smith, Associate	Thomas Cook, Director
Qualification	BA Hons (MPIA)	Bachelor of Planning, UOW
Date		

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GLOSSARY OF TERMS

TERM	*MEANING*
A Metropolis of Three Cities	A Metropolis of Three Cities - The Greater Sydney Region Plan
AU$	Australian Dollars
Council	Lane Cove Council
CIV	Capital Investment Value
CPTED	Crime Prevention Through Environmental Design
DPIE	Department of Planning, Industry and Environment
EIS	Environmental Impact Statement
EP&A Act	Environmental Planning and Assessment Act 1979 (as amended)
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
EPI	Environmental Planning Instrument
EES	Environment, Energy and Science Group
FTE	Full Time Equivalent
GA NSW	Government Architect NSW
GSC	Greater Sydney Commission
GPT	Green Travel Plan
LEP	Local Environmental Plan
PMDL	PMDL Architects
RMS	Roads and Maritime Services
SEARs	Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy
The School	Saint Ignatius' College Riverview
Sqm or m^2	Square metres
SREP	Sydney Regional Environmental Plan
SSD	State Significant Development
The Site	2-60 Riverview Street and Tambourine Bay Road, Riverview
TfNSW	Transport for NSW
Willowtree Planning	Willowtree Planning Pty Ltd

PART A PRELIMINARY

1.1 INTRODUCTION

This Environmental Impact Statement (EIS) is submitted to the New South Wales Department of Planning, Industry and Environment (DPIE) pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) in support of an application for State Significant Development 10424 (SSD). This EIS has been prepared by Willowtree Planning on behalf of St Ignatius' College Riverview, in accordance with the Secretary's Environmental Assessment Requirements (SEARs) dated 5 February 2020.

The SSD seeks consent for ***New Ignis Stage 2*** comprising of a new teaching and learning facility for **St Ignatius' College Riverview** on land at 2-60 Riverview Street and Tambourine Bay Road, Riverview, being legally described as Lot 10 DP 1142773 (the Site). The proposed development seeks approval for Stage 2 of the approved Masterplan (SSD 7140) which provides a framework for the future development of the School. The proposal includes the construction of a five (5) storey teaching and learning facility to ensure the implementation of a modern teaching and learning facility and the ongoing evolution of the School. In summary, this application seeks detailed built form approval for *New Ignis Stage 2*. It is recognised the *New Ignis Stage 2* forms Stage 2 of the Concept Master Plan approved under State Significant Development 7140 (refer to **Section 1.3**)

The proposal is for the construction of a new teaching and learning facility to complement the existing School, being a type of *Educational Establishment* in accordance with the Standard Instrument land use definitions. The proposal is classified as State Significant Development pursuant to Schedule 1 of *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP). Clause 15, Schedule 1 of SEPP SRD 2011, identifies classes of development which are SSD, which includes the following:

> *(2) Development that has a capital investment value of more than $20 million for the purpose of alterations or additions to an existing school.*

This EIS describes the Site and proposed development, provides relevant background information, responds to the SEARs and assesses the proposed development against the relevant matters set out in relevant legislation, environmental planning instruments and planning policies.

The structure of the EIS is as follows:

- **Part A** Preliminary
- **Part B** Site Analysis
- **Part C** Proposed Development
- **Part D** Legislative and Policy Framework
- **Part E** Consultation
- **Part F** Environmental Risk Assessment
- **Part G** Management and Mitigation Measures
- **Part H** Project Justification
- **Part I** Conclusion

1.2 PROJECT TEAM

The State Significant Development Application (SSDA) has been prepared by a project team comprising the qualified experts listed in **Table 1** below.

Table 1. Project Team

Discipline	Consultant	Technical Input	Date	Appendix
Planning	Willowtree Planning	Environmental Impact Statement	November 2020	-
Planning	Willowtree Planning	DCP Compliance Table	October 2020	1
Planning	Willowtree Planning	Environmental Risk Assessment	October 2020	2
Quantity Surveying	Altus	QS Report	October 2020	3
SEARs	Department of Planning, Industry & Environment	SEARs Report	February 2020	4
Survey	LTS Surveyors	Survey Plan	May 2020	5
Architecture	PMDL	Architectural Drawings	October 2020	6
Architecture	PMDL	Architectural Design Report	October 2020	7
Landscape	Arcadia	Landscape Master Plan	October 2020	8
Landscape	Arcadia	Landscape Plans	October 2020	9
Traffic	Positive Traffic	Traffic and Access Assessment Report	October 2020	10
Traffic	TTM	Green Travel Plan	October 2020	11
Heritage	NBRS Architecture	Heritage Impact Assessment	October 2020	12
Aboriginal Heritage	Comber	Aboriginal Cultural Heritage Assessment Report (ACHAR)	September 2020	13
Noise	PKA Consulting	Noise Impact Assessment	August 2020	14
Construction Traffic Management Plan	Prime Construction	Construction Management Plan	October 2020	15
ESD	Action Sustainability	ESD Strategy	October 2020	16
Biodiversity/Ecological Assessment	Eco Logical	Ecological Assessment Report/BDAR Waiver Request	August 2020	17
Biodiversity	DPIE	BDAR Waiver	September 2020	18
Arborist	Tree IQ	Arborist Report	November 2020	19
Civil Engineering	Taylor Thompson Whitting	Civil Engineering Reports	October 2020	20
Civil Engineering	Taylor Thompson Whitting	Civil Plans	October 2020	21
Access	Cheung Access	Accessibility Report	October 2020	22
BCA	BMG	BCA Assessment	August 2020	23
Services	Northrop	Infrastructure Management Plan	October 2020	24

Table 1. Project Team				
Discipline	**Consultant**	**Technical Input**	**Date**	**Appendix**
Hydraulics	JHA Engineers	Integrated Water Management Plan	October 2020	25
Structural	Northrop	Structural Report	August 2020	26
Lighting	Northrop	Lighting Statement	September 2020	27
Waste	Waste Audit	Operational Waste Management Plan	September 2020	28
Waste	Waste Audit	Demolition and Construction Waste Management Plan	September 2020	29

1.3 DEVELOPMENT HISTORY

The Minister for Planning granted development consent on 24 June 2016 for **State Significant Development 7140** for the **Concept Master Plan Approval** and **Stage 1 Built Form Approval** for Saint Ignatius' College Riverview, for the following:

- *Concept Proposal for the staged redevelopment of the Saint Ignatius' College Riverview Senior School Campus over a 30 year period, comprising:*
  - *Demolition works;*
  - *Construction of new buildings and recreation facilities;*
  - *Refurbishment and expansion of existing buildings;*
  - *Vehicular access, car parking and pedestrian circulation arrangements;*
  - *New recreation and outdoor spaces; and*
  - *Associated landscaping.*

- *Stage 1 Works, including the expansion and refurbishment of the existing buildings in the Therry Precinct and associated landscaping.*

Pursuant to Section 4.24 of the EP&A Act, *"while any consent granted on the determination of a concept development application for a site remains in force, the determination of any further development application in respect of the site cannot be inconsistent with the consent for the concept proposals for the development of the site"*.

In order to facilitate the delivery of the Stage 2 SSD Project, a modification application (SSD-7140-MOD-3) was required to the approved Concept Master plan application. As such, a modification application to the Concept Master Plan was submitted to the DPIE seeking consent for the following:

- Relocation of Wallace Precinct Building Envelope;
- Redistribution of Recreation Precinct;
- The height of the new building will be five (5) levels; one (1) level higher than the existing facility which will equate to the top floors of the existing Doyle and Vaughan Buildings; and
- Removal of Tree Vegetation.

SSD-7140-MOD-3 was determined by the DPIE on 11 August 2020. It is acknowledged *New Ignis Stage 2*, proposed under **SSD 10424** will remain consistent with the Concept Master Plan (as modified).

1.4 THE PROPONENT

The proponent (applicant) is St Ignatius' College Riverview. See **Table 2** for contact details.

Table 2. Proponent Details	
Contact Name	Philip Dean
Company Details	St Ignatius' College Riverview
Contact Number	2-60 Riverview Street and Tambourine Bay Road Riverview

1.5 APPROVALS PATHWAY

Schedule 1 of SRD SEPP identifies development which is deemed to be State Significant Development. Clause 15 of Schedule 1 relates to education establishments and provides that development for the purpose of alterations and additions to an existing educational establishment, with a CIV over $20 million, is State Significant Development. The proposed development therefore qualifies as State Significant Development.

Accordingly, this EIS has been prepared in accordance with the requirements of Part 4 of the EP&A Act, Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation) and the SEARs issued **5 February 2020**. The Minister for Planning will be the determining authority for the project.

1.6 CAPITAL INVESTMENT VALUE

The capital investment of this project is estimated at **$39,676,204 (excluding GST)**, subject to final costing and tender clarifications (**Appendix 3**).

1.7 JOBS CREATION

As detailed in the Quantity Surveyors Report (**Appendix 3**), the proposed development is estimated to generate 220 jobs during the construction phase.

1.8 SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS

In accordance with Section 4.22 of the EP&A Act, SEARs were issued by the Secretary of DPIE on 5 February 2020 (**Appendix 4**).

Table 3 provides a detailed summary of the individual matters listed in the SEARs and identifies where each of these requirements have been addressed in this EIS and accompanying technical studies.

This EIS is also consistent with Clause 6 and 7 of Schedule 2 of the EP&A Regulation which specifies the minimum requirements for environmental impact statements.

Table 3. SEARs Requirements		
Matters Raised	**Reference in EIS**	**Reference to Technical Report**
General Requirements		
The environmental impact statement (EIS) must be prepared in accordance with and meet the minimum requirements of clauses 6 and 7 of Schedule 2 of the Environmental Planning and Assessment Regulation 2000 (the Regulation). Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development. Where relevant, the assessment of key issues below, and any other significant issues identified in the risk assessment, must include: ▪ adequate baseline data ▪ consideration of the potential cumulative impacts due to other developments in the vicinity (completed, underway or proposed) and ▪ measures to avoid, minimise and if necessary, offset predicted impacts, including detailed contingency plans for managing any significant risks to the environment.	The EIS has been prepared in accordance with Clauses 6 and 7 of Schedule 2 of the EP&A Regulation. An Environmental Risk Assessment is provided in **Appendix 2** and summarised in **Part H** of this EIS.	
The EIS must also be accompanied by a report from a qualified quantity surveyor providing: ▪ a detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the Regulation) of the proposal, including details of all assumptions and components from which the CIV calculation is derived. The report shall be prepared on company letterhead and indicate applicable GST component of the CIV ▪ an estimate of jobs that will be created during the construction and operational phases of the proposed development and ▪ an estimate of jobs that will be created during the construction and operational phases of the proposed development and ▪ certification that the information provided is accurate at the date of preparation.	▪ Section 1.6 ▪ Section 1.7	▪ Appendix 3
Key Issues		
The EIS must address the following specific matters: **1. Statutory and Strategic Context**	▪ Part D	▪ -

Table 3. SEARs Requirements		
Matters Raised	**Reference in EIS**	**Reference to Technical Report**
Address the statutory provisions applying to the development contained in all relevant environmental planning instruments, including: ▪ 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 ▪ Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 ▪ Draft State Environmental Planning Policy (Remediation of Land) ▪ Draft State Environmental Planning Policy (Environment) and ▪ Lane Cove Environmental Plan 2009. ***Permissibility*** Detail the nature and extent of any prohibitions that apply to the development. ***Development Standards*** Identify compliance with the development standards applying to the site and provide justification for any contravention of the development standards. ***Provisions*** Adequately demonstrate and document in the EIS how each of the provisions in the listed instruments are addressed, including reference to necessary technical documents. ***Saint Ignatius' College Riverview Concept Proposal*** In accordance with Environmental Planning and Assessment Act 1979, demonstrate that the proposal is not inconsistent with the development consent granted for Saint Ignatius' College Riverview (SSD-7140).		

Table 3. SEARs Requirements		
Matters Raised	**Reference in EIS**	**Reference to Technical Report**
2. Policies Address the relevant planning provisions, goals and strategic planning objectives in the following: ▪ NSW State Priorities ▪ The Greater Sydney Regional Plan, A Metropolis of three cities ▪ Future Transport Strategy 2056 ▪ State Infrastructure Strategy 2018 – 2038 Building the Momentum ▪ Sydney's Cycling Future 2013 ▪ Sydney's Walking Future 2013 ▪ Sydney's Bus Future 2013 ▪ Crime Prevention Through Environmental Design (CPTED) Principles ▪ Better Placed: An integrated design policy for the built environment of New South Wales (Government Architect NSW (GA NSW), 2017) ▪ Healthy Urban Development Checklist (NSW Health, 2009) ▪ Draft Greener Places Policy · Eastern City District Plan ▪ Lane Cove Development Control Plan 2010 and ▪ Draft Lane Cove Local Strategic Planning Statement	▪ Part D ▪ Part E	▪ Appendix 1
3. Operation ▪ 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 on the site. ▪ Provide a detailed justification of suitability of the site to accommodate the proposal. ▪ Provide details of how the site will continue to operate during construction activities, including proposed mitigation measures.	▪ Part B ▪ Part H	▪ Appendix 15
4. Built Form and Urban Design		
▪ Address the height, density, bulk and scale, setbacks and interface of the proposal in relation to the surrounding development, topography, streetscape and any public open spaces.	▪ Part C ▪ Part H	▪ Appendix 6 ▪ Appendix 7
▪ Address design quality and built form, with specific consideration of the overall site layout, streetscape, open spaces, façade, rooftop, massing, setbacks, building articulation, materials and colours.	▪ Part C ▪ Part H	▪ Appendix 6 ▪ Appendix 7
▪ Provide details of any digital signage boards, including size, location and finishes.	▪ N/A	▪ N/A

Table 3. SEARs Requirements		
Matters Raised	**Reference in EIS**	**Reference to Technical Report**
▪ 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 GA NSW Design Guide for Schools.	▪ Part E ▪ Part G	▪ Appendix 7
▪ Detail how services, including but not limited to waste management, loading zones, and mechanical plant are integrated into the design of the development.	▪ Part C ▪ Part H	▪ Appendix 24 ▪ Appendix 25 ▪ Appendix 26 ▪ Appendix 28
▪ Provide detailed site and context analysis to justify the proposed site planning and design approach including massing options and preferred strategy for future development.	▪ Part B	▪ Appendix 7
▪ Provide a detailed landscape strategy, including: o integration with built form, security, shade, topography and existing vegetation; and o details of the number of trees to be removed and the number of trees to be planted on the site.	▪ Part C ▪ Part H	▪ Appendix 8 ▪ Appendix 9
▪ 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.	▪ Part H	▪ Appendix 7
▪ Address CPTED Principles.	▪ Part E	▪ -
▪ Demonstrate good environmental amenity including access to natural daylight and ventilation, acoustic separation, access to landscape and outdoor spaces and future flexibility.	▪ Part H	▪ Appendix 6 ▪ Appendix 7 ▪ Appendix 8 ▪ Appendix 9
▪ Demonstrate that Aboriginal culture and heritage is considered and incorporated holistically in the design proposal.	▪ Part H	▪ Appendix 7 ▪ Appendix 9
5. Environmental Amenity		
▪ Assess amenity impacts on the surrounding locality, including solar access, visual privacy, visual amenity, overshadowing and acoustic impacts.	▪ Part H	▪ Appendix 7
▪ Conduct a view analysis to the site from key vantage points and streetscape locations (photomontages or perspectives should be provided showing the building and likely future development).	▪ Part H	▪ Appendix 7
▪ Include a lighting strategy and measures to reduce spill into the surrounding sensitive receivers.	▪ Part H	▪ Appendix 27
▪ Identify any proposed use of the proposed facility outside of school hours (including weekends) and assess	▪ Part H	▪ -

Table 3. SEARs Requirements		
Matters Raised	**Reference in EIS**	**Reference to Technical Report**
any resultant amenity impacts on the immediate locality and proposed mitigation measures.		
▪ Detail amenity impacts including solar access, acoustic impacts, visual privacy, view loss, overshadowing and wind impacts. A high level of environmental amenity for any surrounding residential land uses must be demonstrated.	▪ Part H	▪ Appendix 7 ▪ Appendix 14 ▪ Appendix 19
▪ Provide a view impact assessment that has been prepared in accordance with the established planning principles.	▪ Part H	▪ Appendix 7
6. Staging		
▪ Provide details regarding the staging of the proposed development (if any).	▪ Part A ▪ Part C	▪ Appendix 7
7. Transport and Accessibility		
Include a transport and accessibility impact assessment, which details, but not limited to the following: ▪ accurate details of the current daily and peak hour vehicle, existing and future public transport networks and pedestrian and cycle movement provided on the road network located adjacent to the proposed development	▪ -	▪ Appendix 10
▪ details of estimated total daily and peak hour trips generated by the proposal, including vehicle, public transport, pedestrian and bicycle trips	▪ Part H	▪ Appendix 10
▪ 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	▪ Part B	▪ Appendix 10
▪ measures to integrate the development with the existing/future public transport network	▪ -	▪ Appendix 10 ▪ Appendix 11
▪ 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)	▪ Part H	▪ Appendix 10
▪ 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 3.5 m wide travel lanes),	▪ -	▪ Appendix 10

Table 3. SEARs Requirements		
Matters Raised	**Reference in EIS**	**Reference to Technical Report**
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 the provision of facilities to increase the non-car mode share for travel to and from the site	▪ Part H	▪ Appendix 11
▪ the proposed walking and cycling access arrangements and connections to public transport services	▪ -	▪ Appendix 11
▪ 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	▪ Part C ▪ Part H	▪ Appendix 10
▪ proposed bicycle parking provision, including end of trip facilities, in secure, convenient, accessible areas close to main entries incorporating lighting and passive surveillance	▪ -	▪ Appendix 10 ▪ Appendix 11
▪ 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	▪ Part H	▪ Appendix 10
▪ 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	▪ Part H	▪ Appendix 10
▪ 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	▪ Part E ▪ Part H	▪ Appendix 10
▪ 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)	▪ -	▪ Appendix 10
▪ 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: o assessment of cumulative impacts associated with other construction activities (if any) o an assessment of road safety at key intersection and locations subject to heavy vehicle construction traffic movements and high pedestrian activity o details of construction program detailing the anticipated construction duration and highlighting significant and milestone stages and events during the construction process o details of anticipated peak hour and daily construction vehicle movements to and from the site o details of on-site car parking and access arrangements of construction vehicles, construction workers to and from the site, emergency vehicles and service vehicle o details of temporary cycling and pedestrian access during construction o demonstrate how pedestrian and cycle rider movements along footways and cycleways are maintained	▪ Part H	▪ Appendix 15

Table 3. SEARs Requirements		
Matters Raised	**Reference in EIS**	**Reference to Technical Report**
at all times during construction activities. Should the development require closure to either facility, detail the adequate safety and diversion measures out in place to limit time delay and detour distances o details of any crane locations and road closures and o details of any potential impacts to the bus network.		
▪ Relevant policies and guidelines: o Guide to Traffic Generating Developments (Roads and Maritime Services, 2002) o EIS Guidelines - Road and Related Facilities (Department of Urban Affairs and Planning (DUAP), 1996) o Cycling Aspects of Austroads Guides o NSW Planning Guidelines for Walking and Cycling (Department of Infrastructure, Planning and Natural Resources (DIPNR), 2004) o Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development o Standards Australia AS2890.3 (Bicycle Parking Facilities).	▪ Part E	▪ Appendix 10 ▪ Appendix 11
8. Ecologically Sustainable Development (ESD)		
▪ 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.	▪ Part H	▪ Appendix 16
▪ Include a framework for how the future development will be designed to consider and reflect national best practice sustainable building principles to improve environmental performance and reduce ecological impact. This should be based on a materiality assessment and include waste reduction design measures, future proofing, use of sustainable and low-carbon materials, energy and water efficient design (including water sensitive urban design) and technology and use of renewable energy.	▪ Part H	▪ Appendix 16
▪ Demonstrate how environmental design will be achieved in accordance with the GA NSW Environmental Design in Schools Manual	▪ Part H	▪ Appendix 7
▪ Include preliminary consideration of building performance and mitigation of climate change, including consideration of Green Star Performance.	▪ Part H	▪ Appendix 16
▪ Include an assessment against an accredited ESD rating system or an equivalent program of ESD performance. This should include a minimum rating scheme target level.	▪ -	▪ Appendix 16
▪ Provide a statement regarding how the design of the future development is responsive to the CSIRO projected impacts of climate change, specifically: o hotter days and more frequent heatwave events o extended drought periods	▪ -	▪ Appendix 16

Table 3. SEARs Requirements		
Matters Raised	**Reference in EIS**	**Reference to Technical Report**
○ more extreme rainfall events ○ gustier wind conditions and ○ how these will inform landscape design, material selection and social equity aspects (respite/shelter areas).		
▪ Relevant Policies and Guidelines: ○ NSW and ACT Government Regional Climate Modelling (NARCliM) climate change projections.	▪ -	▪ Appendix 16
9. Heritage		
▪ Provide a statement of significance and an assessment of the impact on the heritage significance of the Heritage Conservation Area and any heritage items on or near to the site in accordance with the guidelines in the NSW Heritage Manual (Heritage Office and DUAP, 1996).	▪ Part H	▪ Appendix 12
▪ If the Statement of Heritage Impact identifies impact on potential historical archaeology, an historical archaeological assessment should be prepared by a suitably qualified archaeologist in accordance with the Heritage Division, Office of Environment and Heritage Guidelines 'Archaeological Assessment' 1996 and 'Assessing Significance for Historical Archaeological Sites and Relics' 2009. This assessment should identify what relics, if any, are likely to be present, assess their significance and consider the impacts from the proposal on this potential archaeological resource. Where harm is likely to occur, it is recommended that the significance of the relics be considered in determining an appropriate mitigation strategy. If harm cannot be avoided in whole or part, an appropriate Research Design and Excavation Methodology should also be prepared to guide any proposed excavations or salvage programme.	▪ Part H	▪ Appendix 12
10. Social Impacts		
▪ Prepare a social impact assessment, which: ○ identifies and analyses the potential social impacts of the development, from the points of view of the affected community/ies and other relevant stakeholders, i.e. how they expect to experience the project ○ considers how potential environmental changes in the locality may affect people's: way of life; community; access to and use of infrastructure, services, and facilities; culture; health and wellbeing; surroundings; personal and property rights; decision-making systems; and fears and aspirations, as relevant and considering how different groups may be disproportionately affected ○ assesses the significance of positive, negative, and cumulative social impacts considering likelihood, extent, duration, severity/scale, sensitivity/importance, and level of concern/interest ○ includes mitigation measures for likely negative social impacts, and any proposed enhancement	▪ Part H	▪ -

Table 3. SEARs Requirements		
Matters Raised	**Reference in EIS**	**Reference to Technical Report**
measures and ○ details how social impacts will be adaptively monitored and managed over time.		
11. Aboriginal Heritage		
▪ Identify and describe the Aboriginal cultural heritage values that exist across the site and document these in an Aboriginal Cultural Heritage Assessment Report (ACHAR). This may include the need for surface survey and test excavation. .	▪ Part H	▪ Appendix 13
▪ Identify and address the Aboriginal cultural heritage values in accordance with the guide to investigating, assessing and reporting an Aboriginal Cultural Heritage in NSW (Office of Environment and Heritage (OEH), 2011) AND Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW (OEH, 2010)	▪ Part H	▪ Appendix 13
▪ Undertake consultation with Aboriginal people and document in accordance with Aboriginal cultural heritage consultation requirements for proponents 2010 (Department of Environment, Climate Change and Water). The significance of cultural heritage values of Aboriginal people who have a cultural association with the land are to be documented in the ACHAR.	▪ -	▪ -
▪ Identify, assess and document all impacts on the Aboriginal cultural heritage values in the ACHAR.	▪ Part H	▪ Appendix 13
▪ 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 the Environment, Energy and Science Group of the Department of Planning, Industry and Environment	▪ Part H	▪ Appendix 13
12. Noise and Vibration		
▪ Identify and provide a quantitative assessment of the main noise and vibration generating sources during demolition, site preparation, bulk excavation, construction. Outline measures to minimise and mitigate the potential noise impacts on surrounding occupiers of land.	▪ Part H	▪ Appendix 14
▪ 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.	▪ Part H	▪ Appendix 14
▪ Relevant Policies and Guidelines ○ NSW Noise Policy for Industry 2017 (NSW Environment Protection Authority (EPA)	▪ Part H	▪ Appendix 14

Table 3. SEARs Requirements		
Matters Raised	**Reference in EIS**	**Reference to Technical Report**
○ Interim Construction Noise Guideline (Department of Environment and Climate Change, 2009) ○ Assessing Vibration: A Technical Guideline 2006 (Department of Environment and Conservation, 2006) ○ Development Near Rail Corridors and Busy Roads - Interim Guideline (Department of Planning, 2008) ○ Australian Standard 2363:1999 Acoustics - Measurement of noise from helicopter operations.		
13. Contamination		
▪ Assess and quantify any soil and groundwater contamination and demonstrate that the site is suitable for the proposed use in accordance with SEPP 55.	▪ Part D	▪ -
▪ Undertake a hazardous materials survey of all existing structures and infrastructure prior to any demolition or site preparation works.	▪ Part D	▪ -
▪ Relevant Policies and Guidelines: ○ Managing Land Contamination: Planning Guidelines - SEPP 55 Remediation of Land (DUAP, 1998) ○ Sampling Design Guidelines (EPA, 1995) ○ Guidelines for Consultants Reporting on Contaminated Sites (OEH, 2011) ○ National Environment Protection (Assessment of Site Contamination) Measure (National Environment Protection Council, as amended 2013)	▪ Part D	▪ -
14. Utilities		
▪ Prepare an Infrastructure Management Plan in consultation with relevant agencies, detailing information on the existing capacity and any augmentation and easement requirements of the development for the provision of utilities including staging of infrastructure.	▪ Part H	▪ Appendix 24
▪ 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.	▪ Part H	▪ Appendix 25
15. Contributions		
▪ Address Council's 'Section 7.11/7.12 Contribution Plan' and/or details of any Voluntary Planning Agreement, which may be required to be amended because of the proposed development.	▪ Part D	▪ -
16. Drainage		
▪ Detail measures to minimise operational water quality impacts on surface waters and groundwater.	▪ Part H	▪ Appendix 24
▪ Stormwater plans detailing the proposed methods of drainage without impacting on the downstream properties.	▪ Part H	▪ Appendix 24

Table 3. SEARs Requirements		
Matters Raised	**Reference in EIS**	**Reference to Technical Report**
▪ Relevant Policies and Guidelines: o Guidelines for developments adjoining land managed by the Office of Environment and Heritage (OEH, 2013). o ANZECC (2000) Guidelines for Fresh and Marine Water Quality o Risk-based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning Decisions (2017)	▪ Part H	▪ Appendix 24
17. Flooding		
▪ Identify flood risk on-site (detailing the most recent flood studies for the project area) and consideration of any relevant provisions of the NSW Floodplain Development Manual (DIPNR, 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.	▪ N/A	▪ N/A
18. Biodiversity		
▪ Biodiversity impacts related to the proposed development (SSD-10424) 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.	▪ Part D ▪ Part H	▪ Appendix 17 ▪ Appendix 18
▪ 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.	▪ Part D ▪ Part H	▪ Appendix 17 ▪ Appendix 18
▪ The BDAR must include details of the measures proposed to address the offset obligation as follows: o the total number and classes of biodiversity credits required to be retired for the development/project o the number and classes of like-for-like biodiversity credits proposed to be retired o the number and classes of biodiversity credits proposed to be retired in accordance with the variation rules o any proposal to fund a biodiversity conservation action and o any proposal to make a payment to the Biodiversity Conservation Fund.	▪ Part D ▪ Part H	▪ Appendix 17 ▪ Appendix 18
▪ 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.	▪ Part D ▪ Part H	▪ Appendix 17 ▪ Appendix 18
▪ The BDAR must be submitted with all spatial data associated with the survey and assessment as per the BAM.	▪ Part D ▪ Part H	▪ Appendix 17 ▪ Appendix 18
▪ The BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the	▪ Part D	▪ Appendix 17

Table 3. SEARs Requirements		
Matters Raised	**Reference in EIS**	**Reference to Technical Report**
Application of the Biodiversity Assessment Method Order 2017 under s6.10 of the Biodiversity Conservation Act 2016.	▪ Part H	▪ Appendix 18
▪ 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.	▪ Part D ▪ Part H	▪ Appendix 17 ▪ Appendix 18
19. Sediment, Erosion and Dust Controls		
Detail measures and procedures to minimise and manage the generation and off-site transmission of sediment, dust and fine particles. ▪ Relevant Policies and Guidelines: o Managing Urban Stormwater - Soils & Construction Volume 1 2004 (Landcom) o Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA) o Guidelines for development adjoining land managed by the Office of Environment and Heritage (OEH, 2013)	▪ Part H	▪ Appendix 25
20. 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. ▪ Relevant Policies and Guidelines: o Waste Classification Guidelines (EPA, 2014)	▪ Part H	▪ Appendix 28 ▪ Appendix 29
21. 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.	▪ Part H	▪ Appendix 15
Plans and Documents		
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. In addition, the EIS must include the following		

Table 3. SEARs Requirements		
Matters Raised	**Reference in EIS**	**Reference to Technical Report**
▪ A section 10.7(2) and (5) Planning Certificates (previously Section 149(2) and (5) Planning Certificate)	▪ -	▪ -
▪ Architectural drawings showing key dimensions, RLs, scale bar and north point, including: o plans, sections and elevation of the proposal at no less than 1:200 showing indicative furniture layouts and program o illustrated materials schedule including physical or digital samples board with correct proportional representation of materials, nominated colours and finishes o details of proposed signage, including size, location and finishes o detailed annotated wall sections at 1:20 scale that demonstrate typical cladding, window and floor details, including materials and general construction quality o site plans and operations statement demonstrating the afterhours and community use strategy	▪ -	▪ Appendix 6
▪ Site Survey Plan, showing existing levels, location and height of existing and adjacent structures / buildings and site boundaries	▪ -	▪ Appendix 5
▪ Site Analysis and Context Plans, including: o any future development and expansion zones o open space network o active transport linkages with existing, proposed and potential footpaths and bicycle paths and public transport links	▪ -	▪ Appendix 6
▪ Sediment and Erosion Control Plan	▪ -	▪ Appendix 24
▪ Shadow Diagrams	▪ -	▪ Appendix 6
▪ View analysis, photomontages and architectural renders, including from those from public vantage points	▪ -	▪ Appendix 8
▪ Landscape architectural drawings showing key dimensions, RLs, scale bar and north point, including: o integrated landscape plans at appropriate scale, with detail of new and retained planting, shade structures, materials and finishes proposed, including articulation of playground spaces o plan identifying significant trees, trees to be removed and trees to be retained or transplanted	▪ -	▪ Appendix 9 ▪ Appendix 10
▪ Design report to demonstrate how design quality will be achieved in accordance with the above Key Issues including: o architectural design statement o diagrams, structure plan, illustrations and drawings to clarify the design intent of the proposal o detailed site and context analysis o analysis of options considered to justify the proposed site planning and design approach	▪ -	▪ Appendix 7

Table 3. SEARs Requirements		
Matters Raised	**Reference in EIS**	**Reference to Technical Report**
○ visual impact assessment identifying potential impacts on the surrounding built environment and adjoining heritage items ○ summary of feedback provided by GA NSW and responses to this advice ○ summary report of consultation with the community and response to any feedback provided		
▪ Visual Impact Assessment	▪ -	▪ Appendix 7
▪ Geotechnical and Structural Report	▪ -	▪ Appendix 26
▪ Accessibility Report	▪ -	▪ Appendix 22
▪ Arborist Report	▪ -	▪ Appendix 19
▪ Acid Sulphate Soils Management Plan and	▪ -	▪ -
▪ Schedule of materials and finishes.	▪ -	▪ Appendix 7
Consultation		
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: ▪ Lane Cove Council ▪ GA NSW ▪ Transport for NSW (TfNSW) and ▪ Transport for NSW (Roads and Maritime Services) (TfNSW RMS). Consultation should commence as soon as practicable to agree the scope of investigation. 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.	▪ Part F	▪ -
Further consultation after 2 years		
If you do not lodge a Development Application and EIS for the development within 2 years of the issue date of these SEARs, you must consult further with the Secretary in relation to the preparation of the EIS.	Noted.	

Table 3. SEARs Requirements		
Matters Raised	**Reference in EIS**	**Reference to Technical Report**
References		
The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified.	Noted.	

PART B SITE ANALYSIS

2.1 SITE LOCATION & EXISTING SITE CHARACTERISTICS

The College Site comprises some 40 hectares, including the Main Campus (Senior School) and Regis Campus (Junior School). The Site is legally described as Lot 10 DP 1142773 and is owned by The Trustees of the Jesuit Fathers (ABN 80 167 682 043), a body corporate by virtue of the Roman Catholic Church Communities' Land Act 1942 No 23 (NSW). The College leases the Site from the landowner.

The Site is in the suburb of Riverview within the Lane Cove Local Government Area. The Site is bounded by Riverview Street to the north, Tambourine Bay Road to the east and the Lane Cove River to the south and west which is a prime waterfront position on the Lane Cove River.

Figure 1 below provides an aerial photograph of the College and the extent of its boundaries.

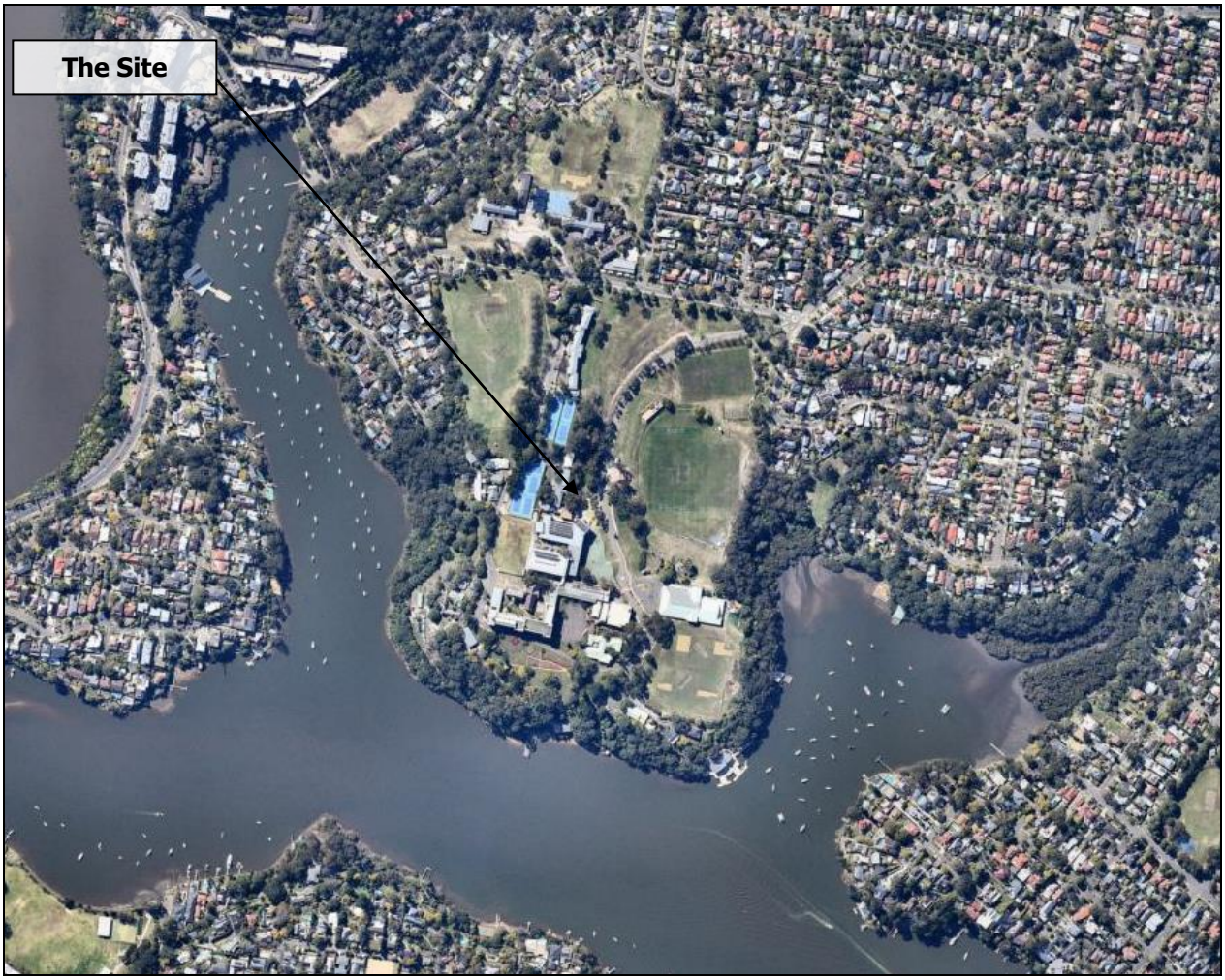

Figure 1. Aerial of the Site (Source: Nearmap, 2020)

The existing campus, like many school campus developments, is characterised by a collection of buildings and facilities, which have been developed in isolation, without maximising opportunities for collaboration or connection.

The College is separated by Riverview Street into two campuses being the Main Campus (Senior School) and Regis Campus (Junior School).

Of significance the College includes amongst other buildings and land uses the following:

- Chapel;
- Administration Buildings;
- Classrooms and Learning Spaces;
- Library;
- Halls
- Refectory, Kitchen and Canteen;
- Boarding Houses;
- Health Centre;
- Long Day Care Centre
- Sporting facilities including playing fields, gymnasium, swimming pool, rowing sheds, sailing club, basketball, cricket nets, mountain biking track and tennis courts;
- Observatory;
- Wharf connecting to the Lane Cove River;
- Staff and Jesuit residences;
- Weather station;
- Storage, maintenance, loading and waste management facilities.

A range of built form and building heights exists across the College, which is typical of an Educational Establishment.

A vehicular/pedestrian loop road also exists through the Main Campus (Senior School) of the College providing two entrances and exits at Riverview Street. A further entrance and exit from Riverview Street services the Regis Campus (Junior School).

Figure 2 below provides an overview of the Site layout (as existing) and the surrounding uses.

Figure 2. Site Layout (Source: PMDL, 2020)

2.2 SCHOOL HISTORY

Saint Ignatius' College Riverview was established by the Jesuit Fathers in 1880 from the Estate of Fr John Joseph Therry. The school first opened as a secondary boarding school with a total of four (4) students. The school was initially housed in the existing cottage on the Site 'Ormeau view'. In July 1880 Saint Michaels House was completed as the first purpose built school building. The Main Building was built between 1889 and 1938 followed by Dalton Chapel 1909.

Since then the School has evolved into one of Sydney's leading private boys educational establishment.

2.3 EXISTING USE AND POPULATION

The Site is currently used as an Educational Establishment for boys with an overall capacity of **1,640** students across the Main Campus and the Regis Campus.

Boarding student numbers fluctuate each year to a maximum of **365**.

The staff numbers fluctuate to a maximum of **350**, and this includes full time and part time staff.

A total of **47** residences are located on site.

2.4 OTHER USES OF THE COLLEGE

The Gartlan Centre pool and sports facilities is hired out when not in use by College students and boarders to various external sporting clubs and coaches during the year for swimming, basketball, cricket and water polo. The Pool is also hired for other schools swimming carnivals. The Gartlan Centre, the ovals, boarding houses and general facilities are also used during the holidays for training camps and carnivals such as Rugby, Cricket, Football, Surf Lifesaving and AFL.

The Ramsay and Regis Halls are hired out for other Schools Speech days, NSW Elections, Dance Concerts and Dinners. The Cricket nets, Tennis courts Ovals and Grounds are leased during and after school hours when not in use by College students and boarders.

Cova Cottage and Boat House may be hired out for functions and conferences under strict operating conditions.

The Chapel is used for Funerals, Weddings, Baptisms and Sunday Mass for Lane Cove Parish. The O'Kelly Theatre is hired our for external use.

Other significant events that occur annually are:

- GPS Rugby Joeys v Riverview every 2nd year;
- Rowing Gold Cup in March;
- Indian Bazaar in September;
- Cross Country Schools Carnival in May.

2.5 EXISTING HOURS OF SCHOOL USE

The following provides a summary of the existing hours of school use across the Site:

- Standard operating hours of the school are from 6.30am to 7.30pm Monday to Thursday and 6.30am – 9.30pm on Fridays;
- Boarding occurs on a 24/7 basis;
- On-site residences on Site 24/7 basis;
- Standard teaching hours are 8.30am – 3.30pm Monday to Friday;
- Afternoon Study Program for Day Students occurs from 3.30pm – 7.30pm Monday to Thursday;
- Before School Curriculum Tutorials occur for students from 7.00am – 8.30am Monday to Friday;
- Co-Curricular activities occur between 6.30am – 8.30am Monday to Friday, 3.30pm – 6.00pm Monday to Thursday, and 3.30pm – 9.30pm on Fridays (Debating and Swimming Friday evenings);
- Saturday sport occurs all day Saturday;
- Sundays - Boarding on-site activities and supervision occur.

PART C PROPOSED DEVELOPMENT

3.1 OBJECTIVES OF THE PROPOSAL

The following objectives have been identified as forming the basis of the proposed development of the existing educational establishment.

- Create an education precinct to create a high-quality teaching and learning environment for staff and students;
- Establish additional floor space to increase availability and efficiency of teaching functions for Saint Ignatius' College Riverview;
- Upgrade the public domain to create visually interesting transitions through the campus, and promote the heritage elements of the campus;
- Ensure minimal environmental impact;
- Ensure the development is compatible with the approved Concept Master Plan; and
- Ensure development is compatible with surrounding development and the local context.

The Site and proposed design are considered to meet the objectives of the project as it allows for development on land that has been previously used for educational purposes.

3.2 DESCRIPTION OF THE PROPOSAL

3.2.1 New Ignis Stage 2 STEMP Building Project Description

The proposed development seeks detailed built form and use approval for New Ignis Stage 2 to provide new teaching and educational facilities, as detailed below:

- Construction of new five (5) storey building with a maximum RL52.00 at the heart of the Campus to accommodate modern, flexible teaching and learning spaces;
- Provide improved learning opportunities for Science, Technology, Engineering, Mathematics and PDHPE as a STEMP facility, along with six (6) Pastoral Care House areas, and staff rooms;
- The ground floor will accommodate a C.O.L.A, multi-purpose Hall and Canteen (Food and Beverage) with servicing by a loading area on basement level;
- Refurbishment of existing O'Neil Building to allow integration of New Ignis Stage 2 STEMP Building to connect to existing fabric;
- New North Landscaped Area;
- New Landscaped Area between the existing Wallace Building and the New Ignis Stage 2 STEMP Building; and
- Upgrade courtyard to improve the integration of the learning space and create a sense of place.

Overall, the proposed built form approval seeks to provide a framework for the future physical development of the Campus to ensure the best teaching and learning outcomes, and ongoing evolution of the School.

The description of the proposed development is provided to assist the DPIE in its initial consideration of the development as State Significant Development (SSD) under the *Environmental Planning and Assessment Act 1979* (EPA&A Act).

3.3 NUMERICAL OVERVIEW

The development particulars of the proposed built form and open space are outlined in **Table 4**.

Table 4. New Built Form Development Particulars	
Development Particular	**Detail**
Height	21m (RL52.00)
Gross Floor Area	L0: 310m^2 L1: 620m^2 L2: 2,100m^2 L3: 2,087m^2

3.4 PROPOSED BUILT FORM

The proposed building envelope has been designed to be consistent with the massing of the existing buildings across the campus, whilst delivering a new future focused learning environment for St Ignatius' College Riverview.

The new teaching and learning building has been pushed into the centre of the Site, integrating with the existing built form and minimising impacts on views and the amenity of the student and staff on-site. The proposed built form has been oriented to not be visible from outside the boundary of the existing school and will sit below the maximum building height across the Site.

The proposed built form comprises a maximum height of **21m**, centrally located within the Site.

The height, density, bulk, scale and setbacks of the proposal respond to the surrounding context, including in relation to existing and surrounding development, land uses, topography, streetscape and other features of the public domain (refer to **Figure 3**).

The five (5) storey form of the new learning building integrates with the existing built form across the Site and enables the structures of the school to integrate and remain commensurate with surrounding development, the streetscape and its environment.

The architectural expressions create a strong identify for St Ignatius' College Riverview that is contemporary, vibrant and dynamic.

The overall appearance of the development has been managed through façade articulation, appropriate massing of different building elements, the equitable treatment of level changes to create appropriate transition across the Site, and landscaping to soften the appearance of the built form.

The proposed building envelope, complemented by appropriate siting, architectural design and landscaping therefore provides a positive contribution to the Site, streetscape and surrounding area. This is achieved whilst ensuing the school is capable of meeting the operational brief and providing a functional, highly amenable learning environment for existing and future students.

Figure 3. New Ignis Stage 2 STEMP Building (Source: PMDL Architects, 2020)

3.5 STUDENT AND STAFF POPULATION

The proposed development does not envisage any significant growth in student and staff numbers, other than that which would ordinarily be attributed to natural growth for Educational Establishments.

3.6 SITE ACCESS

The proposed development continues to maintain vehicular access to the Site from the two (2) existing access points from Tambourine Bay Road and Riverview Street.

3.7 EXCAVATION

The proposed development will result in the following bulk earthworks:

- Estimated Cut Volume: **4,550m^2**;
- Estimated Fill Volume: **1,150m^2**;
- Estimated Balance Volume: **3,400m^2** excess fill.

Overall the proposed bulk earthworks will not be detrimental to the overall operations of the Site.

3.8 LANDSCAPING

A Landscape Plan has been prepared by Arcadia and accompanies this application as **Appendix 8** and **Appendix 9**. The Landscape Plan seeks to execute the objectives of the renewal project as addressed in **Section 3.1** of this report. In particular, the proposed landscape design seeks to:

- Respect and enhance the setting and existing natural features of the Site;
- Incorporate accessible connections between existing and proposed buildings;
- Provide outdoor play areas to assist in learning in the Junior School;
- Provide landscape amenity to new buildings; and
- Propose a consistent palette of materials and planting for the ongoing use of the Site.

St Ignatius' College Riverview is afforded an abundant amount of existing open space for the Senior Students, through the creation of passive and active recreational open space.

Under the New Ignis Stage 2 proposal, landscape works will be undertaken in the vicinity of the new development, creating a highly amenable and attractive landscape environment. Landscaping will create usable outdoor spaces, providing shading and contribute to an attractive visual experience.

The landscape approach has been designed to create a unified environment with a variety of spaces as fluid extensions to the built form (refer to **Figure 4**).

Figure 4. Proposed Landscape Design (Source: Arcadia, 2020)

3.9 MATERIALS AND FINISHES

The proposal includes a variety of materials and finishes to create visual interest to the overall development. The proposed materials have been selected to complement the existing materiality and heritage fabric across the Site, whilst providing a clear delineation between the new and old development.

The exterior architectural approach is formal, and contemporary, and responds to the urban surroundings of the Site. The material selection ensures the creation of a strong identity for the School that is grounded, elegant and timeless.

Pedestrians will clearly be able to decipher between the existing development and the new build.

Figure 5. Materials and Finishes (Source: PMDL Architects, 2020)

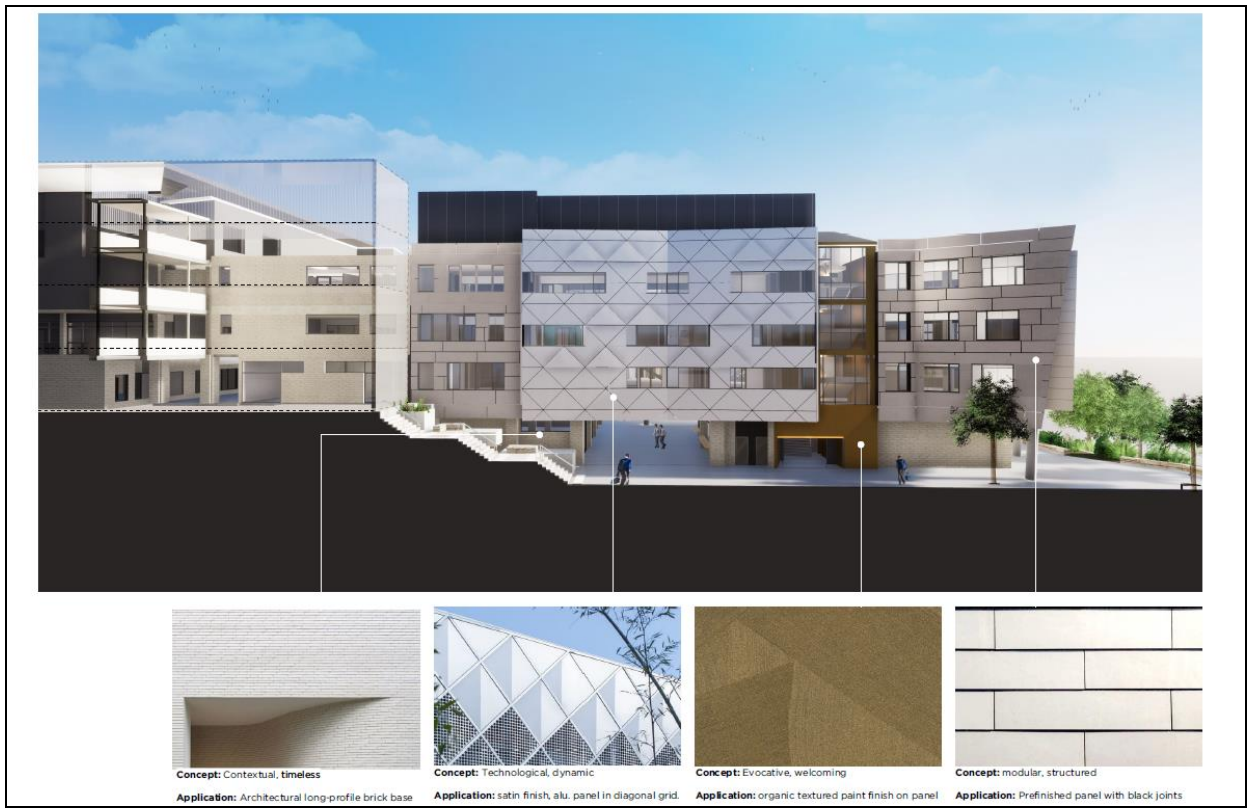

Figure 6. Materials and Finishes (Source: PMDL Architects, 2020)

3.10 WASTE

3.10.1 Construction Waste

The contractor will comply with DPIE's Conditions of Consent to ensure all waste is carefully removed, packaged and transported from the Site to an appropriate waste facility. This will minimise potential contact with the waste and reduce environmental risk from an accidental release. Where appropriate, waste will be reused or recycled.

3.10.2 Operational Waste Management

A Waste Management Plan (WMP) has been prepared by Waste Audit which outlines the proposed operational waste management measures to be implemented on site (refer to **Appendix 28**).

It is noted that the school is an existing operating facility, and as such it proposed that the operation of the new development will be integrated with the existing waste management systems operating on-site.

3.11 UTILITIES AND INFRASTRUCTURE

Northrop has prepared a Services Infrastructure Management Plan (refer to **Appendix 24**). This report identifies the servicing requirements of *New Ignis Stage 2* including mechanical, electrical, hydraulic, and fire protection.

In respect of the existing infrastructure Northrop conclude that following the construction of the proposed development, the Site can be sufficiently serviced by power, telecommunications, water, sewer, gas and stormwater services.

Notwithstanding the above, it has been identified that there is currently insufficient electrical infrastructure to support the proposed buildings, requiring one or more additional kiosk substations (subject to Ausgrid requirements), requiring further investigation of the current capacity of the local HV network to support the proposed utility works.

Further details of infrastructure provisions are provided in Architectural Drawings at **Appendix 6**.

3.12 ECOLOGICALLY SUSTAINABLE DEVELOPMENT

An ESD Strategy Report has been prepared by Action Sustainability and accompanies this application as **Appendix 16**. ESD principles will be incorporated into the design, construction and ongoing operation of the development.

As part of the sustainability benchmarking process for the proposal, a review of sustainability of the proposed development was undertaken.

The proposed development will target a number of sustainability opportunities, including:

- Improved campus connectivity;
- Improved energy efficiency through achieving code-compliance for upgrade works; and
- Improved health and wellness outcomes for students and staff.

Overall the proposed development has been designed to achieve sustainability best practice, in line with the principles set out in **Appendix 16**.

3.13 HOURS OF OPERATION

The School will continue primary operations between 8.30am and 3.30pm, Monday to Friday. However, consistent with the existing operations, the school will continue to operate outside of hours and on weekends for extracurricular activities, including sporting events, parent evenings and school based performances.

3.14 STAGING AND CONSTRUCTION DETAILS

The proposed development will form Stage 2 of the previously approved Masterplan (**SSD 7140**). The approved location was modified (**SSD 7140 MOD-3**) following lessons learnt from the Stage 1 Therry project regarding the need for shunt space during construction to maintain satisfactory operation of the College and minimal impact on the learning opportunities and outcomes. To that end, the revised Masterplan retains the existing Wallace Building for specifically this purpose, as shunt space during not only the Stage 2 Ignis project but for further stage of the learning precinct Masterplan, when other buildings com off-line for either their refurbishment or replacement.

The sequencing of the masterplan has been deliberately not predetermined to enable the College to undertake works appropriate to and supporting the ongoing coherence of learning and pastoral needs and ambitions, the safety and wellbeing of its students and staff, the efficient ongoing operation of its facilities and infrastructure and the funding requirements and debt levels that can be sustained by the College.

In light of the above, it should be noted that the proposed removal of the existing Wallace Building requires flexibility in terms of intended delivery of each Precinct (as prescribed under SSD 7140 (as modified)) as it depends upon the Schools needs and priorities. The demolition of existing Wallace, whenever it occurs in the sequencing, is reliant on the refurbishment of the main building to relocate administration and staff facilities from the existing administration building. Once this is achieved the Administration building and Wallace can be demolished to create a new link building and the associated landscape works that will connect *New Ignis Stage 2* to Third Yard. The delivery of New Ignis Stage 2 and the future demolition of the existing Wallace Building will not detrimentally impact the operations of the School and will be timed and delivered to ensure a fluid transition period.

Further to the above, flexibility will be sought in allowing early occupation by the College to elements of *New Ignis Stage 2* following their completion.

3.15 CONSISTENCY WITH CONCEPT PLAN

The Minister for Planning granted development consent on 24 June 2016 for **SSD 7140** for the **Concept Master Plan Approval** and **Stage 1 Built Form Approval** for Saint Ignatius' College Riverview.

SSD-7140-MOD-3 was determined by the DPIE on 11 August 2020. SSD-7140-MOD-3 was the third modification to SSD 7140 and was proposed in order to amend the Concept Master Plan to accommodate the reconfiguration of the *New Ignis Stage 2* (previously referred to as the Wallace Precinct). The modification to the Concept Approval included amendments to the proposed Wallace Precinct building as two separate building envelopes, being the Wallace and Link Buildings. The works have been separated into two smaller stages, the first being the Wallace Building and the second being the Link Building; the Wallace Building represents Stage 2 of the Concept Master Plan.

It is acknowledged *New Ignis Stage 2*, proposed under **SSD 10424** will remain consistent with the Concept Master Plan (as modified).

3.16 PROJECT NEED

As previously identified, the proposed development is Stage 2 of the previously approved Masterplan (**SSD 7140**). The School is in need of redevelopment to improve out-dated and inefficient teaching spaces and replace them with facilities and spaces that will reflect contemporary models of teaching.

The proposed development will enable the School to continue to provide high standards of education for young men and provide world class education that complements the St Ignatius' College Riverview vision.

3.17 CONSIDERATION OF ALTERNATIVES

The Site is considered suitable for the proposed development as it allows for the continued use of the Site for educational purposes within an established School environment. The design and layout of the proposed built form seeks to maintain consistency with, and enhance, the surrounding educational facilities within the locality.

The options considered, and subsequently dismissed, in arriving to the current proposal included:

(a) 'Do Nothing' Scenario

This option was dismissed as the objectives of the project would not be met.

(b) Development on an Alternative Site

Considerations to alternative sites were not made as the existing College has been a long standing land use on the site. The current site is considered appropriate for the proposed development for the following reasons:

- It will be located on a site that permits Educational Establishments;
- The site has appropriate distance from sensitive land activities including residential development;
- All potential environmental impacts of the proposal can be suitably mitigated within the site;
- The proposal generates and maintains employment opportunities, during both the construction and operational phase;
- The proposal will not affect any area of heritage or archaeological significance; and
- The proposal can be developed with appropriate visual amenity given its surrounding context.

The proposal is justified on the basis it is compatible with the locality in which it is proposed while having no unacceptable economic, environmental or social impact.

PART D LEGISLATIVE AND POLICY FRAMEWORK

4.1 PLANNING FRAMEWORK

The following current and draft Commonwealth, State, Regional and Local planning controls and policies have been considered in the preparation of this application:

- ***Commonwealth Planning Context***
  - *Environment Protection and Biodiversity Conservation Act 1999*

- ***State Planning Context***
  - *Environmental Planning and Assessment Act 1979*
  - *Environmental Planning and Assessment Regulation 2000*
  - *Protection of the Environment Operations Act 1979*
  - *Biodiversity Conservation Act 2016*
  - *Biodiversity Conservation Regulation 2017*
  - *Water Management Act 2000*
  - *State Environmental Planning Policy (State and Regional Development) 2011*
  - *State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017*
  - *State Environmental Planning Policy (Infrastructure) 2007*
  - *State Environmental Planning Policy No. 19 – Bushland in Urban Areas*
  - *State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017*
  - *State Environmental Planning Policy No 55 – Remediation of Land*

- ***Local Planning Context***
  - *Lane Cove Local Environmental Plan 2009*
  - *Lane Cove Development Control Plan 2010*

This planning framework is considered in detail in the following sections:

4.2 ENVIRONMENT PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) is the Australian Government's central piece of environmental legislation. It provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places, defined in the EPBC Act as matters of National Environmental Significance.

Under the EPBC Act, a person must not, without an approval under the Act, take an action that has, will have or is likely to have, a significant impact on a matter of National Environmental Significance. These matters are listed as:

- The world heritage values of a declared World Heritage property;
- The ecological character of a declared Ramsar wetland;
- A threatened species or endangered community listed under the Act;
- A migratory species listed under the Act;
- The environment in a Commonwealth marine area or on Commonwealth land.

An Ecological Report (**Appendix 17**) has been prepared by Eco Logical Australia and accompanies this submission. According to the Department of Planning, Industry and Environment, for the purpose of deciding whether the requirement for a BDAR can be waived, a proposed development could be considered as unlikely to have any significant impact on biodiversity values if:

- *Will not clear or remove native vegetation other than:*
  - *A few single trees with no native understorey in an urban context;*

- *Planted native vegetation that is not consistent with a Plant Community Type (PCT) known to occur in the same Interim Biogeographic Regionalisation of Australia (IBRA) subregion;*

- *Will have negligible adverse impacts on threatened species or ecological communities, considering habitat suitability, abundance and occurrence, habitat connectivity, movement and water sustainability including consideration of any non-natural features, non-native vegetation and human-built structures;*
- *Will have negligible adverse impacts on protected animals because of impacts to flight path integrity.*

The proposed development has been assessed against the DPIE criteria for significant impact to biodiversity values as outlined in **Appendix 17**. This assessment has demonstrated that the development of ***New Ignis Stage 2*** is highly unlikely to have significant impacts upon defined biodiversity values as a result of the proposed development.

On the basis of the investigations, it is the position of Eco Logical Australia that the preparation of a BDAR is not necessary, due to the low likelihood of impacts to biodiversity. Therefore, it was recommended that a waiver for the preparation of a BDAR be sought from the DPIE for the proposed development at Saint Ignatius College Riverview.

A request for a BDAR Waiver was formally lodged with the DPIE on 4 August 2020 (**Appendix 17**). A formal BDAR Waiver was issued on 20 April 2020 by the DPIE with the concurrence of EES (**Appendix 18**).

4.3 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

The *Environmental Planning and Assessment Act 1979* (EPA&A Act) is the overarching governing document for all development in NSW. Pursuant to Section 4.36(2), the EP&A Act provides that:

> *A State environmental planning policy may declare any development, or any class or description of development, to be State significant development.*

The proposed development has been identified as State Significant Development under SRD SEPP as outlined in **Section 4.6** below.

Pursuant to Section 4.12(8), *a development application for State significant development or designated development is to be accompanied by an environmental impact statement prepared by or on behalf of the applicant in the form prescribed by the regulations.* This EIS has been prepared in accordance with the form prescribed by the EP&A Regulation.

Section 4.15(1) of the EP&A Act specifies the matters which a consent authority must consider when determining a DA. The relevant matters for consideration under Section 4.15(1) of the EP&A Act are provided in **Table 5** below.

Table 5. Section 4.15(1)(A) Considerations

Section	Response
Section 4.15(1)(a)(i) any environmental planning instrument, and	Refer to **Part D** of this SEE.
Section 4.15(1)(a)(ii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Planning Secretary has notified the consent	Not applicable.

authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and	
Section 4.15(1)(a)(iii) any development control plan, and	Refer to **Section 4.16** of this SEE.
Section 4.15(1)(a)(iiia) any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4, and	No planning agreement applies to this Site.
Section 4.15(1)(a)(iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph),	Refer to **Section 4.4** of this SEE.
Section 4.15(1)(b)-(c)	Refer to **Part E** of this SEE.

4.4 ENVIRONMENTAL PLANNING AND ASSESSMENT REGULATION

The *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation) prescribes requirements for Environmental Impact Statements in Schedule 2. This EIS has been prepared in accordance with the form prescribed by the EP&A Regulation.

Division 6 Public Participation - State Significant Development applies to the proposed SSD. Following the submission of the EIS with the DPIE, the subsequent notification and response to submissions will be carried in accordance with Division 6 as prescribed by the EP&A Regulation.

4.5 PROTECTION OF THE ENVIRONMENT OPERATIONS ACT 1979

Schedule 1 of the *Protection of the Environment Operations Act 1979* (POEO Act) contains a core list of activities that require a licence before they may be undertaken or carried out. The definition of an 'activity' for the purposes of the POEO Act is:

> *an industrial, agricultural or commercial activity or an activity of any other nature whatever (including the keeping of a substance or an animal).*

The proposal will not involve any activity that would require the issue of an Environmental Protection Licence.

4.6 BIODIVERISTY CONSERVATION ACT 2016

The *Biodiversity Conservation Act 2016* (BC Act) seeks *to maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ecologically sustainable development.*

Part 7 of the BC Act sets out requirements for biodiversity assessments and approvals under the Planning Act (meaning the EP&A Act).

Pursuant to Section 7.2(1), *development or an activity is likely to significantly affect threatened species if:*

> *(a) it is likely to significantly affect threatened species or ecological communities, or their habitats, according to the test in section 7.3, or*

(b) the development exceeds the biodiversity offsets scheme threshold if the biodiversity offsets scheme applies to the impacts of the development on biodiversity values, or

(c) it is carried out in a declared area of outstanding biodiversity value.

Pursuant to Section 7.9, an SSD *is to be accompanied by a biodiversity development assessment report (BDAR) 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.*

It is however requested that the requirement for a BDAR is waived.

A request for a BDAR Waiver was formally lodged with the DPIE on 4 August 2020 (**Appendix 17**). A formal BDAR Waiver was issued on 20 April 2020 by the DPIE with the concurrence of EES (**Appendix 18**).

4.7 STATE ENVIRONMENTAL PLANNING POLICY (STATE AND REGIONAL DEVELOPMENT) 2011

Proposals involving activities that are listed in Schedule 1 of *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP) are identified as being State Significant Development.

Clause 15 of Schedule 1 states:

15 Educational establishments

(1) Development for the purpose of a new school (regardless of the capital investment value).
(2) ***Development that has a capital investment value of more than $20 million for the purpose of alterations or additions to an existing school.***
(3) Development for the purpose of a tertiary institution (within the meaning of State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017), including associated research facilities, that has a capital investment value of more than $30 million.

In accordance with Schedule 1 Clause 15(1), the proposed development for a new school is State Significant Development.

4.8 STATE ENVIRONMENTAL PLANNING POLICY (EDUCATIONAL ESTABLISHMENTS AND CHILD CARE FACILITIES) 2017

In September 2017, DPE released *State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017* (Education SEPP) with the aim of facilitating the effective delivery of education and childcare facilities across the state of NSW.

Part 4 of the Education SEPP relates specifically to schools and identifies prescribed zones within which development for a school may be carried out by any person with development consent. The SP2 Zone and R2 Zone within which the Site is located are prescribed zones for the purpose of Part 4 of the Education SEPP, and therefore the proposed development is permissible with consent.

Pursuant to Clause 35(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:*

(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.

The Design Quality Principles outlined in Schedule 4 relate to context, built form and landscape; sustainability, efficiency and durability; accessibility and inclusivity; health and safety; amenity; whole of life; flexibility and adaptivity; and aesthetics. The development has been designed in accordance with the design quality principles, as detailed in the assessment completed by PMDL Architects at **Appendix 7**.

4.9 STATE ENVIRONMENTAL PLANNING POLICY (INFRASTRUCTURE) 2007

State Environmental Planning Policies (Infrastructure) 2007 (SEPP Infrastructure) provides the legislative planning framework for infrastructure and the provision of services across NSW. The relevant provisions of this SEPP are discussed below.

Schedule 3 of SEPP Infrastructure nominates 'traffic generating development' which requires referral to RMS. Educational Establishments or Schools are not expressly considered in Schedule 3 and therefore the generic threshold applies. Development *for any other purpose* on a site with access to any road requires referral to RMS if it has capacity for 200 or more motor vehicles.

The proposed development will not trigger the thresholds of the Infrastructure SEPP and therefore referral to the RMS is not required.

4.10 STATE ENVIRONMENTAL PLANNING POLICY (VEGETATION IN NON-RURAL AREAS) 2017

State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017 aims to protect the biodiversity values of trees and other vegetation in non-rural areas, and to preserve the amenity of non-rural areas through the preservation of trees and other vegetation.

The SEPP applies to non-rural areas, meaning those zones referred to in Clause 5(1)(b). The Site is zoned SP2 and R2, therefore the provisions of the SEPP are applicable to this application.

Furthermore, Clause 7 of the SEPP provides that vegetation at the subject site may not be cleared without either a Council permit, or relevant development consent in place. Should the vegetation clearing proposed on-site exceed the biodiversity offset scheme threshold (as defined under the BC Act), the approval to clear the vegetation on-site must be obtained from the Native Vegetation Panel under Part 4 of the SEPP.

On balance, the loss of any vegetation is considered to be acceptable given the substantial benefits associated with the project and the extent of proposed landscaping, as well as the wider benefits of the proposed development.

The application is accompanied by an Arborist Report (**Appendix 19**). A total of 62 trees were assessed under the Arborist Report and comprise of a mix of locally indigenous, Australian-native and exotic species. Of the 62 trees assessed four (4) trees (Trees 83-86) are to be removed in order to facilitate the proposed development. The remaining 58 trees are to be retained. The trees to be retained will be excluded from the proposed works through the implementation of Site fencing. TPZ fencing will be provided where Site fencing does not entirely exclude TPZ areas. Tree Protection Fencing shall consist of 1.8m high wire mesh panels supported by concrete feet.

4.11 STATE ENVIRONMENTAL PLANNING POLICY NO. 19 - BUSHLAND IN URBAN AREAS

State Environmental Planning Policy No 19 – Bushland in Urban Areas (SEPP 19) aims to protect and preserve bushland within urban areas owing to its community, aesthetic, recreational, educational and scientific values.

Given the proposal does not relate to land zoned/reserved for public open space or adjoin land zoned/reserved for such purposes, the provisions of SEPP 19 are not applicable.

4.12 STATE ENVIRONMENTAL PLANNING POLICY NO. 55 - REMEDIATION OF LAND

State Environmental Planning Policy No.55 – Remediation of Land (SEPP 55) provides a state-wide planning approach for the remediation of land and aims to promote the remediation of contaminated land to reduce the risk of harm.

Under the provisions of SEPP 55, where a development application is made concerning land that is contaminated, the consent authority must not grant consent unless:

"

(a) it has considered whether the land is contaminated, and
(b) if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and
(c) if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose."

Clause 7(1) of SEPP 55 requires the consent authority to consider whether land is contaminated prior to consent of a development.

The proposed development has historically operated as an educational establishment and does not propose any significant excavation works. Preliminary investigations were previously carried out under SSD 7140 (originally submitted as *Appendix E*) and indicated that the Site is historically free of contamination.

The Preliminary Site Investigation concluded:

> *The site has been part of the Saint Ignatius' College senior school grounds for more than a century and this use of the site is not considered to be contaminating in nature. The potential for contamination at the site, therefore, is considered to be low. There is, however, potential for contamination to be associated with filled areas of the site, hazardous building materials and possible past pesticide use. It is therefore recommended that targeted (or limited) intrusive soil sampling be undertaken at parts of the proposed development site, particularly in areas that have been filled. (It is recommended that this only be undertaken to areas subject of development within the College).*
>
> *Soils designated for off-site disposal will need to be subject to waste classification in accordance with NSW EPA, Waste Classification Guidelines, 2014. Preliminary waste classification testing can be undertaken concurrently with intrusive soil sampling for contamination. In the case that a hazardous building material register (or similar) does not already exist, a hazardous building materials survey should be undertaken for buildings subject to refurbishment works.*

Therefore, no further consideration is required.

4.13 DRAFT STATE ENVIRONMENTAL PLANNING POLICY (REMEDIATION OF LAND)

The *Draft State Environmental Planning Policy (Remediation of Land)* is the proposed new land remediation SEPP set to replace SEPP 55. Public exhibition of the 'explanation of intended effect' for the Draft Remediation SEPP and draft planning guidelines was completed in April 2018.

The Draft Remediation SEPP will retain the objectives of SEPP 55 and reinforce the successful aspects of the framework. In terms of relevant changes applicable to development applications, clause 7 of SEPP 55 is proposed to be incorporated into the Draft Remediation SEPP. In addition, the list of potentially contaminating activities and the purpose of a 'preliminary site investigation' (PSI) and 'detailed site investigation' (DSI) will be integrated into clause 7 of the Draft Remediation SEPP.

The proposed development has historically operated as an educational establishment and does not propose any significant excavation works. Therefore, no further consideration is required.

4.14 DRAFT STATE ENVIRONMENTAL PLANNING POLICY (ENVIRONMENT)

The Draft State Environment Planning Policy (Environment) (Draft Environment SEPP) is the new SEPP seeking to consolidate, repeal and replace the following seven (7) 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.

Public exhibition of the Draft Environmental SEPP was completed in January 2018. The Draft Environmental SEPP will deliver a policy instrument that contains a single set of planning provisions for catchments, waterways, bushland and protected areas.

The land the Site is located on is currently not subject to any of the abovementioned SEPPs, nor is it identified as being attributed to any catchments, waterways, bushland or protected areas.

4.15 PROPOSED AMENDMENTS TO EDUCATION SEPP

The proposed amendments to the Education SEPP aim to improve the operation and useability of the SEPP.

The Explanation of Intended Effect (EIE) for the Education SEPP amendments is currently on exhibition until 17 December 2020. The following amendments have been proposed in relation to schools, as outlined in the EIE:

- Provide clarity around the definition of an 'educational establishment' to ensure it captures circumstances where a new school/campus is proposed some distance from an existing registered school, so the new campus is assessed as a new school;
- Allow student housing as a development permitted with consent, within the boundaries of an existing school.
    - It is expected that the new Housing Diversity SEPP will require consideration, as well as the amended Education SEPP.
- With respect to 'Development Permitted without Consent', it is proposed to increase the student cap by 10%, or by one (1) classroom (approximately 30 students), whichever is greater.
- Increase the validity timeframe for short-term portable classrooms from 24 months to 48 months.
- Amend the thresholds for State Significant Development under Schedule 1, Clause 15 of the SRD SEPP to include the following provisions to satisfy the classification for SSD:
    - Introduce a requirement for the capital investment value for new schools to be $20 million; and
    - Increase the capital investment value for alterations and additions to existing schools from $20 million to $50million.

It is considered that the proposed amendments to the Education SEPP will not alter the approvals pathway and determination of *New Ignis Stage 2*.

4.16 LANE COVE LOCAL ENVIRONMENTAL PLAN 2013

The Site is subject to the provisions of *Lane Cove Local Environmental Plan 2009* (LCLEP2009). Relevant permissibility and development standards are summarised in the subsequent sections of this report.

4.16.1 Zoning and Permissibility

The Site is zoned SP2 Infrastructure (Educational Establishment) (**Figure 7**). Zone objectives and permissibility for the SP2 Zone are outlined in **Table 6** below.

Table 6. Zoning and Permissibility

LCLEP 2009	Provision Applicable to the Site
Zone – SP2 Infrastructure (Educational Establishment)	
Objectives	▪ To provide for infrastructure and related uses. ▪ To prevent development that is not compatible with or that may detract from the provision of infrastructure.
Permitted without Consent	Nil
Permitted with Consent	Aquaculture; **The purpose shown on the Land Zoning Map, including any development that is ordinarily incidental or ancillary to development for that purpose**; Roads; Signage
Prohibited	Any development not specified in item 2 or 3

Accordingly, as indicated on the Zoning Map, Educational Establishments (which by definition include Schools) are permitted with consent in the SP2 Zone. The proposal is consistent with the objectives of the SP2 Infrastructure (Educational Establishment) as it will provide for educational infrastructure in accordance with the zoning of the Site.

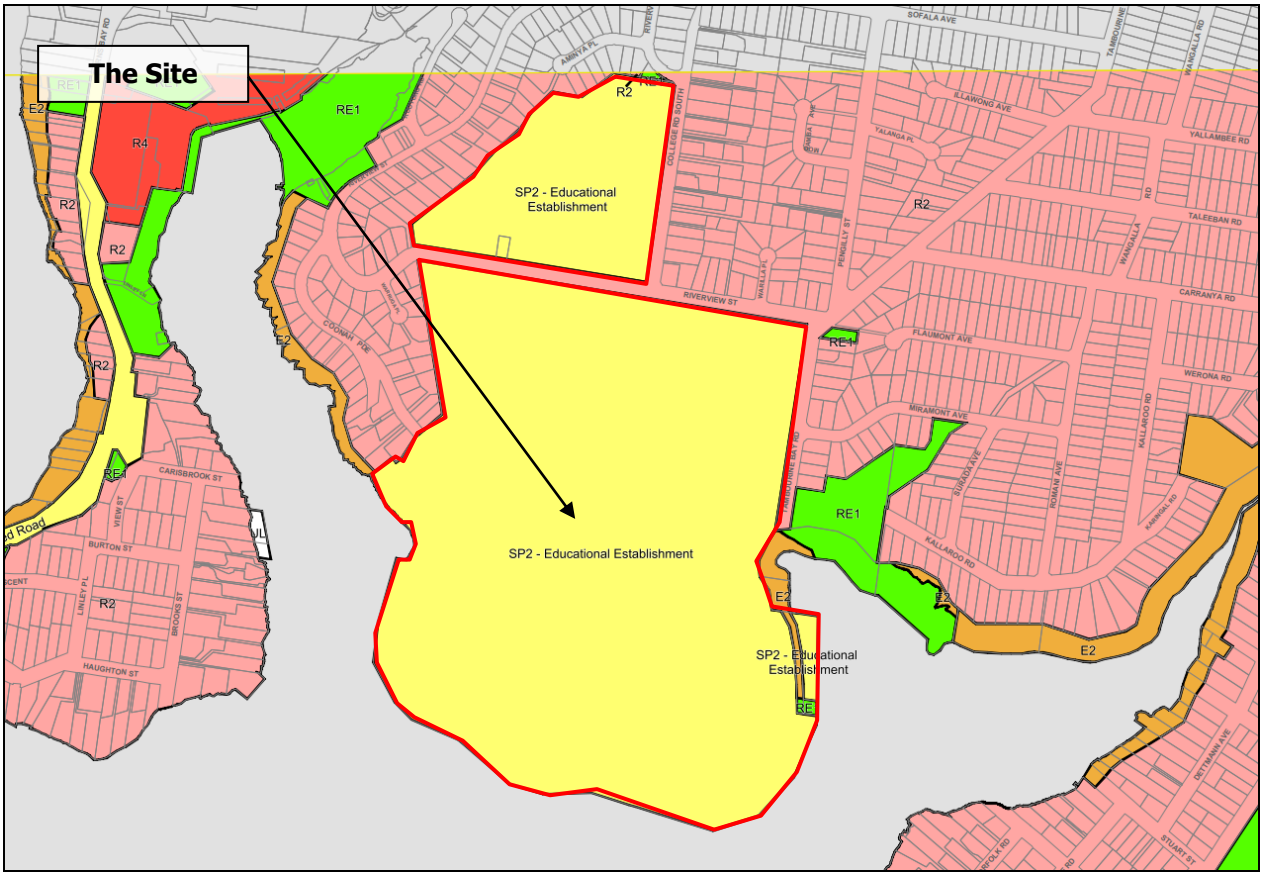

Figure 7. Zoning Map (Source: NSW Legislation, 2020)

4.16.2 Development Standards and other relevant provisions

Table 7. Permissibility and Development Standards	
LCLEP2009	**Details**
Clause 4.3 - Maximum Building Height	Pursuant to Clause 4.3 of the LCLEP 2009, the Site has a maximum building height of **9.5m**. The proposed building envelope has a maximum **RL52.00**, equating to a height of **20m**. The proposed height sits below the highest building on Site, being the Vaughan Roof, at **RL52.43**. The proposed building height has been designed in accordance with the Master Plan approved under SSD 7140 (as modified).
Clause 4.4 - Maximum Floor Space Ratio (FSR)	Pursuant to Clause 4.4 of LCLEP 2009, the Site has a maximum Floor Space Ratio (FSR) of **0.5:1**. The proposed works under ***New Ignis Stage 2*** exhibits a maximum FSR of **0.183:1**.
Clause 5.10 - Heritage	The Site is identified as an item of local heritage significance pursuant to LCLEP 2009, described as follows: ▪ Item 319: Saint Ignatius' Headland (2-68 Riverview Street, Riverview). The School Site is identified as a local heritage item under LCLEP 2009. Whilst the proposed works are not expected to impact directly on the identified heritage item, it will involve development within close proximity to the

Table 7. Permissibility and Development Standards	
LCLEP2009	**Details**
	identified items. The proposed development will not have any heritage impact on the cultural significance of the Main Quadrangle Precinct of St Ignatius' College, or the wider Site. The proposed development supports the historic and ongoing use of the place as a school and as such are acceptable in heritage terms.
Environmental Protection Area	A portion of the Site, located towards the waterfront, is identified as environmental protection land under LCLEP 2009. The proposed works under Stage 2 are centrally located and will not have any direct impact on the identified environmental protection land. No further consideration is required.

4.17 LANE COVE DEVELOPMENT CONTROL PLAN 2010

It is noted that Section 11 of the *State Environmental Planning Policy (State and Regional Development) 2011* states:

> ***11 Exclusion of application of development control plans***
> *Development control plans (whether made before or after the commencement of this Policy) do not apply to:*
>
> *(a) State significant development*

Additionally, Clause 35(9) of the Education SEPP, which relates to schools that are permitted with consent, provides that:

> *A provision of a development control plan that specifies a requirement, standard or control in relation to development of a kind referred to in subclause (1), (2), (3) or (5) is of no effect, regardless of when the development control plan was made.*

This application is for a State Significant Development, and additionally the proposed school within a prescribed zone is development referred to in subclause (1) of the Education SEPP. Therefore, the provisions of a DCP are not applicable.

The SEARs however establish the requirement to consider *Lane Cove Development Control Plan 2010* (LCDCP 2010) and therefore an assessment of the proposal against the relevant provisions of LCDCP 2010 has been carried out in the DCP Compliance Table accompanying this application as **Appendix 1**.

The proposed works are generally compliant with the relevant controls, however, where the proposal seeks a variation from certain controls, the design satisfies the objectives of the control and will result in an improved environmental and amenity outcome, achieving the objectives of, and facilitating the development.

4.18 LANE COVE SECTION 94 CONTRIBUTIONS PLAN

The proposed development is subject to Section 7.11 Contributions Plan under the EP&A Act. *Lane Cove Section 94 Contributions Plan* applies to all land within the Lane Cove Local Government Area (LGA) and is applicable to the Site. Section 94 (now Section 7.11) contributions will be calculated by Council in accordance with the *Lane Cove Section 94 Contributions Plan*.

Any relevant contribution that applies to the educational establishment will be considered prior to the issue of the relevant construction certificate.

PART E STRATEGIC PLANNING FRAMEWORK

5.1 OVERVIEW OF RELEVANT STRATEGIC PLANS

The EIS has given consideration to relevant strategic plans and policies, including:

- *NSW State Priorities*
- *Greater Sydney Region Plan – A Metropolis of Three Cities*
- *Eastern City District Plan*
- *NSW Future Transport Strategy 2056*
- *State Infrastructure Strategy 2018 - 2038*
- *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 NSW*
- *Child Care Planning Guideline*

Detailed consideration of this Strategic Planning framework is provided in the following sections.

Table 8. Environmental Planning Legislation

Instrument	Application to Proposed Development
NSW State Priorities	NSW State Priorities is the State Government's plan to guide policy and decision making across the State. Eighteen (18) state priorities are being actioned by the NSW Government to *make this state of ours even better.* The priorities have been categorised under the following headings: ▪ Strong budget and economy ▪ Building infrastructure ▪ Protecting the vulnerable ▪ Better services ▪ Safer communities The proposed development will achieve a number of the key objectives and priorities, as outlined below: ▪ **Creating Jobs:** the proposal will create temporary job opportunities in manufacturing, construction and construction management during the project's construction phase of works; ▪ **Building Infrastructure:** the proposal provides a significant development opportunity for the State that will create new jobs and help secure existing jobs, stimulate economic activity, and deliver a vital service for the community; ▪ **Improving Education Results:** the proposal will contain high quality facilities, learning spaces and equipment for use by students and teaching staff. This will provide students with greater opportunities to learn and improve their numeracy and literacy skills. Overall, it is considered that the proposal is consistent with the goals and objectives set out in the NSW *State Priorities*.
The Greater Sydney Region Plan, A Metropolis of Three (3) cities	The *Greater Sydney Region Plan – A Metropolis of Three Cities* (the Plan) was prepared by the GSC and supersedes *A Plan for Growing Sydney*. The Plan outlines a vision for Sydney to 2056, defined by three (3) cities; the Western Parkland City, the Central River City, and the Eastern Harbour City.

Table 8. Environmental Planning Legislation	
Instrument	**Application to Proposed Development**
	The Plan seeks to foster productivity, liveability and sustainability, to be achieved through the '30 minute city' model by which a majority of people live within 30 minutes of jobs, education, health facilities and services. The creation of the 30 minute city is to be promoted through infrastructure investment and coordinated transport and land use planning. The ten (10) directions underpinning the Plan emphasise infrastructure delivery, increasing housing choice, creating walkable neighbourhoods and 'great places to live', supporting economic growth, and promoting environmental sustainability. Overall, the Plan aims to accommodate an additional 725,000 dwellings and 817,000 new jobs. The division into three (3) Cities aims to locate a greater proportion of the population closer to employment regions with more intensive jobs; 'city-scale' infrastructure & services; entertainment; and cultural facilities. By managing and retaining residential land close to city centres and transport, the Plan aims to ensure critical and essential services, are readily available to support local businesses and community members and residents. The Proposed Development would not only achieve new economic growth but would also encourage employment-generating opportunities, closer to residential communities, allowing for better access to job opportunities and a shorter commute time to and from work, as well as providing an improved educational facility that is situated in close proximity to the immediate community and the wider locality. The proposed development, located in the Eastern Harbour City, contributes to the four (4) standardised elements in the Plan, across all three (3) cities, including: ▪ **Infrastructure and Collaboration:** once in operation the proposed development will be associated with the delivery of a state-of-the-art educational establishment readily available for the immediate community, as-well-as the wider locality and region; ▪ **Liveability:** the proposed development encourages employment-generating opportunities and economic prosperity, which would have positive influences on the surrounding locality, by promoting a sense of community engagement through the redevelopment of an existing educational establishment in area subject to such growth and demand; ▪ **Productivity:** pursuant to development approval being granted the aims of *A Metropolis of Three Cities, Central* and *Eastern City District Plan*, providing additional jobs (during construction and operation) would be fulfilled; and ▪ **Sustainability:** the Proposed Development would not cause any detrimental impacts to its wider ecological surroundings, as set out in **Part H** of this EIS. In summary, the Proposed Development would contribute to the objectives set out in the *A Metropolis of Three Cities - Greater Sydney Region Plan,* by providing an Educational Establishment as well as employment-generating opportunities to the wider locality and community.

Table 8. Environmental Planning Legislation	
Instrument	**Application to Proposed Development**
North District Plan	Greater Sydney's three (3) cities discuss above reaches across five (5) districts. *The Greater Sydney Region Plan* identifies the Site as being located in the North District. The District Plan is a 20-year plan to manage growth in the context of economic, social and environmental matters to achieve the 40-year vision for Greater Sydney. The District Plan informs local strategic planning statements and local environmental plans, the assessment of planning proposals, as well as community strategic plans and policies. The Greater Sydney Commission reinforces the Plan's potential for achievement by outlining the following strategies, including: ▪ Enhancing the role of the Eastern Economic Corridor, including North Sydney as part of the Harbour CBD; ▪ Supporting jobs growth in strategic centres, including health and education precincts and facilitating innovation • Sustaining local centres to provide jobs, services and amenity; ▪ Providing fast and efficient transport connections to achieve a 30-minute city; ▪ Retaining and managing industrial and urban services land; ▪ Creating and renewing great places while protecting heritage and local character and improving places for people; ▪ Improving walking and safe cycling ways; ▪ Enhancing foreshore access to Sydney Harbour and the District's waterways; ▪ Enhancing the quality and improving access to open space, and increasing urban tree canopy; ▪ Retaining the environmental, social and economic values of the Metropolitan Rural Areas; ▪ Protecting and enhancing the District's unique natural assets including waterways, coastlines and bushland. The NSW Department of Education estimates that an additional 21,9000 students will need to be accommodated in government and non-government schools in the District by 2036, equating to a 20 percent increase. The District Plan recognises that schools help to create and support inclusive and vibrant neighbourhoods. Planning for either new schools or the use of existing schools, must respond to growth and changing demand in innovative ways such as more efficient use of land, contemporary design, greater sharing of spaces and facilities, and flexible learning spaces.
Future Transport Strategy 2056	*Future Transport 2056* presents an integrated 40 year vision and guide for transport investment in NSW. As an update of NSW's *Long Term Transport Master Plan*, *Future Transport 2056* has been developed in concert with the GSC's Sydney Region Plan, Infrastructure NSW's State Infrastructure Strategy and DPIE's regional plans. The Strategy is underpinned by a suite of supporting plans. The Strategy seeks to support a productive economy through the delivery of transport that enables business to reach new markets, attract new investment, while presenting more job and training opportunities. Transport is also recognised as a significant importance in the creation of liveable communities in association with its ability to transform the public domain, activate centres

Table 8. Environmental Planning Legislation	
Instrument	**Application to Proposed Development**
	and unlock new commercial and housing developments, renewing existing neighbourhoods and spaces. Ensuring the efficiency of transport investments, both with respect to environmental performance and budget, is key to obtaining sustainability objectives. Additionally, productivity, liveability and sustainability are sought to be achieved by the Strategy through the mobilisation of emerging technologies and innovation. Representing the efficient use of existing transport networks, the strategic siting of the School is conducive to facilitating efficient access to the School and reducing the need for large families to make multiple trips made by car, and enable the school to continue to be accessed via sustainable, active modes of travel. Measures to promote sustainable travel are incorporated in the Green Travel Plan (**Appendix 11**).
State Infrastructure Strategy 2018 - 2038 Building the Momentum	The *NSW State Infrastructure Strategy 2018–2038* sets out the NSW Government's infrastructure vision for the state over the next 20 years, across all sectors. It is underpinned by the *Greater Sydney Region Plan*, *Regional Development Framework* and *Future Transport 2056*. The Strategy focuses on achieving sustainable growth in the NSW population and economy by aligning investment in infrastructure with the way we build our communities and achieve innovation in service delivery. The Strategy seeks to: ▪ Better integrate land use infrastructure; ▪ Deliver infrastructure to maximise value for money; ▪ Optimise asset management; ▪ Make our infrastructure more resilient; ▪ Improve digital connectivity; ▪ Use innovative service delivery models. In accordance with the objectives of the Strategy, the proposal would deliver school infrastructure in an area experiencing significant population growth. The continued growth of the Lane Cove Local Government Area (LGA) would therefore be supported by the infrastructure required to attain local amenity. The design of the proposal has accounted for the Site constraints so as to ensure the longevity of the asset and safety of future users. Through providing opportunities for the future and shared use of school facilities by the wider community, the proposed works to the school would also optimise the efficiency of the asset's management and represents an innovative model of service delivery. This is also achieved through adaptive design that allows for the flexible use of indoor and outdoor spaces and fosters creative and innovative teaching and learning models. The related NSW Government publication on 'Building Schools and Skills' emphasises investment in schools to provide more student places and classrooms across the Site to accommodate the current and expected surge in enrolments. Specifically, through the 'School Assets Strategic Plan' the NSW Government is: ▪ *Ensuring that our schools can flexibly accommodate increasing student numbers with school expansions and modular buildings;*

Table 8. Environmental Planning Legislation	
Instrument	**Application to Proposed Development**
	▪ *Involving the community in new approaches to planning. Instead of upgrading education infrastructure one school at a time, we are collaborating with the community to determine how best to distribute students and deliver new and upgraded facilities within an area or region;* ▪ *Making it easier for school infrastructure projects to start by streamlining the approvals process in a new education-based State Environmental Planning Policy; and* ▪ *Investigating how we can better harness innovative technologies and equip our education facilities for the digital age.* The proposed development would provide modern, technologically-equipped, energy efficient and flexible facilities that will complement the existing educational establishment. Accordingly, the proposal would support the requirements of the student-base, be conducive to best-practice teaching and learning models, and accommodate emerging, innovative techniques.
Sydney's Cycling Future 2013	*Sydney's Cycling Future* presents a new direction in the way we plan, prioritise and provide for cycling in Sydney. The Plan came into force to reflect to change in culture where individuals were using bicycles as a more frequent mode of transportation. The proposed development will retain the existing bicycle facilities across the Campus. The Green Travel Plan (**Appendix 11**) recognises that at present bicycle usage is under performing with 0.5% of students using a bicycle as a mode of transport to and from the school each day. Notwithstanding, the Green Travel Plan identified potential for bicycle to carry more of the access and egress travel for the College. In light of the above, it is proposed to set a target mode share of 4% by bicycle, this approximates to an additional 45 to 50 students per day using bicycle as an access and egress mode.
Sydney's Walking Future 2013	*Sydney's Walking Future 2013* was introduced by Transport for NSW to implement measures to encourage walking, making it more convenient, better connected, and safer mode of transport. The actions set out in the Plan aim to make walking the transport of choice for quick trips under 2km and assist individuals in accessing public transport. The School is highly accessible to public transport in the immediate area. The proposed development has been undertaken to encourage pedestrian movement through the enhancement of pedestrian movement, including internal connectivity, as well as maintain access to public transport and the surrounding areas and pedestrian movements.
Sydney's Bus Future 2013	*Sydney's Bus Future 2013* was introduced by the NSW Government as a long-term plan to redesign Sydney's bus network to meet customer needs now and into the future. The College is located within proximity to State bus services. Bus operations to and from the College campus includes both a number of medium to large size private buses operated by the college complimented by route buses which operate directly adjacent to each Campus within Riverview Street.

Table 8. Environmental Planning Legislation	
Instrument	**Application to Proposed Development**
	Overall, with dedicated private buses and dedicated public bus services providing direct routes between the Sydney CBD and the College, the College is well served by existing bus operations.
Healthy Urban Development Checklist, NSW Health	The *Healthy Urban Development Checklist* was released by NSW Health to assist in the understanding of health issues relative to urban development plans and proposals, with the aim of promoting healthy communities and lifestyles across NSW. The document is primarily aimed towards officers of NSW Health to provide an understanding of the Planning system and the manner of assessing and providing input into development plans and proposals with consideration to numerous health-related checklist items. The proposed development is considered to be consistent with the *Healthy Urban Development Checklist* as applicable to design and planning for schools, for the following reasons: ▪ The proposed school incorporates significant areas of useable outdoor space conducive to a variety of active and passive, structured and 'free' activities relating to general play, outdoor education and organised sport. Physical activity and incidental exercise would therefore be promoted for students during school hours. ▪ The sharing of the school's facilities will extend benefits to the wider community. ▪ Encourage parents and carers of younger students to car-pool subsequently car trips would be reduced. ▪ The proposal would provide continued vital social infrastructure needed to support the sustainability, amenity and functionality of the school. ▪ The future shared use of school facilities would allow the school to function as a 'social connector' for the wider community, fostering social cohesion. ▪ The proposal will respond to the Masterplan and will not inhibit the delivery of future stages. ▪ The architectural design of the school integrates flexibility and adaptability, allowing indoor and outdoor spaces to be used for a variety of purposes by a variety of user-groups with diverse needs. ▪ Similarly, the design and layout of the school would create healthy environments in which to teach and learn with spaces benefitting from natural ventilation, excellent daylight, glare control, acoustic and thermal comfort. ▪ The overall health of the environment would be supported through the design of the development in accordance with principles of ESD, incorporating both active and passive design features to maximise energy and water efficiency. Accordingly, the proposed school would support the health of future students and teachers, the wider community and the environment.
Crime Prevention Through Environmental Design (CPTED) Principles	The Crime Prevention Through Environmental Design (CPTED) guidelines were prepared by the NSW police in conjunction with DPIE. CPTED provides a clear approach to crime prevention and focuses on the 'planning, design and structure of cities and neighbourhoods'. The main aims of the policy are to: ▪ Limit opportunities for crime;

Table 8. Environmental Planning Legislation	
Instrument	**Application to Proposed Development**
	▪ Manage space to create a safe environment through common ownership and encouraging the general public to become active guardians; and ▪ Increase the perceived risk involved in committing crime. The guidelines provide four (4) key principles to limit crime, being: ▪ Surveillance; ▪ Access Control; ▪ Territorial re-enforcement; and ▪ Space/activity management. ***Principle 1 - Surveillance*** The attractiveness of crime targets can be reduced by providing opportunities for effective surveillance, both natural and technical. ▪ The proposed development orientates active areas such as building entrances, learning precincts and ground floor open space towards surrounding roads, driveways, pedestrian paths, car parking areas and deep-soil landscaping; ▪ The proposed development establishes clear building entrances and functional spaces including the Canteen, Multipurpose Hall, Print Office interface with COLA and outdoor areas. ▪ The proposed development utilises low-level landscaping in appropriate locations to ensure there is no obstruction of surveillance opportunities; and ▪ External security lighting will enable the maintenance of sight-lines and surveillance after dark. ***Principle 2 - Access Control*** Access control can be defined as physical and symbolic barriers that are used to 'attract, channel or restrict the movement of people'. ▪ During and after school hours, access would be allowed via secure access points only; ▪ The design of the built form incorporates in-built access control through, for example, building elevations and retaining walls, avoiding the need for excessive fencing; and ▪ Directional signage and design features would facilitate legibility and direct all site-users to the appropriate access points and areas of the school. ***Principle 3 - Territorial Reinforcement*** ▪ The provision of boundary treatments will emphasise the separation between the private and public realm; and ▪ Well maintained planters, gardens and pavers will indicate the development is well-used and cared for to reduce criminal activity.

Table 8. Environmental Planning Legislation	
Instrument	**Application to Proposed Development**
	Principle 4 - Space Management ▪ Space management strategies to be implemented include activity coordination, site cleanliness, rapid repair of vandalism, rapid removal of graffiti and the replacement of decayed physical elements; ▪ On the ground level, pathways and planters will be well maintained; ▪ Continued repairs and maintenance will discourage vandalism; ▪ High quality materials, varied façade treatments and landscaping along boundaries will assist in discouraging vandalism and graffiti. Accordingly, through the integration of CPTED in design, the proposed development has been planned to prevent crime.
Better Placed: An integrated design policy for the built environment of New South Wales (GANSW, 2017)	*Better Placed* has been developed by the New South Wales Government Architect, addressing community concerns, and as a means to deliver a strategic approach towards ensuring good design is implemented within our towns and cities as they grow. Good design is a focus on how a place looks, works and feels and *Better Placed* outlines how to achieve this. The following seven (7) distinct objectives have been created to define the key considerations in the design of the built environment: ▪ Better fit – contextual, local and of its place; ▪ Better performance – sustainable, adaptable and durable; ▪ Better for community – inclusive, connected and diverse; ▪ Better for people – safe, comfortable and liveable; ▪ Better working – functional, efficient and fit for purpose; ▪ Better value – creating and adding value; and, ▪ Better look and feel – engaging, inviting and attractive The design of Stage 2 Ignis has responded to these objectives, as described below: **Better Fit** *Good design in the built environment is informed by and derived from its location, context and social setting. It is place-based and relevant to and resonant with local character, and communal aspirations. It also contributes to evolving character and setting.* The design of the built form and been informed by its context, both existing and future use. Landscape design is integral to enabling the proposal to integrate with the character of the immediate surrounds and the greater Masterplan. Vegetation planting and landscaping across the will soften the view towards the proposal. The proposed built form has been designed to complement the existing development across the Campus and celebrating the heritage significance, while responding to and complementing the surrounding established built form. **Better Performance** *Environmental sustainability and responsiveness is essential to meet the*

Table 8. Environmental Planning Legislation	
Instrument	**Application to Proposed Development**
	highest performance standards for living and working. Sustainability is no longer an optional extra, but a fundamental aspect of functional, whole of life design. The proposed development has been designed in accordance with principles of ESD, incorporating both active and passive design features to maximise energy and water efficiency and create high-amendable indoor and outdoor learning environments. These features include: ▪ Natural ventilation with additional mechanically-assisted fresh air flow; ▪ Well sealed and highly insulated building; ▪ Maximum solar access achieved through building depths and three-dimensional spatial relationships; ▪ Thermal comfort; ▪ Acoustic attenuation; ▪ Locally sourced, low-maintenance, fit-for-purpose, sustainable building materials; and ▪ Sustainable construction methods. The layout and multi-storey design of the proposed developments makes efficient use of the land, particularly in response to the existing development and identified site constraints. Whilst not compromising natural processes, the proposal effectively creates a safe and functional environment for staff and students. Furthermore, the aesthetically pleasing architectural landscape design responds to the local character and characteristics of the Site and existing development, in order to incorporate useable open space whilst not compromising the architectural integrity of the identified heritage items across the Site. The proposed development, for the purpose of the redevelopment of an existing educational establishment, is considered to support social sustainability through the provision of essential educational facilities for both the current and future population. The proposed development would provide a State-of-the-Art Education Facility, with modern, technology-equipped, energy efficient and flexible facilities. Accordingly, the proposal would be conducive to creative and innovative teaching and learning models and accommodate emerging and innovative techniques and practices. Through the provision of opportunities for the continued shared use of the Schools facilities by the wider community, the proposed development would also multiply the social benefits offered by the investment of reputable calibre, improving on existing infrastructure, being an educational establishment. **Better for Community** *The design of the built environment must seek to address growing economic and social disparity and inequity, by creating inclusive, welcoming and equitable environments. Incorporating diverse uses, housing types and economic frameworks will support engaging places and resilient communities.* As described above, with respect to social sustainability, the proposed development would support the character of the existing school, through flexible learning spaces and adaptable programs. Through architectural design,

Table 8. Environmental Planning Legislation	
Instrument	**Application to Proposed Development**
	the school integrates flexibility and adaptability, allowing indoor and outdoor spaces to be used for a variety of purposes by a variety of user-groups with diverse needs. The future shared use of school facilities would allow the school to function as a 'social connector' for the wider community, fostering social cohesion and providing wide-ranging benefits beyond the immediate student-base and population. **Better for People** *The built environment must be designed for people with a focus on safety, comfort and the basic requirement of using public space. The many aspects of human comfort which affect the usability of a place must be addressed to support good places for people.* The proposed development has been designed to provide a highly amenable environment of flexible indoor and outdoor spaces for staff, students, visitors and the wider community, whilst complementing the fabric and operation of the existing School. The design and layout of the proposed development will create healthy environments in which to teach and learn with spaces benefitting from natural ventilation, solar access, glare control and thermal control. Significant areas of useable outdoor space will be maintained across the Site, which will be supported by innovative landscape design. The school, as a whole, will support the holistic wellbeing of its users. The accessible design of the proposed development would also ensure that the spaces are useable by all people, without discrimination owing to any unique physical needs. The incorporation of CPTED principles in the overall design will similarly support the safety and security of all site users, including those members of society whom may be considered more vulnerable. **Better Working** *Having a considered, tailored response to the program or requirements of a building or place, allows for efficiency and usability with the potential to adapt to changes over time. Buildings and spaces which work well for their proposed use will remain valuable and well-utilised.* The proposed development would provide a State-of-the-Art Educational Establishment, with modern, technology-equipped, energy efficient and flexible facilities. Accordingly, the proposed development would be conducive to best-practice teaching methodologies and curriculum models, and accommodate emerging, innovative techniques. The proposed development would also present opportunities for shared use of its facilities by the wider community, thereby enhancing the efficiency and functionality of the investment. **Better Value** *Good design generates ongoing value for people and communities and minimises costs over time. Creating shared value of place in the built*

Table 8. Environmental Planning Legislation	
Instrument	**Application to Proposed Development**
	environment raises standards and quality of life for users, as well as adding return on investment for industry. The value associated with the proposed development would be multiplied through planning and design such that the School provides needed social infrastructure that is also energy efficient and designed in accordance with the principles of ESD. The social and economic benefits associated with the School would be secured now and into the future through the incorporation of flexible and adaptive spaces suited to a variety of users, innovative teaching models and emerging technologies. **Better Look and Feel** *The built environment should be welcoming and aesthetically pleasing, encouraging communities to use and enjoy local places. The feel of a place, and how we use and relate to our environments is dependent upon the aesthetic quality of our places, spaces and buildings. The visual environment should contribute to its surroundings and promote positive engagement.* The architectural design of the School creates an aesthetically pleasing environment, defined by visual interest created through façade modulation, varied roof forms, design features and landscaping. Overall, the design and planning of the Site has focused on the creation of a 'sense of place' with each space being considered complementary and contributary in their own right to the existing built form, creating a cohesive school identity. Whilst focusing on the School as a 'place', it has also been considered in light of the surrounding context. As aforementioned, the School seeks to respond to the local character. Through attenuation to the landscape design, views to and from the Site, architectural design and heritage significance, the proposed development will effectively integrate with its context accordingly.
Child Care Planning Guideline, 2017	The proposed development will not result in any Child Care Facilities, therefore *Child Care Planning Guideline, 2017* does not apply to the proposed development. No further consideration is required.

PART F CONSULTATION

6.1 OVERVIEW

In accordance with the SEARs issued for this project, consultation has, and will continue to be, undertaken with relevant public authorities, the community and Council.

The objectives of the preliminary consultation were as follows:

- Identify key community stakeholders with an interest in the project;
- Provide relevant information and advise the local community about the proposed development;
- Promote awareness and appreciation of the proposed development;
- Provide opportunity for the local community to comment and provide feedback on the proposed development;
- Build positive relationships with stakeholders to obtain timely and meaningful inputs into the project and leave a legacy of goodwill.

6.2 THE SCHOOL COMMUNITY

The applicant and the consultant team have engaged with the school community. This engagement has primarily been undertaken through formal school publications and has been ongoing through the development of the design brief and through refinements to the detailed design.

6.3 LANE COVE COUNCIL

A formal invitation was issued to Lane Cove Council on 5 March 2020 and subsequently on 10 June 2020, welcoming the opportunity to discuss the proposed development with the school and the design team. No formal response was received from Council. However, the proponent welcomes the opportunity to discuss the proposed development with Council throughout the statutory process.

6.4 GOVERNMENT ARCHITECT NSW

Consultation in accordance with the NSW State Design Review Panel (SDRP) process was carried out over two (2) sessions with the Government Architect (GA) NSW on 12 August 2020 and 7 October 2020, respectively.

Meeting Minutes issued by the GA NSW document the feedback provided by the Panel, with a summary of key comments provided as follows:

- The panel supports the following aspects:
  - The 'pedestrian walkway' along the Wallace Building;
  - The development of the landscape and its opportunities for student engagement;
  - The scale of the proposed Ignis Stage 2 building in response to context and established built form;
  - The response to topography and existing site contours, circulation and aspect;

- The following comments are to be considered in ongoing design development for the proposed development:
  - The proposal indicates strength in the key decisions made including a notable ground plane that picks up the landscape and moves it through the built form up into courtyards and other spaces/pathways. It is recommended that design development take advantage of the opportunity to strengthen this idea.
  - The ground plane, including the proposed spine to the south of the new building, works well, however attention should be given to the spatial quality and amenity of the spine including overshadowing and materiality, and spaces at ground level should allow for multiple uses.

- Further consideration should be given to the existing heritage fabric on the site and cues taken from this to develop the architectural language of the new building. There is an architectural classicism and horizontality in the existing buildings and the current proposal introduces a new style that is superfluous and increases the visual clutter. The architectural language of the built form could also be better tied to place informed by the Aboriginal use of the site. Reconsidering the architectural language should also include simplifying the façade design.
- The façade of the building should be explored as a skin which can be seen through to indicate the different activities behind, and as an extension of the screens of the existing building to the north.
- Further consideration should be given to the scale of the new building. On this large landscaped site, the bulk and mass of the built form dominates. While there has been an attempt to break down the form into three sections with different architectural languages, they compete to make the building appear bulkier. It is recommended that the bulk is reduced through simplification of the architectural language, using existing buildings to guide its expression.
- The hierarchy of the new building within the site needs to be clarified as the current design suggests it is an entry point and primary visual anchor. Its integration with the existing buildings needs to be considered to support the desired hierarchy.
- The location of the new building and the long range (10 year) plan to demolish the Wallis Building, creates a density on the site that is not considered temporary or desirable. Moving the proposed building to allow more space in the round may help to reduce the density and open the grounds.
- The logic and location of landscape elements is encouraging. Further contextual analysis will help inform development of the landscape proposal.
- The current proposal to the east of the new building is abrupt and a more gradual / stepped approach is recommended. This approach may be supported by more space in the round which will allow light to the COLA, provide distance from existing buildings and roads, and enhance landscape opportunities.
- The landscape proposal has the potential to feel like an extension of the nearby national park and this should be explored. In particular, the uniqueness of the site should be reflected in the choice of native planting to create spaces to learn, gather and celebrate.

The recommendations provided by the GA NSW have informed the design development of the project, and are encapsulated in the architecture, urban design and landscaped depicted in the drawings at **Appendices 7** and **9**. The responsiveness of the design to the comments provided by the Panel at the two (2) panel sessions.

6.5 TRANSPORT FOR NSW AND ROADS AND MARITIME SERVICES

An invitation to comment was issued to the Roads and Maritime Services (RMS) and Transport for NSW (TfNSW) on 5 March 2020, to introduce them to the project and the proposed response to access and traffic. No further commentary has been received nor provided.

6.6 SERVICE PROVIDERS

Consultation has been undertaken with the relevant services and infrastructure providers to identify existing capacity and scope for augmentation of existing networks and infrastructure to support the proposal. This has included the following agencies:

- Telstra;
- Sydney Water;
- Ausgrid.

The requirements of these agencies have been incorporated into the designs scheme.

PART G KEY ASSESSMENT ISSUES

7.1 OVERVIEW

The proposed built form has been designed with respect to the continued operational requirements of St Ignatius' College Riverview in order to provide a high quality, adaptable and sustainable development to meet the demonstrated needs of the School and community. The planning and design of the proposed school has been closely informed by environmental and physical site constraints, the existing and desired future character of the surrounding area, and the amenity of nearby properties.

These key considerations, together with the requirements of the SEARs, have been incorporated into the built form, urban design and landscaped scheme for the School. Key assessment items are addressed in the ensuing sections of this EIS.

7.2 BUILT FORM AND URBAN DESIGN

The proposal demonstrates exemplary and a well-planned design with respect to built form, architectural expression, urban design, character, landscaping and overall site layout. This 'good design' has been developed in conjunction with the NSW State Design Review Panel process (refer to details of consultation in **Part F** of this EIS) and has been acknowledged by the Government Architect (GA) NSW.

As assessment of the proposed development relative to the Site context is addressed in the ensuing sections of this report.

7.2.1 Building Envelope

The height, density, bulk, scale and setbacks of the development respond to the surrounding context, including in relation to existing and surrounding development, land uses, topography, streetscape and other features of the public domain.

The five (5) storey form of the new learning building integrates with the existing built form across the Site and enables the structures of the school to integrate and remain commensurate with surrounding development, the streetscape and its environment.

The architectural expressions create a strong identity for St Ignatius' College Riverview that is contemporary, vibrant and dynamic.

The overall appearance of the development has been managed through façade articulation, appropriate massing of different building elements, the equitable treatment of level changes to create appropriate transition across the Site, and landscaping to soften the appearance of the built form.

The proposed building envelope, complemented by appropriate siting, architectural design and landscaping therefore provides a positive contribution to the Site, streetscape and surrounding area. This is achieved whilst ensuing the school can meet the operational brief and providing a functional, highly amenable learning environment for existing and future students.

7.2.2 Architectural Expression

The architectural expression of the built form creates visual interest, forms the impression of a 'welcoming' environment, whilst simultaneously contributing to high levels of amenity and environmental performance for the school and responding to local character.

Building articulation, which contributes to positive aesthetics and a 'human' scale to the development, has been achieved through the application of contrasting materials and finishes in facades, glazing,

appropriate massing of different building elements, clearly defined building entries and a consideration of the heritage significant across the Site.

The New Ignis Development will enhance the overall campus aesthetic and improve the presentation to the public realm, through a design that is respectful to the context whilst presenting a contemporary and inviting solution.

Aesthetically, the architectural approach is to let the old be old. Thus, by proposing an architectural language that is contemporary but sympathetic to the heritage elements to the Site, it allows the opportunity for the new development to express the growth and progression of the school whilst allowing the heritage of the School to be celebrated.

7.2.3 Urban Design

Further to the above, the proposed development delivers a high-quality urban design outcome, achieved through architecture and landscaping that is attentive the spaces between buildings and the relationship of individual elements with the Site overall. Similarly, consideration of the public domain and adjoining properties, has contributed to the school providing a positive interface with its surrounds.

7.2.4 Facades

The proposal includes a variety of materials and finishes to create visual interest to the overall development. The proposed material selection has been chosen to complement the existing materiality and the surrounding context.

The exterior architectural approach is formal, composed and contemporary and responds to the urban surroundings of the Site. The material selection ensures the creation of a strong identity for St Ignatius' College Riverview, that is grounded, elegant and timeless.

7.2.5 Design Quality Principles (Education SEPP)

The Design Quality Principles outlined in Schedule 4 of the Education SEPP relate to the context, built-form and landscape; sustainability, efficiency and durability, accessibility and inclusivity; health and safety; amenity; whole of life; flexibility and adaptivity; and aesthetics. The proposed development has been designed in accordance with the design quality principles, as detailed in the Architectural Design Report accompanying this application as **Appendix 7**.

7.3 ENVIRONMENTAL AMENITY

The proposed development has been designed to minimise and mitigate potential impacts on the amenity of the surrounding environment. Key considerations include:

- Solar access and overshadowing;
- Visual privacy;
- Wind impacts; and
- Amenity impacts associated with use out of school hours.

Overall, the proposed development secures a high level of amenity for the school whilst maintaining the amenity of surrounding sites. Detailed review of potential amenity impacts associated with the development is provided in the ensuing sections of this report.

7.3.1 Solar Access

Due to the orientation of the Site, the scale of the development and the location of the proposed building envelopes, there will be no overshadowing impacts outside the school grounds, as a result of the proposed development.

7.3.2 Visual Privacy and Amenity

The overall intention of the proposed development is to sensitively respond to any potential visual impacts by addressing the compatibility and harmony of built form within the context of its existing surrounds.

Located deep within the College Campus, views to the new facility are restricted to glimpses of the new STEMP building from the Campus boundary, with little to no impact to surrounding neighbours. There will be no impacts to neighbouring properties as the new STEMP building is located wholly within the Site (refer to **Figure 8**). Appropriate levels of acoustic attenuation will be provided to open roof plant areas to mitigate noise impacts to neighbouring properties and the occupants of the new STEMP building and surrounding buildings.

Figure 8. View from NE Campus Entry (Source: PMDL, 2020)

The site for the new building is currently an open hard-paved recreation area where a significant number of the boys congregate to play sport at break times. Proposals for the new facility changes that active recreation space to more passive social spaces.

Overall, it is considered the proposed development will provide appropriate mitigation measures and design solutions in order to alleviate undue impacts on visual privacy.

7.4 TRAFFIC AND TRANSPORT

A Traffic and Access Assessment has been prepared by Positive Traffic and accompanies this application as **Appendix 10**. The assessment identified the existing transport and parking context, operations and addresses the parking and traffic impacts as a result of the proposal. Key items are addressed in the ensuing subsections.

7.4.1 Traffic Impacts

The proposed development does not result in an increase in student population for the Senior School and therefore, traffic conditions in and around the school are not expected to change. Given that intersections immediately surrounding the school currently operate at a satisfactory level of service and mid-block flows on surrounding streets are within expected flows, no external road works are required to support the proposed development.

7.4.2 Car Parking Provision

At present, a total of 304 car parking spaces, including six (6) accessible spaces are provided across the Site. As aforementioned, the proposed development will not alter the existing capacity across the School. Therefore, no further consideration is required.

7.4.3 Servicing and Loading

A delivery and maintenance area will be created to service the school.

The proposed loading dock will be located on basement floor. The proposed loading dock facility would have the capacity to accommodate two (2) small rigid trucks simultaneously with one (1) parking in the waiting bay whilst the other is parked in the loading dock.

Turning path assessments (**Appendix 10**) confirm the proposed entry ramp, manoeuvring space and exit driveway would accommodate the required vehicles to the loading dock. Therefore, the design of the loading dock and access driveways are considered satisfactory.

7.4.4 Green Travel Plan

A Green Travel Plan (**Appendix 11**) has been prepared by High Range Analytics to advise students, parents and employees of sustainable and alternative transport options, with the overall objective to shift travel from private cars to collaborative or public transport options.

The plan is a collection of initiatives and actions to encourage travel behaviour change. The plan will provide students, staff and parents with information on sustainable transport and encourages them to make alternative transport choices than the use of a private vehicle. The implementation of the plan intends to reduce traffic congestion and parking problems.

7.4.5 Summary

Overall, the Traffic and Access Assessment (**Appendix 10**) concludes the following:

- The school does not propose any increase in student population as part of the delivery of the proposed works;
- Intersections immediately surrounding the school currently operate at a satisfactory level of service;
- Traffic flows on surrounding roads are within the expected range for each street type;
- The existing parking capacity of the Senior School more than caters for existing peak demands at the Site and future demands following the delivery of the Stage 2 works;
- The college includes a high use of non-private vehicle modes by students being located adjacent to a range of public transport operations within a convenient walking distance to the College;
- The proposed design of the loading dock facility complies with the requirements of AS2890.2 and is considered satisfactory to accommodate the expected largest vehicle to access the dock, a Small Rigid Truck;
- The proposed entry and exit only driveways to the loading dock adequately cater for a Small Rigid Truck without any impact on general traffic within the school.

7.5 ABORIGINAL HERITAGE

An Aboriginal Cultural Heritage Assessment (ACHAR) has been prepared by Comber Consultants and accompanies this application as **Appendix 13**.

The Site has been subject to moderate disturbance as a result of continuous development and redevelopment programs. Structures existing within the subject area in the 19th Century and development and disturbance have continued since then.

The ACHAR concludes the following:

- There is no objection to the proposed development on Aboriginal archaeological grounds. A part 6 AHIP is not required for works proposed in the proposed scope of works.
- If the final plans for the subsequent stages vary to the concepts detailed in the Masterplan an assessment should be undertaken of the final plans.
- The registered Aboriginal sites within Saint Ignatius' College, Riverview are not within the areas proposed for works and therefore will not be impacted upon. However, during the proposed works care must be undertaken to ensure that they are not impacted upon in any way.
- The rock shelters on Saint Ignatius' College's campus have been defaced by graffiti and the deposition of rubbish. Saint Ignatius' College should develop and implement a management plan for these sites to ensure their ongoing protection and conservation.
- No further archaeological investigation, monitoring or testing is required in respect of this proposal.
- If, during the course of the proposed development, any previously undetected Aboriginal objects are is uncovered, work must cease in the vicinity of that object and further advice sought from the consultant and Metropolitan Local Aboriginal Land Council.
- An induction should be provided to all construction staff, employees, contractors and sub-contractors in respect of Aboriginal heritage protection and their responsibilities under the *National Park Act 1974* by a suitably qualified archaeologist. A written induction should also be provided to be included in all environmental and safety documentation for future reference.

The recommendations provided in the ACHAR have been included in the Mitigation Measures at **Part I**.

7.6 HERITAGE

A Heritage Impact Statement (HIS) has been prepared by NBRS Architecture and accompanies this application as **Appendix 12**. The HIS assesses the potential heritage impacts of the proposed development on the built heritage items within the school grounds and heritage items within the vicinity of the campus.

New Ignis Stage 2 is in relation to the construction of the 'new Wallace building' and the new Student Node-Link Building. At present, *Riverview St Ignatius College Heritage Precinct, Main Quadrangle Tambourine Bay Road, Riverview NSW 2066* Conservation Management Strategy (CMS), dated September 2004, currently sits across the Site. The CMS establishes the cultural heritage significance of the buildings and settings of the Historic Quadrangle Precinct at St Ignatius' College Riverview and the relative significance of the buildings, spaces, component elements and physical fabric of the place. The existing Wallace Building is not identified as a significant building that contributes to the heritage precinct however, the proposal does abut the Main Block.

The CMS states the following:

> *The Main Quadrangle Precinct of St Ignatius College, 'Riverview' comprising the Main Block, The Doyle Wing, the Entry Archway and Western Wing, The Dalton Memorial Chapel and St Michaels House has cultural significance covering Historic Evolution and Associations, Aesthetic and Social values at Local and State levels of importance. The buildings are representative of the large Roman Catholic colleges established in the late 19th century throughout New South Wales in response to the secularisation of education through The Public Instruction Act of1880 and the cessation of State Aid.*

The proposed development will not have any heritage impact on the cultural significance of the Main Quadrangle Precinct of St Ignatius' College, or the wider Site. The proposed development supports the historic and ongoing use of the place as a school and as such are acceptable in heritage terms.

7.7 NOISE AND VIBRATION

PKA Acoustic Consulting have contacted a noise impact assessment associated with regards to *New Ignis Stage 2* STEMP Building Project Development and accompanies this application as **Appendix 14**. The report addresses the noise breakout to sensitive receivers and relevant acoustic treatment and management measures required to be incorporated to meet the relevant acoustic criteria from the proposed development.

The potential noise and vibration impacts which may arise as a result of the proposed development includes:

- Operational noise emissions from regular students;
- Operational noise emissions from on-site mechanical plant; and
- Potential noise and vibration emissions during the construction stage.

The potential noise impacts are addressed in further detail in the ensuing section of this report.

7.7.1 Existing Acoustic Environment

In order to characterise the existing acoustical environment at the nearest sensitive receivers, unattended noise monitoring was carried out to record ambient noise levels (refer to **Figure 9**). It is noted, 120-126 Tambourine Bay Road, Riverview are the nearest sensitive receivers and are located approximately 300m from the proposed development.

Unattended noise monitoring was conducted between 18 and 30 July 2020. The positions of the noise monitors is identified in **Figure 9**. The abovementioned noise monitoring was undertaken to determine the character of the existing acoustic environment of the local area.

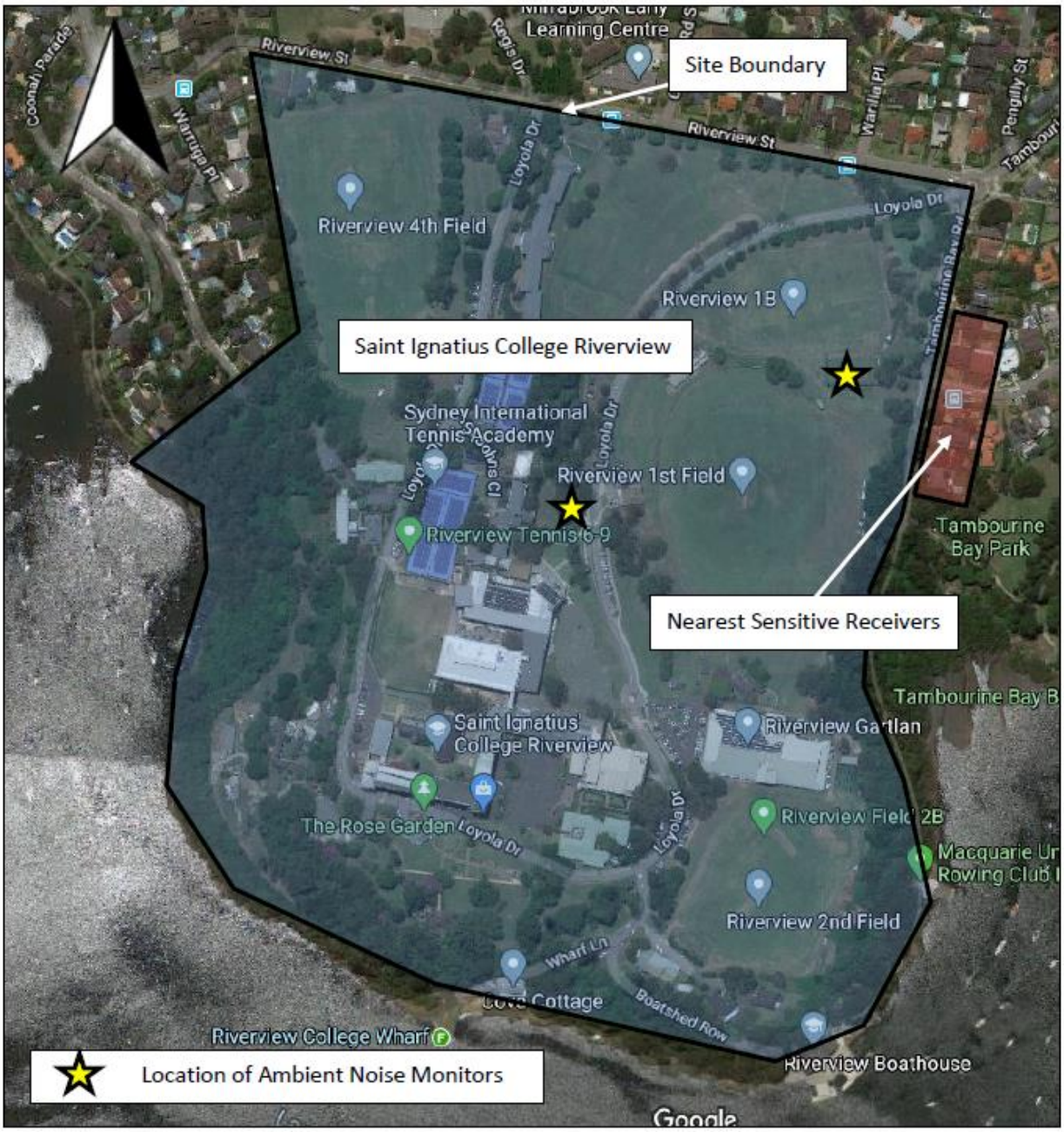

Figure 9. Sensitive Noise Receivers (Source: PKA Acoustic Consulting, 2020)

7.7.2 Rooftop/Mechanical Plant

The position of the rooftop plant is receded within the Site boundary and the College, and will not primarily affect the nearest sensitive receivers along Tambourine Bay Road. Furthermore, the plant is treated to address noise emissions to nearby buildings with the school campus as well as the potential impact to sensitive residential receivers. The majority of the rooftop central thermal plant is located within enclosed rooftop plant rooms, with the exception of one (1) open-air plant room containing cooling towers. Barriers and acoustic louvres are to be implemented to mitigate noise emissions from the cooling towers with the remaining plant contained within rooftop plant rooms sufficiently noise controlled to not cause impact to nearby sensitive residential receivers.

PKA Acoustic Consulting modelled the impact of the proposed mechanical plant on the nearest residential receiver. Calculations considered the sough pressure loss due to shielding from the proposed enclosures/barriers, distance, directivity and the differences in elevations.

Whilst it is anticipated the proposed equipment will only operate between 7am and 6pm, the results of the calculations have been compared to the day, evening and night criteria as summarised below. As illustrated in **Figure 10** below, the proposed rooftop mechanical plants comply with the relevant criteria.

Receiver Type	Period	Combined Sound Power Level of Equipment in Open-Air Plantroom SWL	Noise Level calculated to Receiver Boundary	Project Noise Trigger Levels $L_{Aeq15min}$	Complies?
Residential (Sub-Urban)	Day	102	32	43	Y
	Evening			40	Y
	Night			38	Y

Figure 10. Summary of Rooftop Mechanical Plant (Source: PKA Acoustic Consulting, 2020)

The exact selection/specification of the rooftop plant and equipment will be determined prior to the issuing of the relevant Construction Certificate.

7.7.3 Operation of Public Address and School Bell

The public address system and school bell will be utilised and tie back into the existing system. Detailed assessment of the placement of the new equipment will be co-ordinated during the later stages to ensure compliance with the relevant noise criteria and goals.

7.7.4 Construction Noise Impact

During demolition and excavation there is the potential for vibration impact on the neighbouring buildings' amenity and on structures. The EPA ICNG states that human comfort (amenity) vibration is to be measured and assessed in accordance with *Assessing Vibration – a technical guideline* (DECC 2006).

The construction of the proposed development would involve intermittent sources of vibration which may result in two (2) main types of vibration impact: disturbance at receivers and cosmetic/structural damage to buildings.

Overall, procedures and requirements for construction noise monitoring would be determined as the project progresses, with an appropriate monitoring protocol being defined as part of the future Construction Noise and Vibration Management Plan. The demolition and construction noise impact to the nearest residential receiver will be assessed prior to the construction phase.

7.7.5 Recommendations

PKA Acoustic Consulting provide the following recommendations:

Mechanical Noise Controls

The treatment required to address noise attenuation of rooftop mechanical plant has been incorporated into the architectural design of the building. Treatments include plant room enclosures to a majority of rooftop plant, with enclosures positioned to be acoustic barriers to the 3-off cooling towers located within the open-air plant room. The bounding walls to the open-air plantrooms are to extend a minimum 0.5m above the full height of the installed cooling towers. The plantroom walls are to achieve a minimum acoustic rating of R_w 40 or greater.

In addition, acoustic louvres (equivalent to NAP 600 H-Line acoustic louvres) are to bound the remaining exposed sides of the open-air plant room.

Use of Building

The nature of the building and occupants' activities will not cause rise to disruptive noise at the nearest residential receivers.

Public Address/School Bell

Co-ordination and design of the PA and school bell shall be considered during the detailed design phase.

Construction Noise and Vibration Management

Following confirmation on the details of the construction/demolition and associated groundworks, a detailed construction noise and vibration management plan will be prepared.

7.8 BIODIVERSITY

A Biodiversity Assessment has been prepared by Eco Logical Australia and accompanies this application as **Appendix 17**.

The proposed development has been assessed against the DPIE criteria for significant impact to biodiversity values as outlined in **Appendix 17**. This assessment has demonstrated that the development of *New Ignis Stage 2* is highly unlikely to have significant impacts upon defined biodiversity values as a result of the proposed project. The project is anticipated to impact a 0.68 ha study area and a 0.03ha of native vegetation impact area.

The Assessment has demonstrated that the Stage 2 development of Saint Ignatius College Riverview is highly unlikely to have significant impacts upon defined biodiversity values as a result of the proposed project.

A request for a BDAR Waiver was formally lodged with DPIE 6 August 2020 (**Appendix 17**). A formal BDAR Waiver was issued on 24 September 2020 by the DPIE with the concurrence of EES (**Appendix 18**).

7.9 ARBORIST

An Arborist Report has been prepared by Tree IQ (**Appendix 19**) which undertakes a Visual Tree Assessment to determine the impact of the proposed works on the trees, and where appropriate, recommend the use of sensitive construction methods and tree protection methods to minimise adverse impacts.

For the purpose of the proposed development a study area bound by Therry and O'Neill Buildings to the north, Loyola Drive and parking areas to the south and east, and the Wallace and Ramsay Buildings to the west.

A total of 62 trees were assessed under the Arborist Report and comprise of a mix of locally indigenous, Australian-native and exotic species. Of the 62 trees assessed four (4) trees (Trees 83-86) are to be removed in order to facilitate the proposed development. The remaining 58 trees are to be retained. The trees to be retained will be excluded from the proposed works through the implementation of Site fencing. TPZ fencing will be provided where Site fencing does not entirely exclude TPZ areas. Tree Protection Fencing shall consist of 1.8m high wire mesh panels supported by concrete feet.

7.10 ACCESS

A Disability Access Report has been undertaken by Cheung Access to identify compliance with the accessibility provisions of BCA 2015 and the *Disability (Access to Premises - Building) Standard 2010* (refer to **Appendix 22**).

In order to achieve compliance with the accessibility provisions of the BCA, whilst preserving the functional aesthetic requirements of the project, the use of performance-based will be considered. Therefore, it is considered the performance-based design *may* deliver a building that satisfies the performance requirements of the BCA.

The assessment concludes that the proposed development is able to achieve compliance with the relevant provisions of the BCA, be it via either complying with the DtS provisions or performance requirements of the BCA.

7.11 BUILDING CODE OF AUSTRALIA

Blackett Maguire Goldsmith have undertaken an assessment against the relevant provisions of the Building Code of Australia which accompanies this application as **Appendix 23**.

The assessment identified key compliance issues that have been identified throughout the assessment that require further resolution, either by way of fire engineered Performance Solutions or plan amendments prior to the issue of the Construction Certificate stage.

Notwithstanding, it is considered that the proposed development can readily achieve compliance with the BCA subject to resolution of the matters identified in **Appendix 23**.

7.12 INFRASTRUCTURE REQUIREMENTS

An Infrastructure Management Plan has been prepared by Northrop (**Appendix 24**) and identifies the utility upgrades to accommodate the proposed development.

In summary, the following key findings have been identified in the accompanying Infrastructure Management Plan:

- The existing School site contains three existing substations accessible around the site's perimeter. These substations do not have sufficient capacity to support the Project's proposed loads; therefore, there is a requirement for new power infrastructure from the local supply authority, Ausgrid. The new substation is proposed to be an Ausgrid 'K' type kiosk. The kiosk carries an easement size of 6.65 metres by 4.5 metres. For all Ausgrid high-voltage cables, an additional two-metre easement is required around the path the cable is laid. The allowance for the new substation is proposed to be located inside the campus, at the roundabout where Loyola Drive meets the observatory. The new substation will encompass the loads of the new STEMP building, existing buildings previously supplied by PT.1837 and Central Thermal Plant.

- The proposed development will be directly connected to the College's private fibre optic network. The College's private network is suppled by an existing Telstra lead-in fibre optic service which Northrop have determined is suitable for continued use by the new STEMP building. No new utility telecommunications service will be required to service the Site.

- The assessment indicates additional demands imposed on Sydney Water water infrastructure and the existing site service proposed for connection for the St Ignatius' College Redevelopment - Ignis Stage 2 will not adversely affect the current capacity of the water main or service. The existing incoming 65 mm water service and associated water meter and RPZD assemblies will not be required to be upgraded to accommodate the additional requirements of the Ignis Stage 2 redevelopment. The new fixtures will be serviced from a connection to the existing 80mm

water service, in the vicinity of the proposed Ignis Stage 2 redevelopment. It is not expected that a pressure pump set will be required to provide adequate pressure to the fixtures and the Fire Hose Reels.

- It is not necessary to provide Fire Hose Reel (FHR) coverage to classrooms or associated corridors of schools. However, for any other classification/use within the school, FHR coverage is required if the fire compartment is over 500 m^2 in area. Fire hose reels will be required to be installed within 4m of fire exits and additional, located in the path of travel, to provide compliant coverage to non-classroom/corridor areas. The fire hose reel system will connect to the cold water service and be of copper piping.

- It is intended to connect to the existing fire hydrant piping system and extend to serve both external and internal fire hydrants to provide compliant coverage for the Ignis Stage 2 redevelopment. The fire hydrants will be located externally, within fire stairs and additional internal fire hydrant along the path of travel to provide compliant coverage.

Overall, Ignis Stage 2, including the construction of the proposed new STEMP building, can be sufficiently serviced by power, telecommunications, water, sewer, gas and stormwater services.

7.13 STORMWATER

A stormwater assessment has been prepared by TTW and forms part of **Appendix 20**. The findings are summarised below.

7.13.1 Stormwater Management

The existing 375mm pipe from the Vaughan and Therry Buildings and the 300mm pipe from the Wallace Building will be reconstructed to a new alignment to allow for the basement structure. Both pipes will reconnect into the downstream 525mm pipe. To avoid a lengthy diversion around the building structure, the 375mm pipe from the Vaughan and Therry Buildings will pass under the proposed basement slab and will be concrete encased to reduce the risk of crushing or differential settlement.

In order to reduce the risk of flooding the basement in the event of a blockage downstream, a surcharge pit with an top of grate level 150mm below the basement finished floor level will be provided adjacent to Loyola Drive. This will allow any stormwater surcharging in the system to safely discharge across the oval towards Tamborine Bay instead of inundating the basement.

7.13.2 Stormwater Quantity and Quality

Pursuant to LCDCP 2010, the Site is exempt from on-site detention requirements due to the proximity to the Lane Cove River foreshore.

Although the new building structure will utilise the footprint of the hardstand playing courts, the additional paved areas shown in proposed landscaping plans will result in an overall reduction in the pervious area compared the existing site condition. One of the key issues for the development was ensuring that all minor storm events up to the 50-year storm can still be conveyed by the piped system.

As there are no downstream developments from the project site, there is no risk of flooding to other buildings, habitable or otherwise. However, in major storm events up to the 100-year storm, overland flows paths will need to be designed to safely discharge any excess runoff into Tamborine Bay.

In order to manage stormwater quality an additional gross pollutant trap (GPT) will be installed downstream on the development Site. The additional GPT will be positioned alongside Loyola Drive at the connection point into the existing 525mm diameter pipe which will filter additional external area runoff and roof water.

Results from the DRAINS model demonstrates for the 50 year ARI storm stormwater runoff is fully conveyed by the in-ground system without upwelling. Results for the 100 year storm shows that any surcharging stormwater in safely conveyed via overland flow path towards Tamborine Bay.

7.13.3 Erosion and Sediment Control

Soil Erosion and Sediment Controls measures have been addressed in a detailed Civil Engineering Plans prepared by Northrop. The documentation has been prepared in accordance with the relevant industry standards of the anticipated pollution sources to occur during construction.

7.14 OPERATIONAL WASTE

A Waste Management Plan (WMP) has been prepared by Waste Audit which outlines the proposed operational waste management measures to be implemented on the Site (**Appendix 28**).

It is noted that the School is an existing operating facility, and as such it is proposed that the operation of the new development will be integrated with the existing waste management systems operating on-site. Therefore, there is no anticipated increase and/or decrease in waste generation and the current servicing arrangement will remain adequate.

No new waste and recycling streams are expected to be generated by the development, and the existing storage area located on the school's campus at Loyola Drive will continue to be used for storage of all future operational general waste and recycling streams. All bins will continue to be easily accommodated within the existing storage area, therefore, the proposed development will not require construction of any new storage facilities.

7.15 ENVIRONMENTALLY SUSTAINABLE DESIGN

An Environmentally Sustainable Design (ESD) Statement has been prepared by Action Sustainability and accompanies this application as **Appendix 16**. The Statement outlines the ESD principles that are to be considered in the design, construction and ongoing operation phases of the development.

The College is investigating the use of Green Star Design and As-built standard as a framework, with a target of achieving a 4-star rating for the *New Ignis Stage 2*.

Further to the above, the College is investigation to understand the feasibility of, while striving to incorporate, various ESD principles into the overall design and ongoing maintenance of the development. These principles will be finalised and developed during the projects design development and may include climate resilient design, higher operational efficiency of systems, smart controls, use of renewable energy, and water conservation.

Overall, the proposed development will be able to adequately achieve the relevant principles of environmentally sustainable design.

7.16 SITE SUITABILITY

The Site is suitable for the proposed development that already operates as a school, with a built form that complements the existing development across the Site.

New Ignis Stage 2 seeks consent for Stage 2 of the approved Masterplan.

The site is in close proximity to transport infrastructure, shops and other services, and the built form is in keeping with the existing surrounding development. The design has development to ensure there is no impact on the existing operations of the school. Due to the location and orientation of the proposed built form, no detrimental impact will be incurred on neighbouring residential properties.

The development is suitable for the Site as the development:

- Is permissible in the zone;
- Involves the construction of a high quality building which replaces an outdated, impractical building and will enhance the quality of development on the Site;
- Improves the functionality and accessibility of the Site; and
- Considers and minimizes impacts on the surrounding locality.

7.17 PUBLIC INTEREST

The proposed development of the school is in the public interest as it:

- Will create additional jobs during construction and operation and represents an investment in the local economy;
- Has been designed to limit visual impacts on the density of the proposed development;
- Will modernize outdated educational facilities for future generations;
- Is of a high architectural standard, and the built form is compatible with the Site's surrounding buildings;
- The design outcome has responded to the matters raised by the local community during the consultation process; and
- Retains and respect's the Site's heritage significance whilst developing new facilities which complement the heritage built form.

PART H ENVIRONMENTAL RISK ASSESSMENT

The SEARS requires the EIS to include an environmental risk assessment to identify potential environmental impacts associated with the proposal. This is provided in the following section. The assessment undertaken comprised a qualitative assessment consistent with AS/NZs ISO 31000:2009 *Risk management – Principles and guidelines* (Standards Australia 2009).

The level of risk was assessed by considering the potential impacts of the proposed development prior to application of any mitigation or management measures. Comment on residual risk (the remaining level of risk following implementation of mitigation and management measures) is also provided.

It should be noted that the assessment is not intended to be exhaustive, rather it focuses on key impacts.

Risk comprises the likelihood of an event occurring and the consequences of that event. For the proposal, the following descriptors were adopted for 'likelihood' and 'consequence'.

Likelihood

A	Almost Certain
B	Likely
C	Possible
D	Unlikely
E	Rare

Consequence

1	Widespread irreversible impact
2	Extensive by reversible (within 2 years) impact or irreversible local impact
3	Local, reversible (with 2 years) impact
4	Local, reversible, short term (<3 months) impact
5	Local, reversible, short term (<1 month) impact

Risk scores for likely and potential impacts were derived using the following risk matrix (**Figure 11**).

Significance of impact	Manageability of impact				
	5 Complex	4 Substantial	3 Elementary	2 Standard	1 Simple
1 – Low	6 (Medium)	5 (Low/Medium)	4 (Low/Medium)	3 (Low)	2 (Low)
2 – Minor	7 (High/Medium)	6 (Medium)	5 (Low/Medium)	4 (Low/Medium)	3 (Low)
3 – Moderate	8 (High/Medium)	7 (High/Medium)	6 (Medium)	5 (Low/Medium)	4 (Low/Medium)
4 – High	9 (High)	8 (High/Medium)	7 (High/Medium)	6 (Medium)	5 (Low/Medium)
5 – Extreme	10 (High)	9 (High)	8 (High/Medium)	7 (High/Medium)	6 (Medium)

Figure 11. Risk Assessment Matrix

The results of the environmental risk assessment are presented in **Appendix 2**. This provides a risk rating prior to any mitigation and a residual risk rating after mitigation. The risk assessment has been based on information available at the time of finalizing the EIS.

PART I DRAFT MANAGEMENT AND MITIGATION MEASURES

by	St Ignatius College Riverview
in relation to	New Ignis Stage 2 STEMP Building Project Development
at	2-60 Riverview Street and Tambourine Bay Road, Riverview, being legally described as Lot 10 DP 1142773

St Ignatius College Riverview will undertake the construction and operation of the proposed facility in accordance with the following:

The following defines some of the terms and abbreviations used in this statement:

Approval	The Minister's approval of the Project
BCA	Building Code of Australia
Council	Lane Cove Council
Department	Department of Planning, Industry and Environment
Secretary-General	Secretary-General of the Department (or delegate)
EIS	Environmental Impact Statement
EP&A Act	*Environmental Planning and Assessment Act 1979*
SICR	St Ignatius College Riverview
Project	The development as described in the EIS
Site	Land to which the project application applies
WorkCover	NSW WorkCover

Commitment to Minimise Harm to the Environment

1. St Ignatius' College Riverview will implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction or operation of the project.

Occupation Certificate

2. St Ignatius' College Riverview will ensure a staged Interim and Final Occupation Certificate is obtained prior to the occupation of the new STEMP building.

Terms of Approval

3. St Ignatius College Riverview will carry out the project generally in accordance with the:

    a) Environmental Impact Statement;
    b) Drawings prepared by PMDL Architecture & Design and Arcadia;
    c) Management and Mitigation Measures;
    d) Any Conditions of Approval.

4. If there is any inconsistency between the above, the Conditions of Approval shall prevail to the extent of the inconsistency.

5. St Ignatius' College Riverview will ensure compliance with the relevant requirement/s of the Secretary-General of the Department of Planning, Industry and Environment arising from the Department's assessment of:

a) Any reports, plans, programs, strategies or correspondence that are submitted in accordance with this Approval; and
b) The implementation of any recommended actions or measures contained in reports, plans, programs, strategies or correspondence submitted by the Project Team as part of the application for Approval.

Access

6. St Ignatius College Riverview will ensure at Construction Certificate Stage to ensure compliance with Part D3 and Part E3 of the Building Code of Australia (BCA).

Noise

7. Construction on the Site will only be undertaken between 7am and 6pm Monday to Friday, and 8am to 1pm on Saturdays. No construction will be allowed on site on Sundays or Public Holidays.

Heritage

8. Works are to be undertaken in accordance with the Heritage Impact Statement prepared by NBRS, dated October 2020.

Tree Removal

9. Trees to be retained will be protected in accordance with the recommendations of the Arboricultural Impact Assessment prepared by Tree IQ and dated July 2020.

Construction and Noise Mitigation

10. All heavy vehicle movements shall be from the point access via the shortest appropriate route to the state road network and vice versa;

11. Contractors shall restrict deliveries, including plant deliveries to outside of peak student pick-up and drop-off times;

12. All heavy vehicles shall enter and exit in a forward direction;

13. Construction vehicles shall not queue on public road network prior to the commencement of works;

14. Where traffic controllers are used to facilitate heavy vehicle movements, priority shall be given to the public over construction vehicles;

15. Truck loads shall be covered during transportation to or from the site;

16. Loading and unloading should only within work sites and approved on-street Work Zones;

17. Deliveries shall be coordinated to minimise the amount of construction vehicles on site at any one time;

18. Neighbouring properties should be notified of construction works, timing and significant events; and

19. Contractors shall repair and clean up any damage to the road network resulting from construction vehicle associated with the works.

Vibration

20. The potential vibration impacts should be assessed prior to the issuing of the relevant Construction Certificate and its is recommended that safe working distances for vibration intensive plant.

Construction Noise Mitigation and Management

21. The Construction Contractor will need to, where reasonable and feasible, implement best practice noise mitigation measures, including:

    a) Judicious selection of mechanical plant and equipment (e.g. quieter machinery and power tools);
    b) Maximising the offset distance between noisy plant items and nearby noise sensitive receivers.
    c) Avoiding the coincidence of noisy plant working simultaneously close together and adjacent to sensitive receivers;
    d) Orientating equipment away from noise sensitive areas;
    e) Carrying out loading and unloading away from noise sensitive areas;
    f) Localised shielding of noisy equipment;
    g) Minimising consecutive works in the same locality;
    h) Considering periods of respite.

An Environmental Risk Assessment to identify the potential environmental impacts associated with the construction of the development. The impacts and mitigations of that risk assessment have been incorporated in the above.

PART J PROJECT JUSTIFICATION

The proposal is considered to be justified in the context of environmental, social and economic terms and is compatible with the locality in which it is proposed.

This application is lodged on the basis of:

Supporting State, Regional and Local Planning objectives

The proposal is consistent with the objectives, provisions and strategies outlined within the following State, Regional and Local plans and policies:

- *Environmental Planning and Assessment Act 1979*
- *Environmental Planning and Assessment Regulation 2000*
- *Protection of the Environment Operations Act 1979*
- *Biodiversity Conservation Act 2016*
- *Biodiversity Conservation Regulation 2017*
- *State Environmental Planning Policy (State and Regional Development) 2011*
- *State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017*
- *State Environmental Planning Policy (Infrastructure) 2007*
- *State Environmental Planning Policy No. 19 – Bushland in Urban Areas*
- *State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017*
- *State Environmental Planning Policy No 55 – Remediation of Land*
- *Lane Cove Local Environmental Plan 2009*
- *Lane Cove Development Control Plan 2010*

Appropriate use of an approved site

The proposal will contribute to the provision of a state-of-the-art education facility. The strengthening of the education sector is an important strategy for supporting the sustainable growth of Lane Cove, the Sydney Metropolitan Area and NSW. The development complements significant investment in infrastructure and will continue to be an employment generating development.

Environmental impacts have been minimised

Specialist consultants have assessed the risks and determined that the development can be undertaken with minimal environmental impacts. No significant risk to the locality is to result from the proposal.

Compatibility with surrounding development

The proposed use is compatible with existing and future uses on the subject site and adjacent land. The investigations undertaken as part of this application conclude that no significant cumulative impact would occur from the proposed use for the purpose of an educational establishment.

Ecologically Sustainable Development

The principles of ecological sustainable development as outlined in Clause 7(4) of the EP&A Regulation are addressed as follows:

- *Precautionary Principle*
  No unmanageable threat or irreversible damage to the environment has been identified in relation to the proposal.

- *Inter-generational Equity*

No unreasonable use of resources, affectation of environmental processes or prevention of the use of land for future generations will occur from the proposal.

- *Conversation of Biological Diversity and Ecological Integrity*
  The site has been previously disturbed and does not present any risk to any significant ecological integrity.

  No processes, habitats or species outside the site are likely to be significantly affected by the development.

- *Improved Valuation, Pricing and Incentive Mechanisms*
  The proposal seeks to implement measures to avoid, contain and address any associated waste or pollution through appropriate design and management.

Comprehensive justification for the proposed school is provided throughout this EIS and in the plans and technical reports included as appendices.

PART K CONCLUSION

This EIS has been prepared to consider the environmental, social, and economic impacts of the proposed development at St Ignatius' College Riverview. The EIS has addressed the matters outlined in the SEARs (**Appendix 4**) and accords with Schedule 2 of the EP&A Regulation with regards to consideration of relevant environmental planning instruments, built form, social and environmental impacts.

The proposal is considered appropriate for the location and should be supported by the Minister for Planning for the following reasons:

- It has been prepared having regard to the relevant planning legislation and is permissible with consent.
- The proposal has been prepared with regard to the relevant State and regional planning policies and strategies and demonstrates consistency and compliance with the objectives of the strategic documents.
- It has been prepared having regard to Council's planning policies and generally complies with the aims and objectives of the planning controls for the Site including the LCLEP 2009 and LCDCP 2010.
- The proposal is suitable for the Site as evidenced by the Site analysis and various Site investigations, including visual impact assessment and heritage.
- The proposal does not have any unacceptable off-site impacts on adjoining or surrounding properties or the public domain, in terms of traffic, social and environmental impacts.
- The proposal improves on-site pedestrian circulation across the Campus.
- The proposed development is of a high quality in terms of built form, bulk and architectural treatment and responds positively to adjoining development. The proposal will make a positive contribution to the overall built form, and respects the architectural integrity and heritage character of St Ignatius' College Riverview and its environment.
- The proposal has addressed the concerns raised during community consultation with key stakeholders;
- The proposed development will result in an improved educational environment for the school through:
    - Promoting excellence in education;
    - Building on the strengths of the past to inform the present and create new futures that will enable students to experience growth and success;
    - Achieve quality teaching and learning in all aspects of School life.
- The proposed development will contribute positively to energy efficiency and environmental sustainability. The proposed development has adopted and incorporated many ESD features to reduce energy consumption during the life of the proposed development.

In summary, the development warrants the support of the Minister and we therefore recommend that approval be granted to New Ignis Stage 2 for St Ignatius' College Riverview.