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Green Square Integrated Community Facility and School

Environmental Impact Statement (SSD-10381)

Prepared for:
NSW Department of Education

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M **Heritage Impact Statement**
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O **Social Impact Assessment**
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T	**Remedial Action Plan** *Prepared by JBS&G*
U	**Interim Audit Advice Letter and subsequent letter responding to SEARs** *Prepared by Ramboll*
V	**Infrastructure Management Plan** *Prepared by Stantec Australia*
W	**Accessibility Report** *Prepared by Philip Chun*
X	**Civil Services Report** *Prepared by Bonacci Group*
Y	**Lighting Strategy** *Prepared by Stantec Australia*
Z	**ESD Report** *Prepared by Norman Disney & Young*
AA	**Operational Waste Management Plan** *Prepared by Elephants Foot Recycling Solutions*
AB	**Preliminary Construction Pedestrian & Traffic Management Plan** *Prepared by Traffix*
AC	**Preliminary Construction Management Plan** *Prepared by JBS&G*
AD	**Integrated Water Management Plan** *Prepared by Stantec Australia*
AE	**Arboricultural Impact Assessment Report** *Prepared by Sturt Noble Arboriculture*
AF	**BDAR Waiver Approval** *Prepared by Heritage NSW*
AG	**Structural Report** *Prepared by Meinhardt-Bonacci*
AH	**Operational Plan** *Prepared by SINSW*
AI	**Noise & Vibration Impact Assessment** *Prepared by Acoustic Logic*
AJ	**Pedestrian Wind Environment Statement** *Prepared by Windtech*

Statement of Veracity

This Environmental Impact Statement (EIS) has been prepared in accordance with Schedule 2 of the *Environmental Planning and Assessment Regulations 2000*. This Environmental Impact Statement (EIS) has been prepared by:

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In respect of:

State Significant Development Application (SSD-10381) for the proposed development of the Green Square Integrated Community Facility and School (as described in **Section 3** of this EIS).

Applicant:

NSW Department of Education
C/– Architectus Australia Pty Ltd

Land to be developed:

3 Joynton Avenue, Zetland NSW 2017. The site is legally described as Lot 2 in Deposited Plan 1174641.

Declaration:

It is declared to the best of my knowledge that:

- This Environmental Impact Statement has been prepared in accordance with Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*;
- This Environmental Impact Statement contains all available information that is relevant to the environmental assessment of the proposed development; and
- The information contained in this report is neither false nor misleading.




Jane Fielding | Jonathan Archibald | Boris Santana | Jasmine Bautista

Executive Summary

Preliminary

This Environmental Impact Assessment (EIS) has been prepared by Architectus Australia Pty Ltd (Architectus) on behalf of the applicant, NSW Department of Education, in support of a State Significant Development (SSD) Application (SSD-10381) for the proposed development of the Green Square Integrated Community Facility and School, located at 3 Joynton Avenue, Zetland NSW 2017.

This EIS should be read in conjunction with the Secretary's Environmental Assessment Requirements (SEARs) issued by the Department of Planning, Industry and Environment (DPIE) on 15 November 2019 and attached at **Appendix A**, and the supporting technical documents provided at **Appendix D – Appendix AJ**.

Site

The site is located at 3 Joynton Avenue, Zetland NSW 2017 and is legally described as Lot 2 of Deposited Plan 1174641.

The site is within the City of Sydney (Council) Local Government Area (LGA). It is located in the north western corner of the Green Square Community and Cultural Precinct, and occupies an important position within the Green Square Town Centre.

The site is currently occupied by the Green Square community hall and carpark, a 3-storey hydrotherapy facility and associated open space to the south and west of the building. The hydrotherapy facility was decommissioned in late 2020, with the site presently used for parking and the storage of construction materials.

Proposed Development

The proposed development seeks approval for the construction of the Green Square Integrated Community Facility and School, being a public primary school (Kindergarten to Year 6) and associated works.

The proposed development will be a vibrant, welcoming place to learn for both the attending children and the surrounding and broader community after hours. The new public primary school will respond to the NSW Department of Education's Education Facilities and Guidelines (EFSG) requirements for a 'Core 21' school facility.

The scope of the proposed works subject of this SSD application includes the following:

- A new public primary school (Kindergarten – Year 6). The new school will respond to EFSG requirements for a Core 21 school facility, which includes:
    - A capacity for up to 600 students and 60 staff;
    - 24 home bases;
    - 1 Canteen;
    - Out of Hours School Care (OHSC);
    - Covered Outdoor Learning Space (COLA);

    - Communal Hall (located at the ground level, which is to be shared with the community outside school hours);
    - Library;
    - Multi-purpose games court;
    - Administration support spaces;
    - Outdoor learning spaces and play spaces, including a central courtyard at ground level and rooftop play area; and
    - Staff rooms, administrative offices, interview rooms, storerooms and amenities.
- Community Facilities, solely for community use consisting of two multi-purpose spaces 1A and 1B (at ground level) with kitchenette, amenities and storage.
- Shared Facilities to be used by both the school and the community consisting of:
    - Communal Hall, Multi-purpose space, Multi-purpose Games Court, and ground level courtyard.
- Bicycle parking for the community facilities and the school facilities.

Consultation

As required by the SEARs, the project team has undertaken extensive consultation with relevant state and local Government authorities, agencies and other stakeholders, as well as consultation with the local community.

The issues discussed and matters raised during this consultation have been addressed as part of the proposal. An overview of these consultation processes and outcomes have been addressed in detail at **Section 4** of the EIS.

Planning Framework and Assessment

The proposed development is classified as SSD on the basis that it satisfies the requirements of clause 15(1) of Schedule 1 of *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP), being 'Development for the purpose of a new school (regardless of the capital investment value)'.

The proposed development has been assessed against the SEARs issued for the project on 15 November 2019 at **Appendix A** and the applicable planning framework. In summary:

Statutory and Strategic Planning Context

The proposed development has been assessed against relevant strategic policies and planning controls and is found to be generally consistent with these, as detailed within **Section 5** of this EIS. Additionally, the proposal satisfies the SEARs as demonstrated in this EIS.

Environmental Impacts

Following a comprehensive environmental assessment, it has been determined that the proposed development will not result in any unacceptable environmental impacts, either to surrounding properties or the public domain. Subject to the various mitigation measures recommended at **Section 8**, the proposal will not result in any unreasonable traffic, heritage, economic, social and environmental (or other) impacts.

Suitability of the Site

There are no known site conditions which would prevent the development including geotechnical conditions, contamination, flooding, biodiversity, Aboriginal cultural heritage, or other. The site is well serviced by existing public transport connections and will also benefit from further enhancement planned within the locality.

Where there are environmental impacts, these can be sufficiently ameliorated through mitigation measures and design development. The site is therefore suitable for the proposed development.

Public Interest

The proposed Green Square Integrated Community Facility and School offers significant public benefits to the users of the school and broader community. Key benefits of the proposed development are:

- It will provide permanent and state of the art teaching facilities for students and staff that meet current standards and best practice requirements.
- Provide community access to the site and its facilities, including, but not necessarily limited to, the multi-purposes spaces 1A and 1B (located at ground level), which are solely for community use. The proposed Communal Hall, Multi-purposes space and Multi-Purpose Games Court have also been designed to support outside of school hours use.
- The new building has been designed and certified to equivalent 5-star Green Star Design, providing a progressive sustainability outcome for the community.
- It will provide extensive play space, tree numbers, tree canopy, and shade cover for students. The proposed landscaping will provide urban amenity for users of the space.
- Improved and coherent landscaping strategy for the site which will provide a more appropriate setting for its heritage buildings and provide amenity benefits for users and visitors.
- The proposed development will generate construction and additional operational jobs, and together with the value of the project to the economy, will stimulate the economy.

On balance, accounting for site suitability, environmental impacts including cumulative impacts, the principles of Ecologically Sustainable Development (ESD), the risk assessment and key benefits, the proposed development is in the public interest.

Given the above it is considered that the SSD Application has merit and can be supported by the City of Sydney Council, as Delegated Authority for the Department of Planning, Industry and Environment and the Minister for Planning and Public Spaces.

Secretary's Environmental Assessment Requirements

SEARs for the project were issued under Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation) by DPIE on 15 November 2019. Refer to the SEARs in full at **Appendix A** to this report.

Table 1 below provides a summary of the SEARs and identifies the section of the report where the relevant requirement is addressed and/or the appendix reference for the specialist consultant's report associated with that requirement.

Table 1 Secretary's Environmental Assessment Requirements

Item/ Description	Document Reference
General Requirements	
Where relevant, the assessment of key issues below, and any other significant issues identified in the risk assessment, must include:	
- adequate baseline data	*Section 6: Environmental Assessment*
- consideration of the potential cumulative impacts due to other developments in the vicinity (completed, underway or proposed);	*Section 6.25 Cumulative Impacts*
- measures to avoid, minimise and if necessary, offset predicted impacts, including detailed contingency plans for managing any significant risks to the environment; and	*Section 8 Recommendations and Mitigation Measures*
- a health impact assessment of local and regional impacts associated with the development, including those health risks associated with relevant key issues.	*Appendix O*
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 - certification that the information provided is accurate at the date of preparation.	*Section 3: Proposed Development* *Appendix D*
Key Issues The EIS must address the following specific matters:	
1. Statutory and Strategic Context	
Address the relevant planning provisions, goals and strategic planning objectives in the following: – *Biodiversity Conservation Act 2016* – *State Environmental Planning Policy (State & Regional Development) 2011*	*Section 5: Statutory and Strategic Planning context*

Item/ Description	Document Reference
– *State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017* – *State Environmental Planning Policy No. 64 – Advertising and Signage* – *State Environmental Planning Policy No.55 – Remediation of Land* – *Draft State Environmental Planning Policy (Remediation of Land)* – *Draft State Environmental Planning Policy (Environment)* – *South Sydney Local Environmental Plan 114* – *South Sydney Local Environmental Plan 1998 and* – *Royal South Sydney Hospital Master Plan 2013 (Hill Thalis)* <u>Permissibility</u> Detail the nature and extent of any prohibitions that apply to the development <u>Development Standards</u> Identify compliance with the development standards applying to the site and provide justification for any contravention of the development standards. <u>Provisions</u> Adequately demonstrate and document in the EIS how each of the provisions in the listed instruments are addressed, including reference to necessary technical documents.	
2. Policies	
Address the relevant planning provisions, goals and strategic planning objectives in the following: – *NSW State Priorities* – *The Greater Sydney Regional Plan, A Metropolis of three cities* – *Future Transport Strategy 2056* – *State Infrastructure Strategy 2018 – 2038 Building the Momentum* – *Sydney's Cycling Future 2013* – *Sydney's Walking Future 2013* – *Sydney's Bus Future 2013* – *Crime Prevention Through Environmental Design (CPTED) Principles* – *Better Placed: An integrated design policy for the built environment of New South Wales (GANSW, 2017)* – *Eastern City District Plan* – *Green Square Town Centre Development Control Plan 2012* – *Design Guide for Schools – GANSW* – *City of Sydney Access Development Control Plan 2004* – *City of Sydney Heritage Development Control Plan 2006* – *Green Square Town Centre Public Domain Strategy* – *Green Square Community and Cultural Precinct Public Domain Coordination Plan* – *Green Square Public Art Strategy 2012* – *Sydney Landscape Code Volume 2: All development except for single dwellings*	*Section 5: Statutory and strategic planning context* *Section 6: Environmental Assessment* *Appendix F* *Appendix J* *Appendix L* *Appendix M* *Appendix O* *Appendix P* *Appendix Z*
3. Operation	
– Provide details of the proposed school operations, including staff and student numbers, school hours of operation, and operational details of any proposed before/after school care services. – Provide details of the community use of facilities including proposed activities, hours of operation and which areas are to be shared with the community and which areas are to be for exclusive use by the school. – Provide a detailed justification of suitability of the site to accommodate the proposal.	*Section 3: Proposed Development* *Section 6: Environmental Assessment* *Section 8: Recommendations and Mitigation Measures* *Appendix AH*

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.	*Section 2: Site Analysis* *Section 3 Proposed development* *Section 4: Consultation* *Section 6: Environmental Assessment* *Appendix E – Appendix G*
–	Address design quality and built form, with specific consideration of the overall site layout, streetscape, open spaces, façade, rooftop, massing, setbacks, building articulation, materials and colours.	
–	Provide details of any digital signage boards, including size, location and finishes.	
–	Clearly demonstrate how design quality will be achieved in accordance with Schedule 4 Schools – Design Quality Principles of State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 and the GANSW Design Guide for Schools.	
–	Detail how services, including but not limited to waste management, loading zones, and mechanical plant are integrated into the design of the development.	
–	Provide detailed site and context analysis to justify the proposed site planning and design approach including massing options and preferred strategy for future development.	
–	Provide a detailed landscape design, demonstrating consideration of the function, equity, biodiversity and amenity of outdoor play spaces, and integration with built form, security, shade structures, topography, canopy trees and other vegetation.	
–	Provide a visual impact assessment that identifies any potential impacts on the surrounding built environment and landscape including views to and from the site and any adjoining heritage items.	
–	Address CPTED Principles.	
–	Demonstrate good environmental amenity including access to natural daylight and ventilation, acoustic separation, access to landscape and outdoor spaces and future flexibility.	
–	Demonstrate that Aboriginal culture and heritage is considered and incorporated holistically in the design proposal.	
5.	**Design Excellence**	
–	Undertake an architectural design competition compliant with the *Architectural Design Competition Brief for the Green Square Integrated Community Facility and School* (GSICFS) dated October 2019 and prepared by Urbis for the NSW Department of Education and the City of Sydney.	*Appendix G*
–	Provide the Architectural Design Competition Report prepared by the Jury that: o summarises the competition process incorporating a copy of the competition brief; o outlines the assessment of the design merits of each of the entries; o sets out the rationale for the choice of the preferred design and how it best exhibits the potential to achieve design excellence in accordance with the provisions of Clause 6.9(4) Sydney Local Environmental Plan 2012 (Green Square Town Centre Stage 2) 2013; and o outlines any recommended design amendments that are relevant to the achievement of design excellence.	*Appendix G*
–	Set out how the design integrity of the preferred design will be maintained during design development and through to completion and occupation of the GSICFS.	*Appendix F*

6. Environmental Amenity	
– Assess amenity impacts on the surrounding locality, including solar access, visual privacy, visual amenity, overshadowing, view loss and acoustic impacts. – Conduct a view analysis to the site from key vantage points and streetscape locations (photomontages or perspectives should be provided showing the building envelope and likely future development). – Include a lighting strategy and measures to reduce spill into the surrounding sensitive receivers. – Identify any proposed use of the school outside of school hours (including weekends) and community use and assess any resultant amenity impacts on the immediate locality and proposed mitigation measures. – Detail amenity impacts including solar access, acoustic impacts, visual privacy, view loss, overshadowing and wind impacts. A high level of environmental amenity for any surrounding residential land uses must be demonstrated.	*Section 3: Proposed development* *Section 6: Environmental Assessment* *Appendix F* *Appendix Y* *Appendix AI* *Appendix AJ*
7. Staging	
Provide details regarding the staging of the proposed development (if any).	*Section 3: Proposed development*
8. Transport and Accessibility	
Include a transport and accessibility impact assessment, which details, but not limited to the following: – accurate details of the current daily and peak hour vehicle, existing and future public transport networks and pedestrian and cycle movement provided on the road network located adjacent to the proposed development. – details of estimated total daily and peak hour trips generated by the proposal for all modes of travel, including vehicle (car driver and car passenger), public transport, pedestrian and bicycle trips. – the adequacy of existing public transport or any future public transport infrastructure within the vicinity of the site, pedestrian and bicycle networks and associated infrastructure to meet the likely future demand of the proposed development with an appreciation of the cumulative impacts of proposed and approved developments in the area and identification of any upgrades required. – the identification of infrastructure measures required to integrate the development with the existing/future public transport and active transport network. – the impact of trips generated by the development on nearby intersections, with consideration of the cumulative impacts from other approved developments in the vicinity, and the need/associated funding for, and details of, upgrades or road improvement works, if required (Traffic modelling is to be undertaken using SIDRA network modelling for current and future years) to the satisfaction of Transport for NSW and Transport for NSW (Roads and Maritime Services). Specifically, the following intersections are to be examined/modelled: o Joynton Avenue / Future Zetland Avenue o Portman Street / Future Zetland Avenue – the identification of infrastructure required to address any impacts on traffic efficiency and road safety impacts associated with the proposed development, including details on improvements required to affected intersections, additional school bus routes along bus capable roads (i.e. minimum 3.5m wide travel lanes), additional bus stops or bus bays. – details of travel demand management measures to minimise the impact on general traffic and bus operations, including details of a location-specific sustainable travel plan (Green Travel Plan and specific Workplace travel	*Section 3: Proposed Development* *Section 6: Environmental Assessment* *Appendix P* *Appendix AC*

plan) and the provision of facilities to increase the non-car mode share for travel to and from the site.

- the proposed walking and cycling access arrangements and connections to public transport services and bicycle networks.
- the proposed access arrangements, including car and bus pick-up/drop-off facilities, and measures to mitigate any associated traffic impacts and impacts on public transport, pedestrian and bicycle networks, including pedestrian crossings and refuges and speed control devices and zones.
- proposed bicycle parking provision, including end of trip facilities, in secure, convenient, accessible areas close to main entries incorporating lighting and passive surveillance.
- proposed number of car parking spaces that is consistent with modal targets for the site that prioritise Sustainable Transport such as Public Transport and Active Transport (cycling and walking) and reduce car dependence.
- an assessment of the cumulative on-street parking impacts of cars and bus pick-up/drop-off, staff parking and any other parking demands associated with the development.
- an assessment of road and pedestrian safety adjacent to the proposed development and the details of required road safety measures and personal safety in line with CPTED.
- emergency vehicle access, service vehicle access, delivery and loading arrangements and estimated service vehicle movements (including vehicle type and the likely arrival and departure times).
- details of existing and proposed freight and servicing vehicle access arrangements, including a Delivery Service Plan detailing loading dock and servicing provision, adequacy and management ensuring all servicing and loading occurs on-site and does not rely on kerbside controls.
- in relation to construction traffic:
    - detail vehicle routes, peak hour and daily truck movements, hours of operation, access arrangements, works zone location, haulage routes, construction program and traffic control measures for all demolition /construction activities;
    - an assessment of road safety at key intersections and locations subject to pedestrian / vehicle / bicycle conflicts;
    - details of temporary cycling and pedestrian access and end of trip facilities during construction;
    - an assessment of the likely construction traffic impacts, such as required road / lane closures and diversions, impacts on bus and ‘point to point’ transport, impacts on pedestrian and cycle movement, and taking into account other construction activities;
    - details of proposed mitigation measures should any impacts be identified, the duration of the impacts and measures proposed to mitigate any associated general traffic, public transport, pedestrian and cyclist impacts should be clearly identified; and
    - preparation of a draft Construction Pedestrian and Traffic Management Plan to demonstrate the proposed management of impact. This Plan needs to include works zone location, vehicle routes, number of trucks, hours of operation, indicative construction program, access arrangements and traffic control measures for all demolition/construction activities.

Relevant Policies and Guidelines:

- *Guide to Traffic Generating Developments (Roads and Maritime Services)*

– *EIS Guidelines – Road and Related Facilities (DoPI)* – *Cycling Aspects of Austroads Guides* – *NSW Planning Guidelines for Walking and Cycling* – *Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development* – *Australian Standard AS 2890.3:2015 Parking Facilities Part 3: Bicycle Parking Facilities.* – *'Austroads Bicycle Parking Facilities: Guidelines for Design and Installation'* – *Green Square Town Centre DCP 2012.*	
9. Ecologically Sustainable Development	
– Detail how ESD principles (as defined in clause 7(4) of Schedule 2 of the Regulation) will be incorporated in the design and ongoing operation phases of the development. – Include a framework for how the future development will be designed to consider and reflect national best practice sustainable building principles to improve environmental performance and reduce ecological impact. This should be based on a materiality assessment and include waste reduction design measures, future proofing, use of sustainable and low-carbon materials, energy and water efficient design (including water sensitive urban design) and technology and use of renewable energy. – Include preliminary consideration of building performance and mitigation of climate change, including consideration of Green Star Performance. – Include an assessment against an accredited ESD rating system or an equivalent program of ESD performance. This should include a minimum rating scheme target level. – Demonstrate how environmental design will be achieved in accordance with the GANSW Environmental Design in Schools Manual (https://www.governmentarchitect.nsw.gov.au/guidance/environmental-design-in-schools) and Section 5.15 of the Architectural Design Competition Brief for the GSICFS dated October 2019 and prepared by Urbis. – Provide a statement regarding how the design of the future development is responsive to the CSIRO projected impacts of climate change, specifically: o hotter days and more frequent heatwave events. o extended drought periods. o more extreme rainfall events. o gustier wind conditions. o how these will inform landscape design, material selection and social equity aspects (respite/shelter areas). <u>Relevant Policies and Guidelines:</u> – *NSW and ACT Government Regional Climate Modelling (NARCliM) climate change projections.*	*Section 6: Environmental Assessment* *Appendix Z*
10. Heritage	
– Provide a statement of significance and an assessment of the impact on the heritage significance of the state and local heritage items in the vicinity and on the site and the adjoining heritage conservation areas in accordance with the guidelines in the NSW Heritage Manual. – Address any archaeological potential and significance on the site and the impacts the development may have on this significance.	*Section 6: Environmental Assessment* *Section 8: Recommendations and Mitigation Measures* *Appendix F* *Appendix M*
11. Social Impacts	
– Prepare a social impact assessment, which: o identifies and analyses the potential social impacts of the development, from the points of view of the affected community/ies and other relevant stakeholders, i.e. how they expect to experience the project.	*Section 6: Environmental Assessment* *Section 8: Recommendations*

○ 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 measures. ○ details how social impacts will be adaptively monitored and managed over time.	*and Mitigation Measures* *Appendix O*
12. Aboriginal Heritage	
– Identify and describe the Aboriginal cultural heritage values that exist across the site and document these in an Aboriginal Cultural Heritage Assessment Report (ACHAR). This may include the need for surface survey and test excavation. – Identify and address the Aboriginal cultural heritage values in accordance with the Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (OEH, 2011) and Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW (OEH, 2010). – Undertake consultation with Aboriginal people and document in accordance with Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW). The significance of cultural heritage values of Aboriginal people who have a cultural association with the land are to be documented in the ACHAR. – Identify, assess and document all impacts on the Aboriginal cultural heritage values in the ACHAR. – The EIS and the supporting ACHAR must demonstrate attempts to avoid any impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the ACHAR and EIS must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to EES Group at the Department.	*Section 6: Environmental Assessment* *Section 8: Recommendations and Mitigation Measures* *Appendix L*
13. Noise and Vibration	
– Identify and provide a quantitative assessment of the main noise and vibration generating sources during demolition, site preparation, bulk excavation, construction. Outline measures to minimise and mitigate the potential noise impacts on surrounding occupiers of land. – Identify and assess operational noise, including consideration of any public-address system, school bell, mechanical services (e.g. air conditioning plant), use of any school hall for concerts etc. (both during and outside school hours) and any out of hours community use of school facilities, and outline measures to minimise and mitigate the potential noise impacts on surrounding occupiers of land. – an assessment of the likely vibration amenity and structural impacts of the project under the German Standard DIN 4150-3 Structural Vibration – Effects of vibration on structures, including consideration of impacts to the structural integrity and significance of heritage items.	*Section 6: Environmental Assessment* *Section 8: Recommendations and Mitigation Measures* *Appendix AI*

Relevant Policies and Guidelines: – *NSW Noise Policy for Industry 2017 (EPA)* – *Interim Construction Noise Guideline (DECC)* – *Assessing Vibration: A Technical Guideline 2006* – *Development Near Rail Corridors and Busy Roads – Interim Guideline* – *(Department of Planning 2008)* – *Australian Standard 2363:1999 Acoustics – Measurement of noise from helicopter operations.*	
14. Contamination	
– Assess and quantify any soil and groundwater contamination and demonstrate that the site is suitable for the proposed use in accordance with SEPP 55. A site audit statement will be required to demonstrate that the accompanying reports and any recommended actions are sufficient to satisfy SEPP 55. – Undertake a hazardous materials survey of all existing structures and infrastructure prior to any demolition or site preparation works. Relevant Policies and Guidelines: – *Managing Land Contamination: Planning Guidelines - SEPP 55 Remediation of Land (DUAP).*	*Section 5: Statutory and strategic planning context* *Section 6: Environmental Assessment* *Appendix S – Appendix U*
15. Utilities	
– Prepare an Infrastructure Management Plan in consultation with relevant agencies, detailing information on the existing capacity and any augmentation and easement requirements of the development for the provision of utilities including staging of infrastructure. – Prepare an Integrated Water Management Plan detailing any proposed alternative water supplies, proposed end uses of potable and non-potable water, and water sensitive urban design.	*Section 6: Environmental Assessment* *Appendix AC* *Appendix V*
16. Contributions	
– Address Council's 'Section 7.11 Contribution Plan' and/or details of any Voluntary Planning Agreement, which may be required to be amended because of the proposed development.	*Section 5: Statutory and strategic planning context*
17. Drainage	
– Detail measures to minimise operational water quality impacts on surface waters and groundwater and to maximise on-site water infiltration. – Stormwater plans detailing the proposed methods of drainage without impacting on the downstream properties. WSUD infrastructure and canopy tree planting must form part of the stormwater plans where appropriate. Relevant Policies and Guidelines: – *Guidelines for development adjoining land and water managed by DECCW (OEH, 2013).*	*Section 6: Environmental Assessment* *Appendix X*
18. Flooding	
Identify flood risk on-site (detailing the most recent flood studies for the project area) and consideration of any relevant provisions of the NSW Floodplain Development Manual (2005) and Council's Interim Floodplain Management Policy, including the potential effects of climate change, sea level rise and an increase in rainfall intensity. If there is a material flood risk, include design solutions for mitigation. The development is also required to consider Section 5.13 of the Architectural Design Competition Brief for the GSICFS dated October 2019 and prepared by Urbis.	*Section 6: Environmental Assessment* *Appendix X*
19. Biodiversity Assessment	
– Biodiversity impacts related to the proposed development (SSD 10224) are to be assessed in accordance with the Biodiversity Assessment Method and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the Biodiversity Conservation Act 2016 (s6.12),	*Section 6: Environmental Assessment* *Appendix H* *Appendix AF*

Biodiversity Conservation Regulation 2017 (s6.8) and Biodiversity Assessment Method. – The BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the Biodiversity Assessment Method. – The BDAR must include details of the measures proposed to address the offset obligation as follows: o the total number and classes of biodiversity credits required to be retired for the development/project o the number and classes of like-for-like biodiversity credits proposed to be retired o the number and classes of biodiversity credits proposed to be retired in accordance with the variation rules o any proposal to fund a biodiversity conservation action o any proposal to make a payment to the Biodiversity Conservation Fund – If seeking approval to use the variation rules, the BDAR must contain details of the reasonable steps that have been taken to obtain requisite like-for-like biodiversity credits. – The BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the Application of the Biodiversity Assessment Method Order 2017 under s6.10 of the Biodiversity Conservation Act 2016. – Where a Biodiversity Assessment Report is not required, engage a suitably qualified person to assess and document the flora and fauna impacts related to the proposal. *Note: Notwithstanding these requirements, the Biodiversity Conservation Act 2016 requires that State Significant Development Applications be accompanied by a Biodiversity Development Assessment Report unless otherwise specified under the Act.*	
20. Sediment, Erosion and Dust Controls	
Detail measures and procedures to minimise and manage the generation and off-site transmission of sediment, dust and fine particles. <u>Relevant Policies and Guidelines:</u> – *Managing Urban Stormwater – Soils & Construction Volume 1 2004 (Landcom)* – *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA)* – *Guidelines for development adjoining land and water managed by DECCW (OEH, 2013)*	*Section 6: Environmental Assessment* *Appendix X*
21. Waste	
Identify, as per Section 5.16 of the Architectural Design Competition Brief for the GSICFS dated October 2019 and prepared by Urbis, quantify and classify the likely waste streams to be generated during construction and operation and describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste. Identify appropriate servicing arrangements (including but not limited to, waste management, loading zones, mechanical plant) for the site.	*Section 6: Environmental Assessment* *Appendix AA* *Appendix Q*
22. Construction Hours	
Identify proposed construction hours and provide details of the instances where it is expected that works will be required to be carried out outside the standard construction hours.	*Section 6: Environmental Assessment* *Appendix AC*
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:	

– A section 10.7(2) and (5) Planning Certificates (previously Section 149(2) and (5) Planning Certificate)	*Appendix B*
– 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 after hours and community use strategy	*Appendix E* *Appendix F*
– Site Survey Plan, showing existing levels, location and height of existing, future and adjacent structures / buildings and site boundaries	*Appendix C*
– Site Analysis Plans, including: o site and context plans that demonstrate principles for future development and expansion, built form character and open space network o active transport linkages with existing, proposed and potential footpaths and bicycle paths and public transport links o site and context plans that demonstrate principles for future network, active transport linkages with existing, proposed and potential footpaths and bicycle paths and public transport links	*Appendix F*
– Sediment and Erosion Control Plan	*Appendix X*
– Shadow Diagrams	*Appendix F*
– View analysis, photomontages and architectural renders, including from those from public vantage points	*Appendix F*
– Landscape architectural drawings showing key dimensions, RLs, TOW levels, scale bar and north point, including: o integrated landscape plans at appropriate scale, with detail of new and retained planting, shade structures, tree canopy cover, materials and finishes proposed including articulation of playground spaces o plan identifying significant trees, trees to be removed and trees to be retained or transplanted o details of any planting on structure, confirming sufficient soil volume, drainage, irrigation and easy access for maintenance	*Appendix I*
– 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 including building envelope study to justify the proposed site planning and design approach o visual impact assessment identifying potential impacts on the surrounding built environment and adjoining heritage conservation areas and heritage items o demonstrate compliance with the City of Sydney Competitive Design Policy o summary report of consultation with the community and response to any feedback provided	*Appendix F*

– Geotechnical and Structural Report	*Appendix R and Appendix AG*
– Accessibility Report	*Appendix W*
– Arborist report	*Appendix AE*
– Schedule of materials and finishes	*Appendix F*
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: – City of Sydney Council – Government Architect NSW – Transport for NSW and – Transport for NSW (Roads and Maritime Services). 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.	*Section 4* *Appendix N*

1. Introduction

1.1 Project Overview

This EIS has been prepared by Architectus Australia Pty Ltd (Architectus) on behalf of the NSW Department of Education to accompany an SSD Application (SSD-10381) for the construction of an integrated community facility and school (Kindergarten to Year 6) including associated works. The project is known as the Green Square Integrated Community and School (GS ICFS).

The site

The site is located at 3 Joynton Avenue, Zetland NSW 2017 and is legally described as Lot 2 of Deposited Plan 1174641.

The site is within the City of Sydney LGA. It is in the north western corner of the Green Square Community and Cultural Precinct, which occupies an important position within the Green Square Town Centre.

The site has existing frontages to Joynton Avenue to the east and Portman Street to the west. The site will also have a street frontage to the north at the future Zetland Avenue. It is noted that the construction of Zetland Avenue is progressing and is anticipated to be operational in early 2022.

The site is currently occupied by the Green Square community hall and carpark, a three (3) storey Hydrotherapy building and associated open space to the south and west of the building. The Hydrotherapy building was decommissioned in late 2020, with the site presently used for parking and the storage of construction materials.

Refer to a detailed overview of the site at **Section 2** of this EIS.

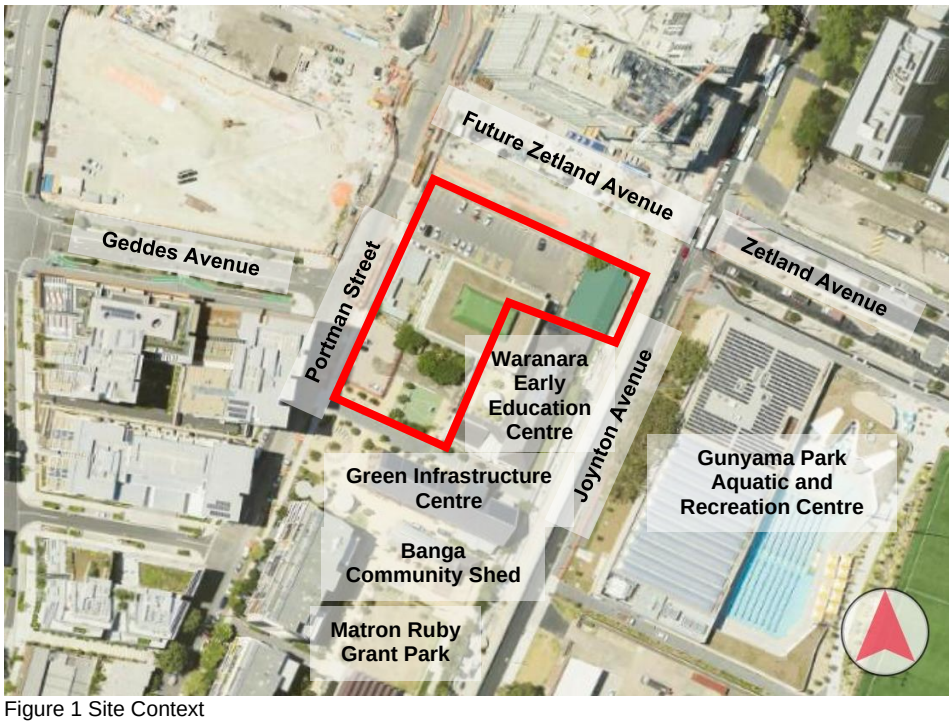


Figure 1 Site Context
The site is outlined in red
Source: Metro Map with Architectus overlay

Proposed development

The Project proposes the construction of an integrated community facility and public primary school (Kindergarten to Year 6) and associated works.

A detailed description of the proposed development is provided at **Section 3.1** of this EIS. Refer also to the architectural plans (**Appendix E**) and architectural design report (**Appendix F**) prepared by BVN Architects, and Landscape Plans (**Appendix I**) and Landscape Design Report (**Appendix J**) prepared by Turf Design Studio.

1.2 Project Objectives

The objective of the proposed development is to develop a joint community facility and new public primary school (Kindergarten – Year 6) that responds to the EFSG requirements for a Core 21 School Facility.

The ESFG Educational Principles that have informed the design of the proposed development include:

- First and foremost, focus on the needs of learners and learning.
- Build community and identity to create a culture of welcome, inclusion and belonging that reflects and respects diversity within the school's community.
- Be aesthetically pleasing.
- Provide contemporary, sustainable learning environments.
- Embed potential for reconfigurability, multi-purpose use over time.

1.3 The Need for the Proposal

Green Square is currently undergoing significant urban renewal. The City of Sydney provides a snapshot of the development at Green Square, identifying that 61,000 people are expected to live in Green Square by 2030, and the number of primary school children are projected to increase by 1,249 students by 2026.

The proposed development is located within the Green Square Primary Cluster, which currently comprises of five (5) schools across three (3) principal networks, including:

- Alexandria Park CS (Marrickville Principal Network);
- Bourke Street PS (Port Jackson Principal Network);
- Darlington PS (Marrickville Principal Network);
- Erskineville PS (Marrickville Principal Network); and
- Gardeners Road PS (Botany Bay Principal Network).

Over recent years, the Green Square Primary Cluster has experienced significant enrolment growth. Further development has occurred to existing schools in the Cluster to increase teaching spaces, to support residents as the Green Square population continues to grow. However, while there has been an addition of 35 permanent teaching spaces, the Cluster is still expected to reach permanent teaching space capacity in 2025, with a total shortfall of 38 teaching spaces by 2031.

In addition, the proposed development was subject of a Government Business Case that concludes how existing schools in the Green Square Primary Cluster are either at capacity or with limitations that restrict or significantly increase the cost of development works. This highlights the need for new public education infrastructure to support the existing and future Green Square community. The integrated community facilities will contribute to strengthen the sense of local

community and belonging, which is essential in an area undergoing significant transformational change.

1.4 Report Structure

This EIS provides the following:

- Section 1: An overview of the site, proposed development, project objectives and project team;
- Section 2: A detailed description of the site and surrounding context, and summary of site constraints;
- Section 3: A detailed description of the proposed development;
- Section 4: A description of the consultation undertaken for the project, including the consultation process, issues raised and how the design of the development has responded to these issues;
- Section 5: An assessment of the proposed development against relevant strategic and statutory planning controls;
- Section 6: An assessment of key issues and impacts generated by the proposed development;
- Section 7: An environmental risk assessment;
- Section 8: Recommended mitigation measures; and
- Section 9: Conclusion.

This EIS should be read in conjunction with the SEARs attached at **Appendix A,** and the supporting technical documents provided at **Appendix D – Appendix AJ**.

1.5 Project Team

The project team is set out in **Table 2** below.

Table 2 Project team

Discipline	Consultant
Applicant	NSW Department of Education / City of Sydney Council
Quantity Surveyor	MBMpl Pty Ltd
Surveyor	C.M.S Surveyors Pty Limited
Architect	BVN
Landscape Architect	Turf Design Studio
Urban Planner	Architectus Australia Pty Ltd
Heritage Consultant	City Plan Services
Historical Archaeological Consultant	Archaeological Management & Consulting Group
Aboriginal Cultural Heritage Consultant	Archaeological Management & Consulting Group
Traffic Consultant	Traffix
Geotechnical Engineer	JK Geotechnics
Site Contamination Consultant	Ramboll
Arboricultural Consultant	Sturt Noble Arboriculture
Social Impact Consultant	RPS Group
Ecological Consultant	Cumberland Ecology
ESD Consultant	Norman Disney & Young
Accessibility Consultant	Philip Chun Accessibility Pty Ltd
Civil Engineer	Meinhardt-Bonacci (NSW) Pty Ltd
Structural Engineer	Meinhardt-Bonacci (NSW) Pty Ltds
Acoustic Engineer	Acoustic Logic
Wind Engineer	Windtech

Infrastructure Management Engineer	Stantec Australia Pty Ltd
Water Management Engineer	Stantec Australia Pty Ltd
Construction Management Consultant	JBS&G
Waste Management Consultant	Elephants Foot Recycling Solutions
Lighting Consultant	Stantec Australia Pty Ltd
Consultation Consultant	RPS Group Pty Ltd

1.6 Estimated Capital Investment Value (CIV)

The estimated Capital Investment Value (CIV) for the proposed development is $56,521,350 (excluding GST). A detailed cost estimate has been prepared by MBMpl Pty Ltd and is provided at **Appendix D**.

1.7 Related Planning Applications

The site holds extant development consent for both the demolition of existing structures on site, as well as remediation and site preparation works to facilitate the proposed redevelopment. Refer to table below.

Table 3 Related Planning Applications

Application Number	Description	Determination Date
D/2011/1022	This approval provides for the demolition of buildings, removal of 25 trees from the site and removal of the northern car park, pathways, and existing in-ground services. Whilst works associated with Stages 1, 2A and 2B of the development consent have been undertaken, comprising tree removal, and decommissioning of services at the site, the Stage 3 works (demolition of buildings) have not yet been commenced. These approved Stage 3 works provide for the demolition of hydrotherapy building, neurological building and northern car park, being the only structures that remain on the site. These works are shown in light blue outline in the site plan at Figure 2 below.	26/9/2011
D/2011/1022/A	A subsequent Section 4.55(1A) application was approved by Council for changes to Condition 3 to allow surface contaminants to be removed from the topsoil.	7/10/2011
D/2011/1022/B	A subsequent Section 4.55(1A) application was approved by Council for changes to Condition 3A to permit the removal of building slabs and hardstand areas on the site.	24/4/2012
D/2020/923	The development site was also subject of a separate planning approval for remediation and site preparation works. The works facilitate the development of the integrated community and school facility. These works have not commenced. It is intended for these works to be undertaken following the demolition of the Hydrotherapy building and community hall and in concert with the construction phase of the proposed development.	16/12/2020
D/2020/1683	This DA proposes the removal of trees within the area of the proposed GS ICFS. An Arboricultural Impact Assessment Report accompanied this tree removal and has also been appended in **Appendix AE** to this EIS for information purposes only.	1/09/2021
D/2020/923/A	A subsequent Section 4.55(1A) application was approved by Council for changes to conditions 8 and 10 of the original consent.	14/07/2021

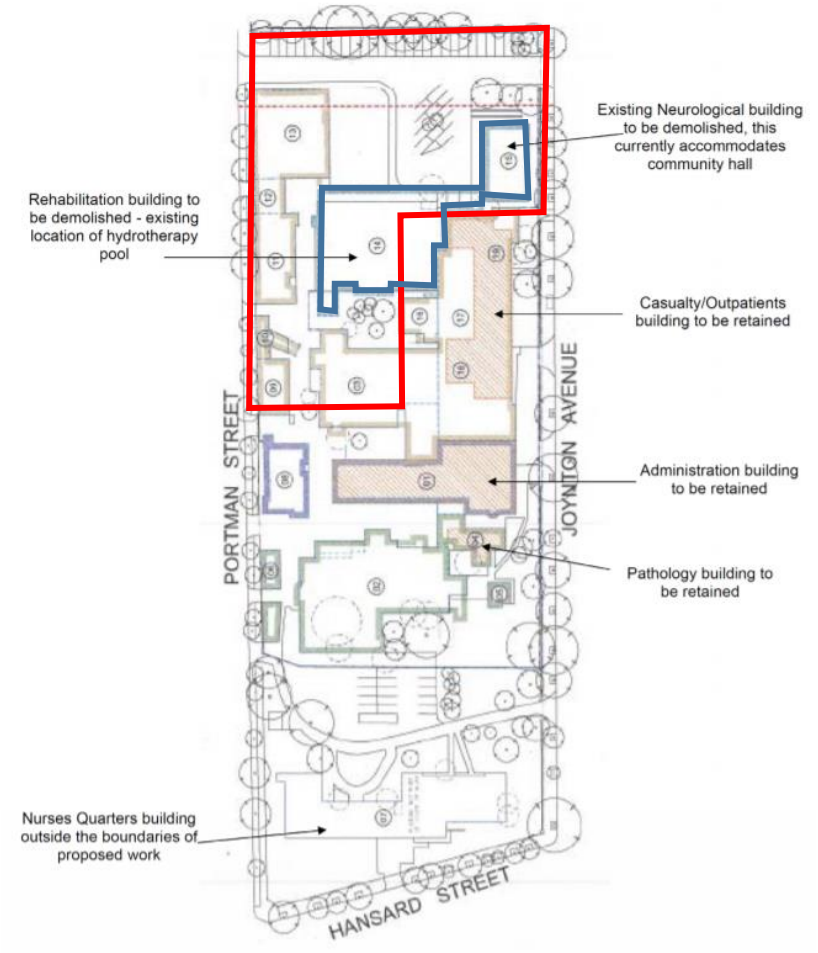


Figure 2 Site Plan for D/2011/1022
The development site is outlined in red.
Source: Extract from Assessment Report for D/2011/1022 with Architectus overlay

Each of the above applications align with the scope and extent of the proposed development and will render the site suitable for the proposed GS ICFS.

Whilst the locality is subject to a number of other developments either planned or underway (discussed within this report), a review of DPIE Major Projects Planning Portal tracker and Council's DA tracker does not indicate any other related or relevant planning applications that would affect or preclude the undertaking of the proposed development.

2. Site Analysis

2.1 The Site

The site is located at 3 Joynton Avenue, Zetland and is legally referred to as Lot 2 DP 1174641. The site has an area of 1.127 hectares and has frontages to Joynton Avenue to the east, Hansard Street to the south, Portman Street to the west, and the future Zetland Avenue to the north.

The site was formerly known as Royal South Sydney Hospital site (RSSH) but has more recently come to be known as the Green Square Community and Cultural Precinct, due to its change in use from a hospital site to a place with community facilities. Despite this shift, most of the former RSSH has been kept and adapted for new community purposes.

The development site (subject to works) is located to the north western corner of the Green Square Community and Cultural Precinct and occupies an area of approximately 4,670sqm (refer to **Figure 3**).

The development site has a frontage of 85 metres to Portman Street, 73 metres to the future Zetland Avenue and 28 metres to Joynton Avenue.

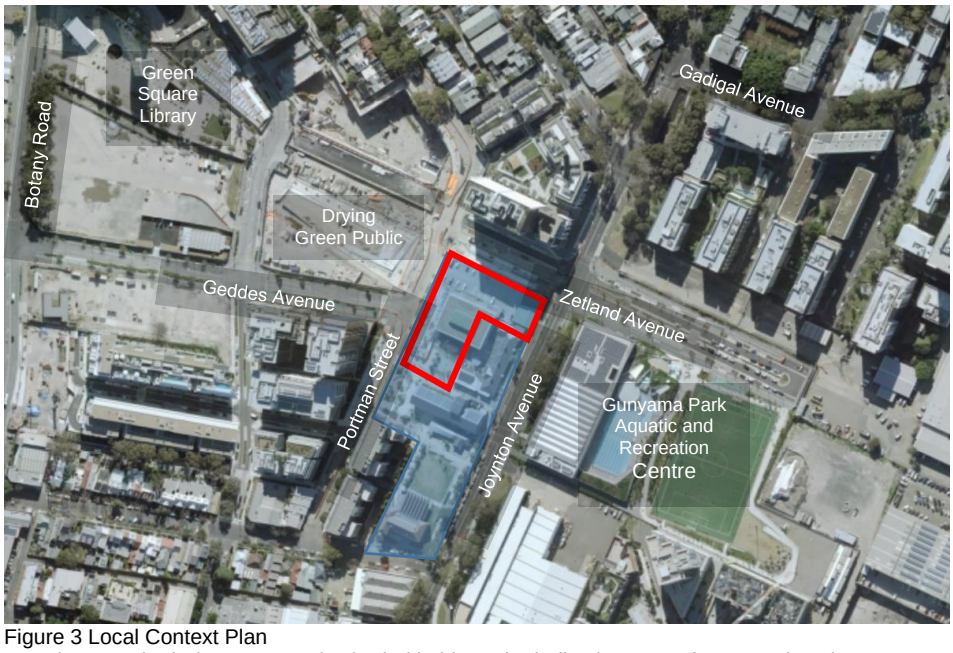


Figure 3 Local Context Plan
Lot 2 in Deposited Plan 1174642 is shaded in blue. The indicative area of proposed works is outlined in red.
Source: Metro Map with Architectus edits

2.2 Existing Development

In its current form, the site contains several former hospital buildings ranging from one to three storeys which have been repurposed as community facilities. These include Main Administration Building (Green Infrastructure Building), The Pathology Building (Banga Community Shed), the Outpatients Building (Waranara Early Childhood Centre), the Esme Cahill Building (Joynton Avenue Creative Centre) and the Pathology Building.

Figure 4 Perspective of Green Square Community and Cultural Precinct
Lot 2 in Deposited Plan 1174642 is shaded in blue. The is outlined in red.
Existing structures are numbered **(1)** The Joynton Avenue Creative Centre; **(2)** The Banga Community Shed; **(3)** The Waranara Early Childhood Centre (Outpatients Unit); **(4)** the Green Infrastructure Building; **(5)** Rehabilitation building; **(6)** Neurological building.
Source: Metromaps with Architectus edits (2021)

The development site is currently occupied by a Neurological building (Green Square community hall), carpark, a 3 storey Rehabilitation building (currently decommissioned) and associated open space to the south and west of the building. These structures and spaces are approved for demolition, pursuant to D/2011/1022.

Refer from **Figure 5** to **Figure 9** for photographs of the site.

Figure 5 View south along Joynton Avenue
Source: BVN Architects

Figure 6 View along Portman Street, facing north
Source: BVN Architects

Figure 7 View east along Geddes Avenue
Source: BVN Architects

Figure 8 View north along the eastern Portman Street footpath
Source: BVN Architects

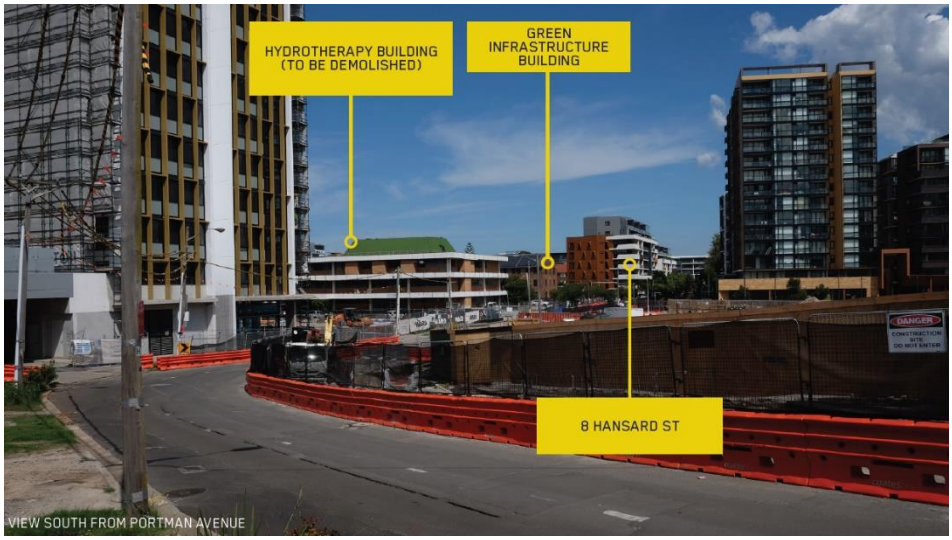


Figure 9 View south from Portman Avenue
Source: BVN Architects

2.3 Site Context

The site is located approximately 4.5km to the south of the Sydney CBD. The surrounding areas include Waterloo and Redfern to the north, Moore Park to the east, Kensington to the south east, Beaconsfield to the south and Alexandria to the west.

Figure 10 Regional context of the site
The indicative location of the site is shown with a red dot
Source: Metro Map with Architectus edits

The site is within the rapidly developing Green Square precinct, surrounded by several recently completed developments, as well as other current and future development sites.

To the north of the site is predominantly medium to high density residential development. It is noted that a new road, Zetland Avenue, is also currently under construction abutting the site's northern boundary.

To the east of the site, across Joynton Avenue is Council's new Gunyama Park Aquatic and Recreation Centre. Furthermore, opposite the Eastern Distributor, is the Randwick Local Government Area.

Directly to the south of the development site are residential apartment buildings. These buildings are separated from the development site by a shared pedestrian and service vehicle lane, located along the southern boundary of the development site.

To the west of the site, across Portman Street is Council's new Drying Green Public Park, presently under construction (anticipated completion early 2022) and existing residential apartment buildings.

Refer to the site context plan at **Figure 1**, local context plan at **Figure 3,** and the regional context plan at **Figure 10**.

2.4 Ownership

The site is legally described as Lot 2 DP 1174641, and is under the ownership of Council. A stratum is to be granted (above ground level) on a 99 year lease to the DoE for a public primary school.

2.5 Topography

The topography of the site is relatively level to gently undulating. The site extends over one topographic zone, that belonging to the Tuggerah fluvial landscape, which consists of an extensive dune system of gently undulating plains and rolling undulating rises of broad and level swales and dunes with a local relief of <20m. Refer to the Survey Plan attached at **Appendix C**.

2.6 Transport

Road Network

The site has three existing street frontages, including Joynton Avenue to the east, Portman Street to the west and Hansard Street to the south.

Vehicular access to the site is currently provided via Portman Street. Portman Street is a local road directly west of the site that traverses north to south, accommodating a single lane of traffic in either direction.

To the east of the site is Joynton Avenue, a local collector road with a north to south alignment, accommodating a single lane of traffic in either direction. On-street kerbside parking is permitted along either side of Joynton Avenue and Portman Street, subject to timed, unrestricted, and bus zone parking restrictions.

Zetland Avenue, located north of the site, is currently being extended from Joynton Avenue to Paul Street. The Zetland Avenue extension is planned to accommodate two lanes of traffic and a single parking lane in either direction within a divided carriageway, including dedicated bike lanes. Zetland Avenue is anticipated for completion in 2022.

It is anticipated that the upgrades to Portman Street and the Zetland Avenue extension will be completed prior to the occupation of the development site for the purpose of the GS ICFS. The EIS including accompanying consultant reports are predicated on this likely scenario.

Bus Services

The site is well serviced by bus services, with 14 bus stops conveniently located within 400 metres of the proposed development. These services provide connections to the Eastern Suburbs and Sydney CBD. Bus services include route 301, 309, 309X, 310X, X93, 320, 343, 348 and 370.

Train Services

The site is located within 400m of the Green Square Railway Station. Green Square Railway Station services the T8 Airport and South Line, providing connections to major centres such as Central Station, Wolli Creek, Revesby and Campbelltown. Services are relatively frequent, arriving/departing every 10 minutes during peak periods.

Walking

In relation to pedestrian infrastructure, a pedestrian crossing is currently provided halfway between Epsom Road/Joynton Avenue and Zetland Avenue/Joynton Avenue. The proposed signalised intersection of the future Zetland/Portman as well as Zetland/Joynton Avenue are set to provide further pedestrian options immediately adjacent to the site.

Cycling

Having regard to cycling infrastructure, although primary school aged children are permitted to cycle on pedestrian footpaths, cycleways will be provided within the Zetland Avenue and Portman Street carriageway. This infrastructure will help connect the site to broader network of cycling infrastructure.

Infrastructure Capacity

An analysis of existing infrastructure within the broader enrolment extent of the school has been undertaken. The analysis has revealed that although most streets provide adequate infrastructure, there are some gaps that should be ameliorated to ensure safety of cycling travel options for school students. This is discussed further in **Section 6** below.

2.7 Vegetation

The site is largely developed and is generally devoid of significant vegetation, however there are some areas of vegetation. Note all vegetation on site is proposed to be removed under separate planning approval pathways discussed at **Section 1.7** above.

Notwithstanding there is no vegetation being removed under this application, a BDAR Waiver Request was prepared by Cumberland Ecology to assess the significance of vegetation at the site and is provided at **Appendix H**.

The BDAR Waiver Request indicates that the site is comprised of a combination of exotic vegetation and planted native species (small trees, exotic shrubs, and herbaceous species) of planted origin within a highly artificial context. Exotic vegetation and planted native vegetation present within the site have a total planting area of 0.039 hectares.

Refer to **Figure 11** for a map showing existing vegetation on site. Vegetation on the land is not considered to conform with any Threatened Ecological Community listed under the Biodiversity Conservation Act 2016 (BC Act) or the Commonwealth Environment Protection and Biodiversity Conservation Act 1999.

Figure 11 Vegetation mapping of the site
Source: Cumberland Ecology

2.8 Acid Sulfate Soils

The site is classified as having no occurrence of any acid sulfate soils under the Department of Land and Water Conservation (1997) 'Acid Sulfate Soil Risk Map 2nd Edition' for Botany Bay.

2.9 Flooding

The Section 10.7(2) & (5) Planning Certificate issued for Lot 2 DP 1174641 (Ref. 2021301652) at **Appendix B,** dated 10 March 2021, identifies that the lot is not subject to flood development controls.

Notwithstanding this, available flood studies for the Alexandra Catchment suggests that Joynton Avenue is subject of a maximum 1% AEP flood level of 18.55m AHD.

The City of Sydney Interim Floodplain Management Policy (IFMP) requires that all school and childcare facilities to be located above the 1% AEP plus 500mm freeboard. Floor levels have been raised to achieve the freeboard.

2.10 Site Considerations

The Section 10.7(2) & (5) Planning Certificate also identifies that the site is:

- A “deferred matter” in Sydney Local Environmental Plan (LEP) 2012 (SLEP 2012), Sydney Local Environmental Plan (Green Square Town Centre - Stage 2) 2013 (Green Square LEP 2013) and the South Sydney Local Environmental Plan 1998 (SSLEP 1998).
- Zoned 5(a) Special Uses under the South Sydney Local Environmental Plan 114 (SSLEP 114).
- Nominated as a heritage item under the SSLEP 1998 Amendment 17 – Green Square Town Centre – Deferred Matter.
- Not affected by section 38 or 39 of the Coastal Protection Act 1979.
- Not proclaimed to be in a mine subsidence district.
- Not affected by a road widening or road realignment.
- Not affected by a policy that restricts development of land due to the likelihood of landslip, bushfire, flooding, tidal inundation, subsidence, acid sulphate soils or any other risk.
- Not affected by any acquisition of land provision.
- Not biodiversity certified land.
- Not subject to any bio-banking agreement.
- Not affected by any property vegetation plan.
- Not significantly contaminated; and
- The subject of a site audit statement within the meaning of the Contaminated Land Management Act 1997.

2.11 Zoning

The site is a “deferred matter” in the LEP 2012, Green Square LEP 2013 and the SSLEP 1998. The SSLEP 114 is therefore the applicable Environmental Planning Instrument applicable to the site.

The site is zoned 5(a) Special Uses under the SSLEP 114. The objective of 5(a) Special Uses Zone is to ‘identify land which is currently used by public authorities, institutions, organisations or the Council to provide certain community facilities, services or utilities’. An extract of the SSLEP 114 Zoning map is provided at **Figure 12**.

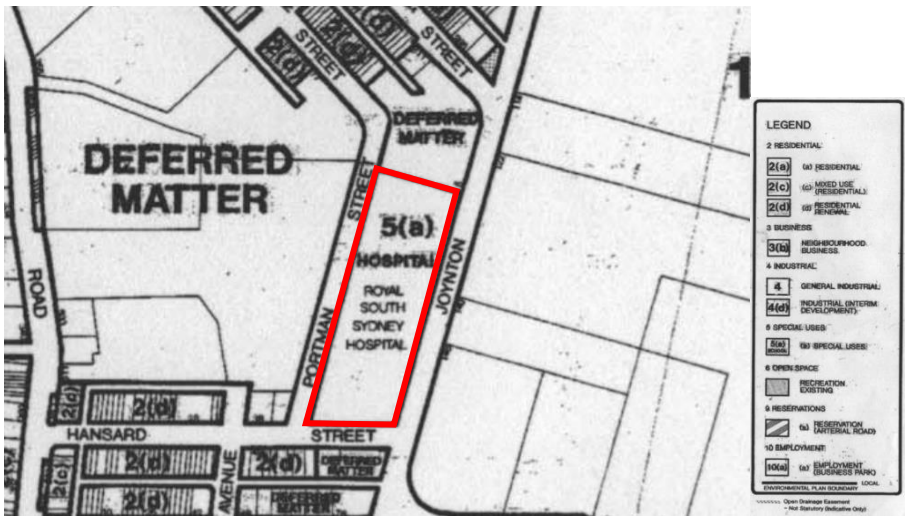


Figure 12 Extract of SSLEP114 zoning map
The site forms part of the Royal South Sydney Hospital site (outlined in red).
Source: South Sydney Local Environmental Plan 114 (map sheet 1) with Architectus edits

2.12 Heritage

Schedule 2 of the SSLEP 1998 identifies the site as heritage item 554A-Former Royal South Sydney Hospital Group and includes buildings of local significance as indicated in the table below.

Administration Building, Queen Anne style building, 1913, with later alterations and additions (numbered 2 in Figure 13)	
Pathology Building, single story building to Joynton Avenue, 1913 (numbered 1 in Figure 13)	
Outpatients Building, single storey Inter-War Georgian Revival style building, c 1935 (numbered 3 in Figure 13)	

Nurses Home (eastern wing), three storey Inter-War Georgian Revival style building, c 1938 (numbered 4 in Figure 13)

Other features of heritage value include the landscaped area fronting Joynton Avenue between the Nurses Home and the Pathology Building, including the significant trees and open landscaped areas around the buildings (numbered 5) as well as the brick and sandstone boundary fence to Joynton Avenue. Refer to **Figure 13**.

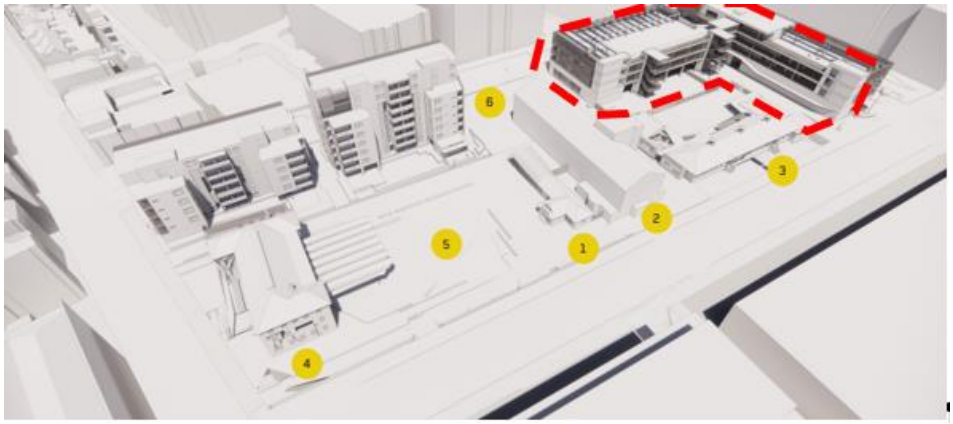


Figure 13 Locality map
Note: Subject site outlined in red and surrounding heritage items numerically identified.
Source: BVN Architects

The site is in the vicinity the following heritage items as identified in SLEP 2012:

LEP Item No.	Significance	Item Name & Location
I2206	Local	Electrical substation including interior at 68-74 Epsom Road
I2214	Local	Horse trough, Joynton Avenue, corner Elizabeth Street;
I2218	Local	Terrace group including interiors, 65-69 Portman Street
I2219	Local	Terrace group including interiors at 71-75 Portman Street;
I2280	Local	Former Joseph Lucas office, stairs and showroom including interiors and building setback at 146-158 Joynton Avenue.

The site is also in the vicinity the following heritage conservation zones as identified in SLEP 2012:

LEP Item No.	Significance	Item Name & Location
C72	Local	Hansard Street Heritage Conservation Area
C73	Local	Zetland Estate Heritage Conservation Area

An overview of the surrounding heritage context is provided at **Figure 14** below.

Figure 14 Extract of SLEP2012 Heritage map
Note: Showing the area of the subject site (indicated in red), location of nearby heritage items and conservation areas (outlined in blue) and surrounding heritage context.
Source: City Plan Services

3. The Proposed Development

3.1 Project Description

The proposed development seeks the construction of the Green Square Integrated Community and School (GS ICFS), being a new public primary school (Kindergarten to Year 6) and associated works. This is a joint project between the NSW Department of Education and the City of Sydney.

The proposed development will provide a vibrant, welcoming place to learn for both the attending children and the surrounding and broader community after hours. The new public primary school will be consistent with the NSW Department of Education's EFSG requirements for a 'Core 21' school facility.

The scope of the proposed works subject of this SSD application includes the following:

- A new public primary school (Kindergarten – Year 6) which includes:
    - A capacity for up to 600 students and 60 staff;
    - 24 home bases;
    - 1 Canteen;
    - Out of Hours School Care (OHSC);
    - Covered Outdoor Learning Space (COLA);
    - Communal Hall (located at the ground level, which is to be shared with the community outside school hours);
    - Library;
    - Multi-purpose games court;
    - Administration support spaces;
    - Outdoor learning spaces and play spaces, including a central courtyard at ground level and rooftop play area; and
    - Staff rooms, administrative offices, interview rooms, storerooms and amenities.
- Community Facilities, solely for community use consisting of two multi-purpose spaces 1A and 1B (at ground level) with kitchenette, amenities and storage.
- Shared Facilities to be used by both the school and the community consisting of:
    - Communal Hall, Multi-purpose space, Multi-purpose Games Court, and ground level courtyard.
- Off street Loading Zone for deliveries.
- Bicycle parking for the community facilities and the school facilities.

Refer to Proposed Site Plan at **Figure 15** and photomontages of the proposed development at **Figure 16** to **Figure 18**.

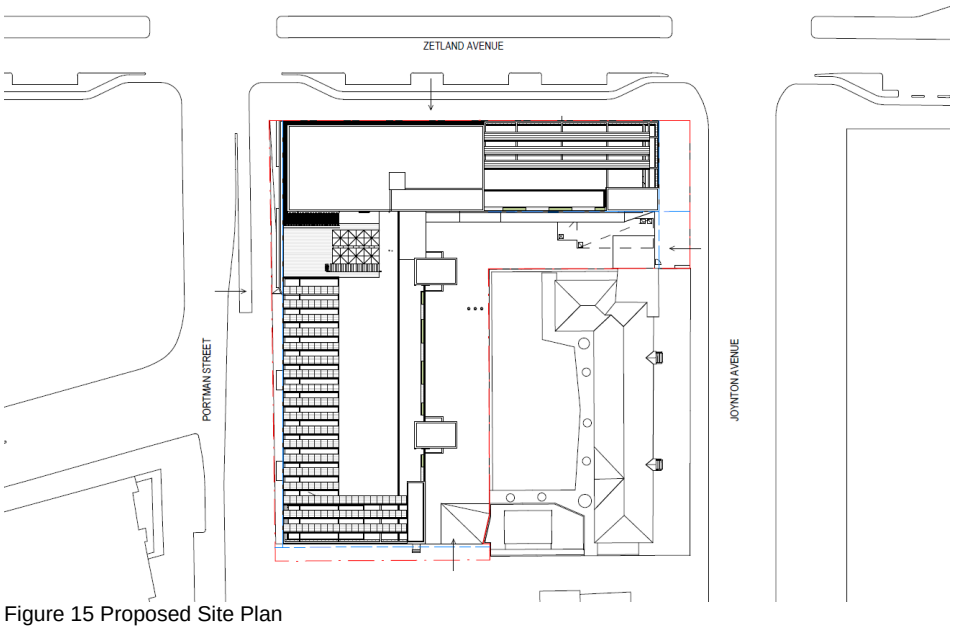


Figure 15 Proposed Site Plan
Source: BVN Architects

Figure 16 Proposed development from the north west
Source: BVN Architects

Figure 17 Proposed development from north east
Source: BVN Architects

Figure 18 Proposed development from west
Source: BVN Architects

3.2 Numerical Overview

The key numerical information for the proposed development is summarised in **Table 4** below.

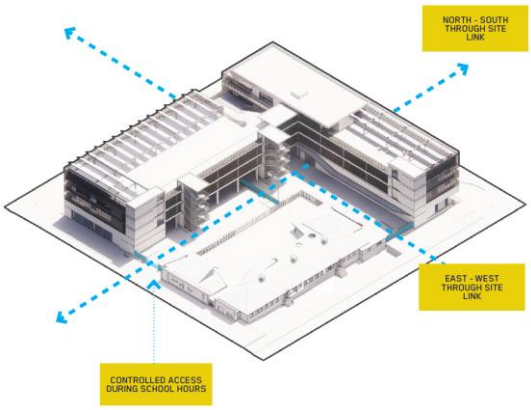
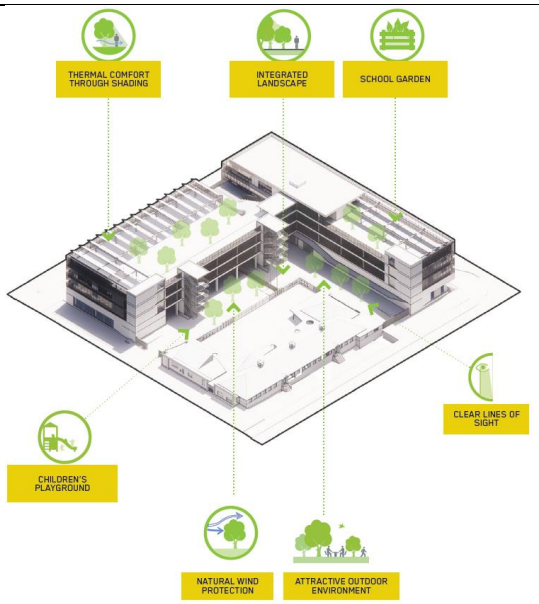
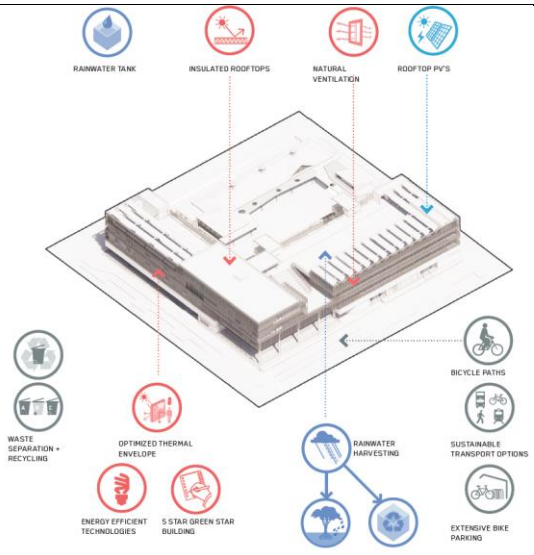
Table 4 Numerical overview

Component	Data
Site area	2,710m^2
Gross floor area (GFA)	9,680^2
Floor Space Ratio	3.57:1
Building height – Highest RL	35.050m
Building height – Metres	17m approximately
Building height – Storeys	4 storeys including ground floor
Proposed outdoor play area	5,387m^2 (8.98m^2 per child)
Trees	25 trees (removal of 28 trees under a separate planning approval; retain 0 trees; plant 25 trees)
Native planting area	486.5m^2 (10.6%)
Urban tree canopy cover – Existing	234m^2 (5%)
Urban tree canopy cover – Proposed	458m^2 (9.8%)
School staff	36 (24 teachers and 12 other staff)
Students	600
Jobs – Operation	50 FTE
Jobs – Construction	227 FTE
Car parking spaces	6 parents drop off and pick-up on-street car parking spaces
Bicycle parking racks	80 U-Rail bicycle parking racks for students 20 U-Rail bicycle parking racks for staff
Bicycle parking spaces	170 bicycle parking spaces

3.3 Design Principles

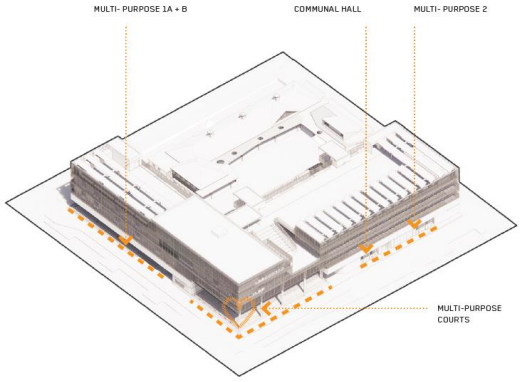
The Architectural Design Report prepared by BVN Architects at **Appendix F**, identifies design principles which have informed the proposed development. Refer to **Table 5**.

Table 5 Design principles of the proposed development
Source: BVN Architects

Design Principles	
<u>A porous site</u> The proposed development considers site permeability by providing north-south and east-west through site links.	
<u>Outdoor spaces</u> The proposed development provides a supportive outdoor space network from strong consideration of thermal comfort through shading, integrated landscaping, clear lines of sight, natural wind protection, an attractive outdoor environment, and delivery of a school garden and children's playground.	
<u>A sustainable building</u> The proposed development supports sustainable practices and behaviours through rainwater tanks, insulated rooftops, natural ventilation, rooftop PV's, bicycle paths, extensive bike parking, rainwater harvesting, optimised thermal envelope, 5-star green star building, energy efficient technologies, and waste separation and recycling.	

Shared spaces

The proposed development delivers spaces to be shared by the school community and the public including Multi-purpose 1A and B, communal hall, Multi-purpose 2, and Multi-purpose courts. The series of shared spaces allows for an integrated community facility and school.



3.4 Built Form

The built form of the proposed development is a four-storey L-shaped perimeter block, with a strong urban street wall to Zetland Avenue (north of the site), Portman Street (west of the site), and Joynton Avenue (east of the site).

The proposed development presents a 73m elevation to Zetland Avenue and an 82m elevation to Portman Street. A central courtyard is provided, separating the GS ICFS from the existing Waranara Early Learning Centre. Refer to **Figure 19**.

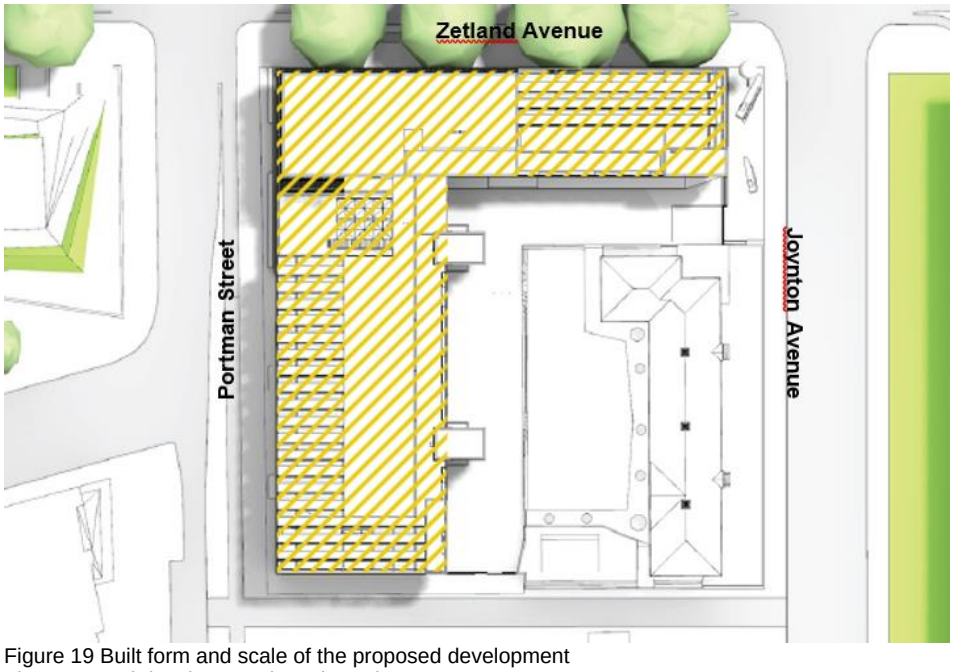


Figure 19 Built form and scale of the proposed development
The proposed development is L-shaped.
Source: BVN Architects with Architectus edits

The overall bulk of the proposed development is broken down by a large break in the Portman Street elevation above the western entry, which physically separates the northern and western 'bars' of the L-shape proposed development form. Refer to **Figure 20**.

Figure 20 Indicative view of the proposed development from Portman Street
Source: BVN Architects

The maximum building height for the proposed development is RL 35.050m (approximately 17m tall), strategically established by surrounding locality and built form context.

The proposed building height is similar to that of surrounding public facilities, including the Gunyama Aquatic and Recreation Centre, the Joynton Avenue Creative Centre and the Green Infrastructure Centre. Refer to **Figure 21** for street elevations demonstrating the relationship of the proposed development with the heights of surrounding developments.

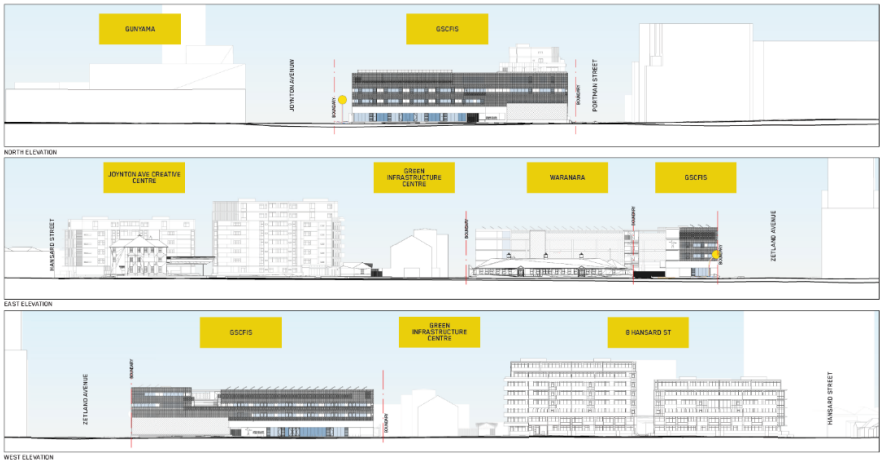


Figure 21 Proposed elevations
Source: BVN Architects

Along the northern elevation, the ground level frontage of the community multi-purpose spaces 1a and 1b are setback from the primary building line.

For further detail of the proposed development in relation to built form, refer to the Architectural Plans at **Appendix E** and the Architectural Design Report at **Appendix F**.

3.5 External Materials

Materials have been chosen to be robust and welcoming. Prominent materials will include:

- Flex brick screen;
- Coloured in-situ concrete;
- Aluminium framed glazing;
- Insulated non-combustible aluminium panel; and
- Photovoltaic cells.

Refer to **Figure 22** for the proposed material palette.

Figure 22 Material palette of the proposed development
Source: BVN Architects

The external façade of the proposed development is arranged into four main elements:

- In-situ coloured concrete structure/façade to the ground level and stair cores.
- The weather-line of the building is a thermally broken glazing system. This system consists of both IGU's & insulated non-combustible aluminium cladding panels.
- Protecting the glazed facade is proprietary masonry screen called 'Flexbrick'. Flexbrick suspends terracotta "brick's" using a stainless steel suspension system, which is hung from the building's structure.
- An anti-climb mesh screen to the multi-purpose games court.

The proposed façade treatment provides for sustainability, response to heritage, privacy and security, character and identity, and maintenance accessibility. Refer to **Figure 23** for the proposed façade treatment.

Figure 23 Façade treatment of the proposed development
Source: BVN Architects

Refer to Architectural Design Report prepared by BVN Architects at **Appendix F**, for a detailed description of the proposed materials and treatments.

3.6 Landscaping, Trees and Open Space

Landscape Plans and a Landscape Report have been prepared by Turf Design Studio at **Appendix I** and **Appendix J**, respectively.

Proposed landscaping has been influenced by the following place principles:

- Biophilia: Engaging with biophilic principles to promote health and wellbeing.
- Flexible learning: Form reconfigurable, integrated and versatile modular spaces.
- Play: Activating the ground plane and podium levels with passive and active play.
- Culture: Promoting cultural learning through indigenous landscape experiences.
- Inclusivity: Creating a connected, inclusive environment for all.
- Outdoor learning: Maximising outdoor learning spaces.

<u>Open Space and Landscaping</u>

The proposed development seeks to provide 5,387m^2 of outdoor unencumbered play space. This would allow for 8.98m^2 per student, delivered across a series of open spaces within the site, including:

- Internal courtyard;
- Rooftop library learning space;
- Amphitheatre teaching space; and
- Rooftop mound play space.

Refer to the location and distribution of these spaces within the extract of the Landscape Masterplan at **Figure 24**.

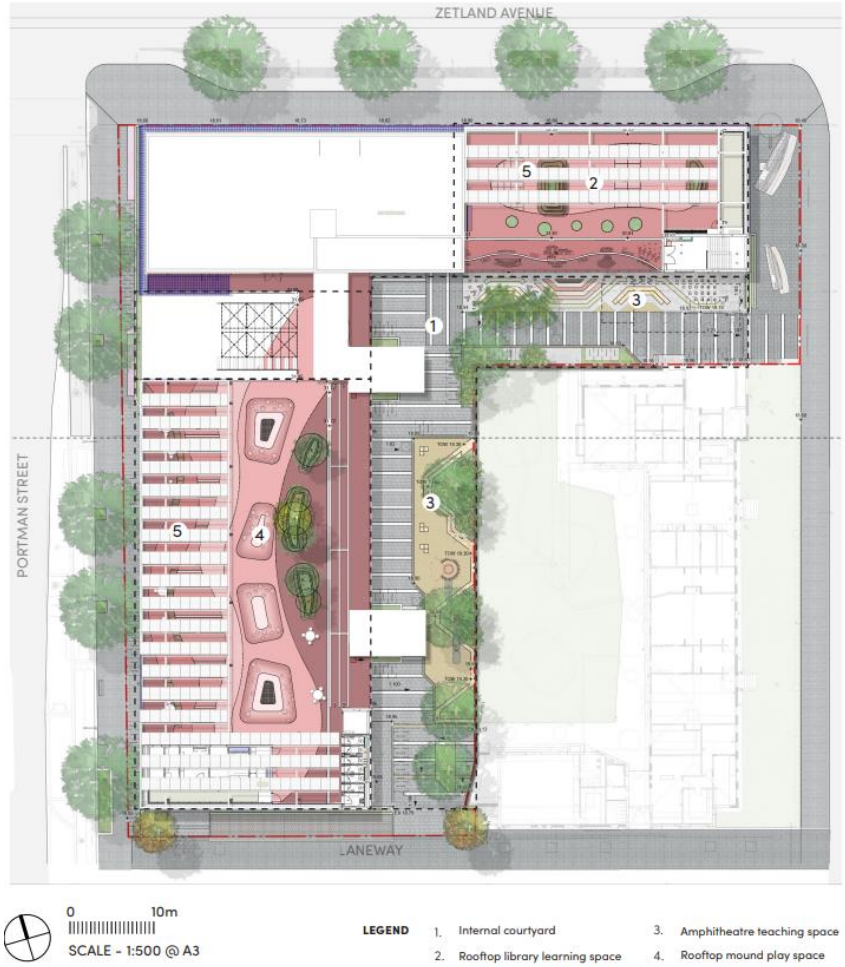


Figure 24 Landscape Masterplan of the proposed development
Source: Turf Design Studio

Trees

A total of 28 trees are approved for removal from the site to facilitate the GS ICFS (subject of a separate application). The separate planning application (D/2020/1683) has been determined by Council for this tree removal. The Arboricultural Impact Assessment Report which accompanied this application has been included at **Appendix AE**.

The Draft Greener Places Design Guide sets an overall target for the CBD to achieve 15% tree canopy cover.

The proposal will plant twenty-five (25) new trees at the site (on the basis there are nil trees left following the undertaking of works approved under D/2020/1683). Accordingly, the proposal will improve the urban tree canopy cover from 234m^2 (5% site coverage) under present circumstances to 458m^2 (9.8% site coverage) post development. This represents an increase of 4.8% from the existing canopy cover present at the site.

For further detail, refer to the Landscape Plans and Landscape Report prepared by Turf Design Studio at **Appendix I** and **Appendix J,** respectively. An extract of the Tree Management Plan is also provided at **Figure 25**.

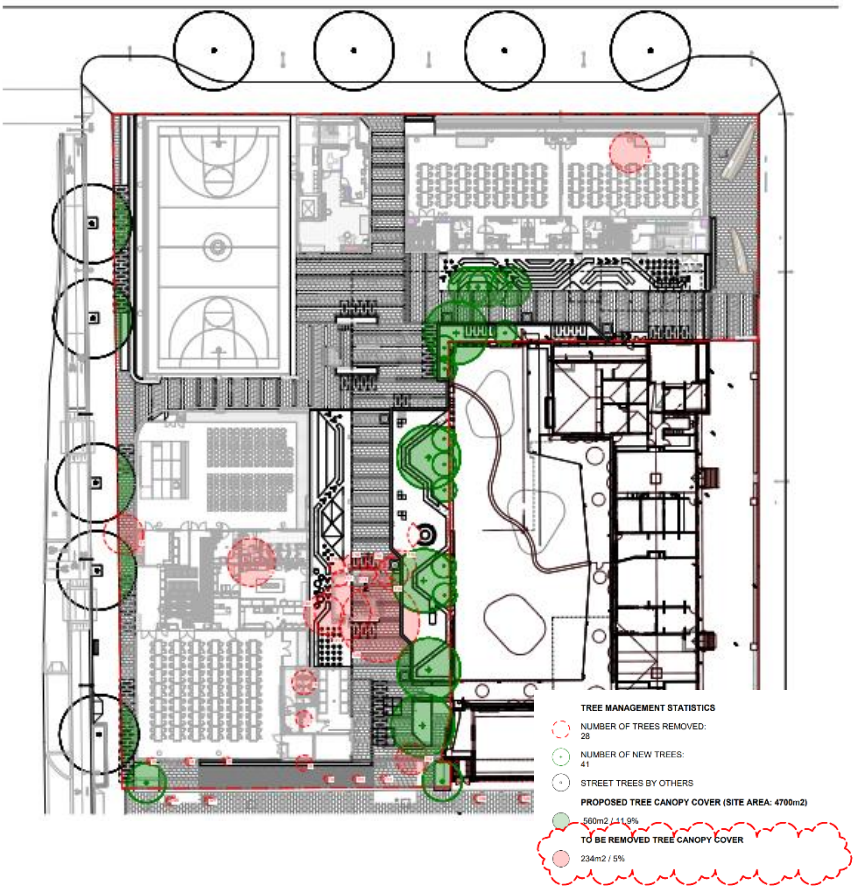


Figure 25 Tree Management Plan showing urban tree canopy on site (top image - ground floor and bottom image - rooftop terrace)
Source: Turf Design Studio

South Ground through site link

The proposal will refurbish the existing through site link to the south of the development site. Parking for delivery vehicles and entrances into the building and rear open space area will be demarcated in a change of pavement that is still sympathetic to existing pavement within this area. The proposal will also provide for the relocation of existing light poles.

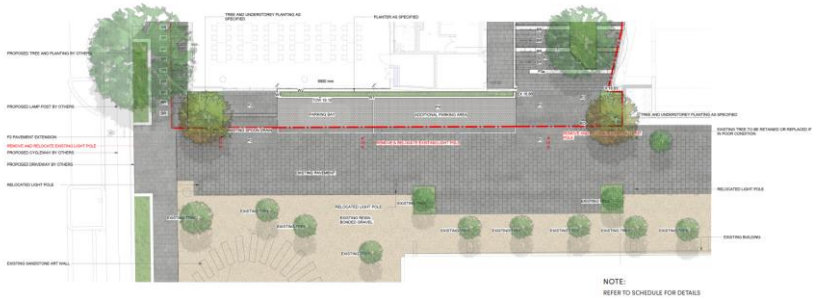


Figure 26 Landscape plan for the south ground through site link
Source: Turf Design Studio

3.7 Transport, Parking, and Access

A Transport and Accessibility Assessment has been prepared by Traffix for the proposed development at **Appendix P**.

The on-site transport provisions associated with the proposed development include the following:

- Four (4) x site entry points:
    - Primary pedestrian-only entry on Northern boundary of the site at Zetland Avenue;
    - Secondary pedestrian-only entry on Eastern boundary the site at Joynton Avenue;
    - Services entry on Southern boundary of the site; and
    - Secondary pedestrian-only entry on Western boundary of the site at Portman Street.
- Six (6) x on-street pick-up/drop-off parking spaces provided north of the site along Zetland Avenue:
    - Four (4) x standard parking spaces; and
    - Two (2) x accessible parking spaces.
- Emergency vehicle zone to the northern boundary of the site at Zetland Avenue;
- Staff end-of-trip facilities:
    - Two (2) x unisex shower cubicles; and
    - Two (2) x change rooms.
- Bicycle and scooter parking spaces provided to the southern and western boundary of the site and within the site; and
- A loading zone on the southern boundary of the site, accessed via the one-way shared roadway that runs between Portman Street in the west and Joynton Avenue in the east.

Refer to **Figure 27 below** for a map identifying the location of these transport provisions.

During core school hours as well as OSHC, the proposed development is secure, with access for the public limited to the footpaths leading directly to the

dedicated community multi-purpose spaces 1A and 1B. Following the conclusion of OSHC, the entire ground plane of the site is publicly accessible

Refer to **Figure 28** for school and public accessibility on site.

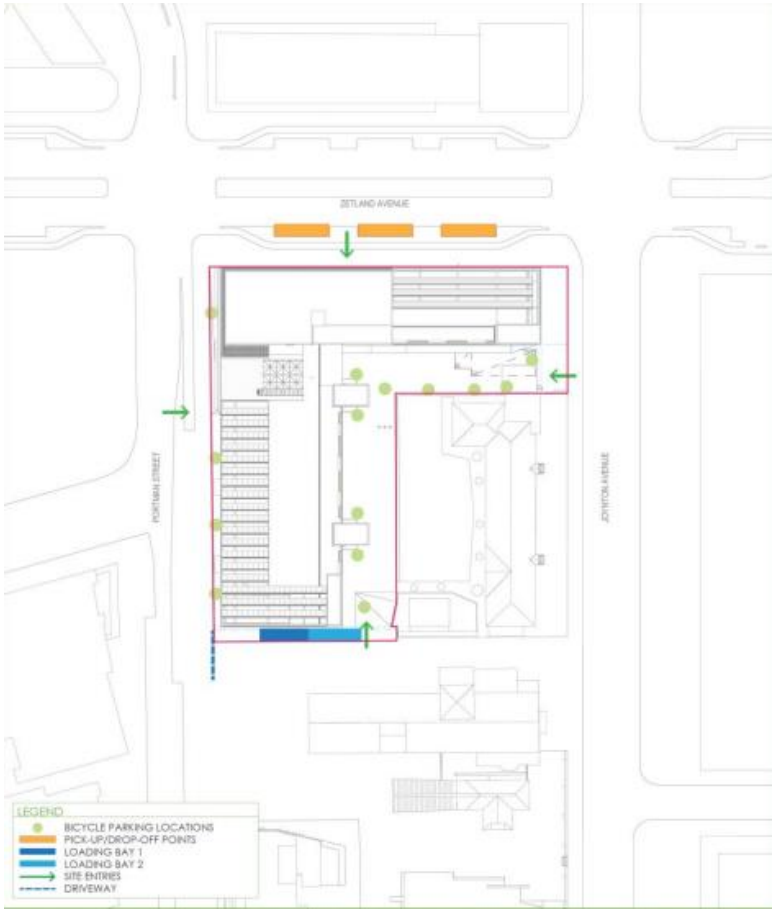


Figure 27 On-site transport provisions
Source: Traffix

Figure 28 School and public accessibility on site
Source: BVN Architects

3.8 Outside School Hours Care

The operation of the OSHC will be based at the Multi-Purpose Space 2, located to the south western corner of the building, which incorporates the OSHC office, kitchen and store.

In combination with the courtyard area, Communal Hall and Games Court the facility will cater for the nominated capacity of up to 200 students. The entrance to the OSHC in the mornings and afternoons shall be off Portman Street.

3.9 Community Use of School Facilities and Community Facilities

The proposed development seeks to provide community use of school facilities outside of school hours. The following school facilities are proposed to be shared with the community, and jointly managed by Council and the proposed public primary school:

- Multi-purpose space 2 – capacity of 150 persons seated at tables;
- Multi-Purpose Games Court;
- Courtyard; and
- Community hall - capacity of up to 200 persons auditorium style seating.

Additionally, the proposed development seeks to also deliver community facilities, solely for community use, and managed by Council:

- Multi-purpose space 1A – capacity of up to 60 persons seated at tables; and
- Multi-purpose space 1B – capacity of up to 60 persons seated at tables.

These spaces are hired to community users on an advanced booking basis managed by Council.

Refer to **Figure 29** for a map showing which school facilities will be shared with community and which facilities are solely dedicated to community use.

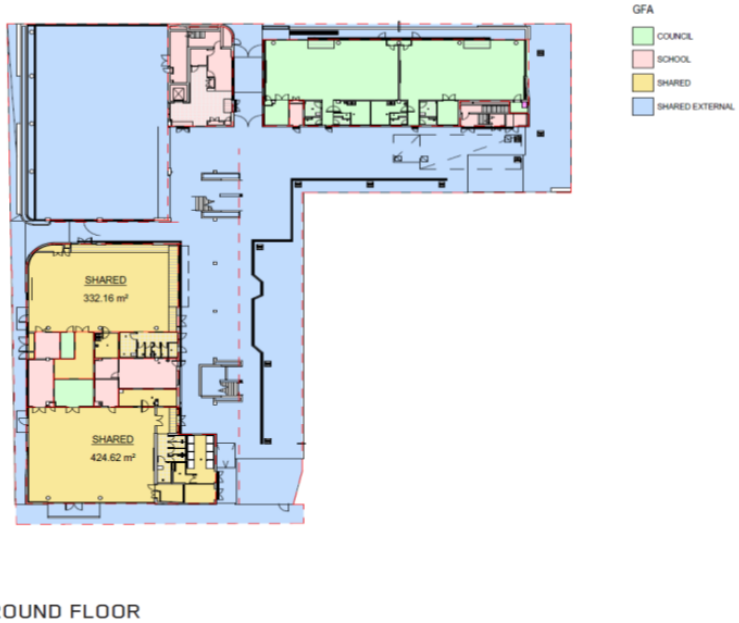


Figure 29 Community facilities
Source: Operational Plan

Proposed Activities

The proposed activities for the community use of facilities include community sport, special events, community functions, community classes, through-site link and courtyard, and kids play area.

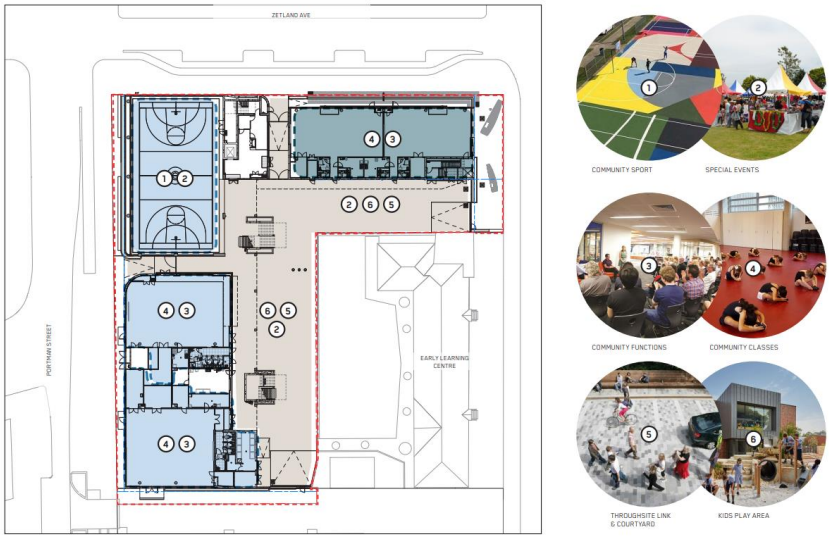


Figure 30 Proposed activities for the community use of facilities'
Source: BVN Architects

3.10 Hours of Operation

The proposed hours of operation for the GS ICFS during the school terms is provided in **Table 6**.

Table 6 Hours of Operation

Area	Use	Times
General	The proposed new public primary school	General operating hours: Monday to Friday 8am to 3.30pm
OSHC	Utilising the ground floor courtyard, games court, communal hall and multi-purpose space 2	Monday to Friday 7am to 8am and 3.30pm to 6pm
Shared space ground floor	Courtyard, communal hall, multi-purpose space 2 and multi-purpose games court	School Use: Monday to Friday during School Terms 7am to 6pm. Vacation Care: Monday to Friday during school holidays 7am to 6pm Community Use: Weekdays from 6:30pm to 10:30pm; Weekends & School Holidays from 8am to 10:30pm
Library	Located on Level 3, intended use by school only	Within general operating hours for the school: Monday to Friday 8am to 3.30pm
Multi-purpose space on ground floor	Community use of the ground floor multi-purpose space to be operated by City of Sydney.	Monday to Sunday from 7am to 10:30pm

During scheduled school holiday periods it is planned for a Vacation Care service to operate. This service will operate from 7am to 6pm on weekdays.

3.11 Signage

The building utilises three primary signage types for building identification:

– SC 1 - static building identification signage cast into the facade concrete with a length of 2180mm, height of 1220mm and depth of 50mm.

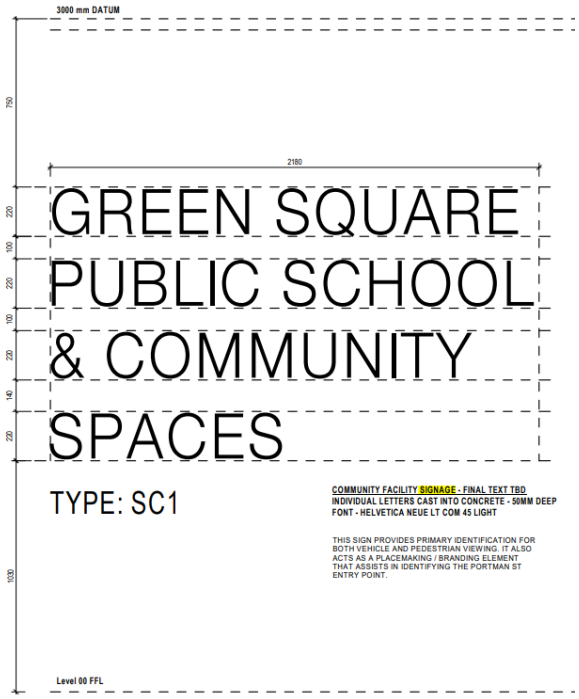


Figure 31 Building Identification Signage SC1
Source: BVN Architects

– SC 2 – Static building identification signage cast into the façade in the form of a logo – this signage has a length of 2540mm, a height of 2500mm and depth of 50mm.

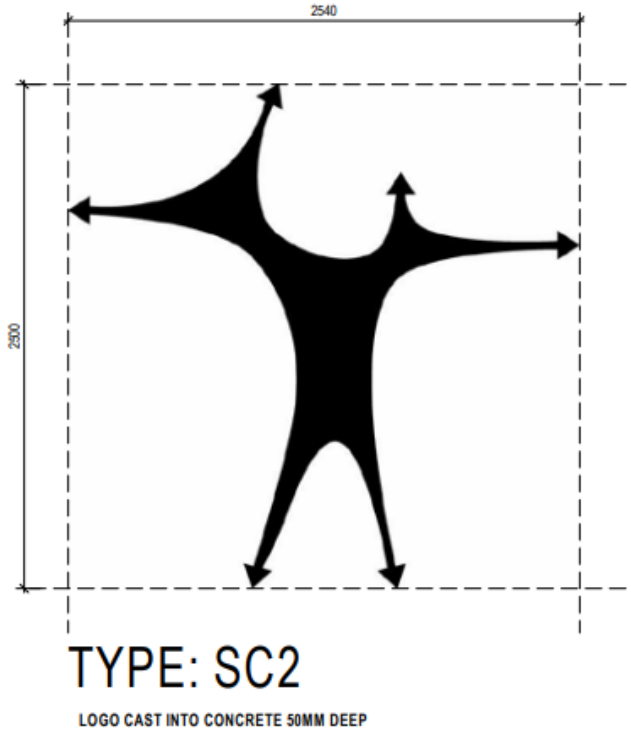


Figure 32 Building Identification Logo SC2
Source: BVN Architects

– SC3 – static building identification signage cast into concrete with a length of 1300mm, a height of 330mm and depth of 50mm.

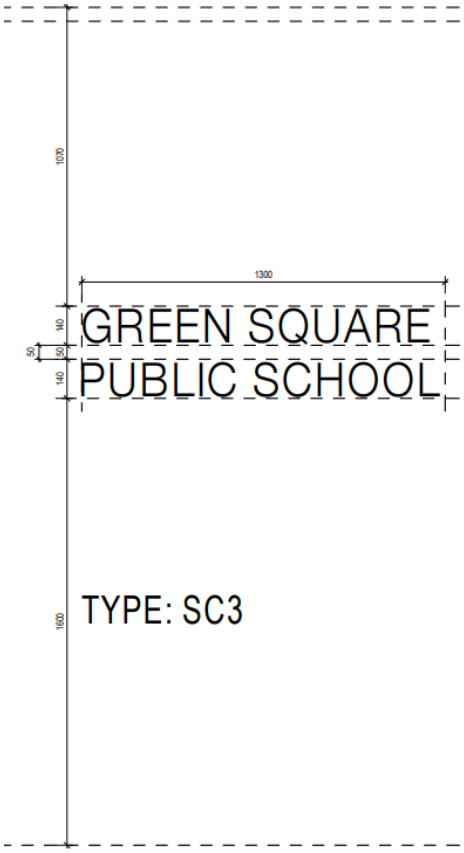


Figure 33 Building Identification Signage SC3
Source: BVN Architects

A Digital signage board (D1) is proposed to communicate ephemeral school information. The LED screen is to be located on the northern façade of the building (Zetland Avenue) adjacent to the main pedestrian entry. The LED screen has a length of 4000mm and height of 2000mm and will be surrounded by a 12mm steel plate on all sides. The LED screen will consist of 500mm x 500mm high resolution modules.

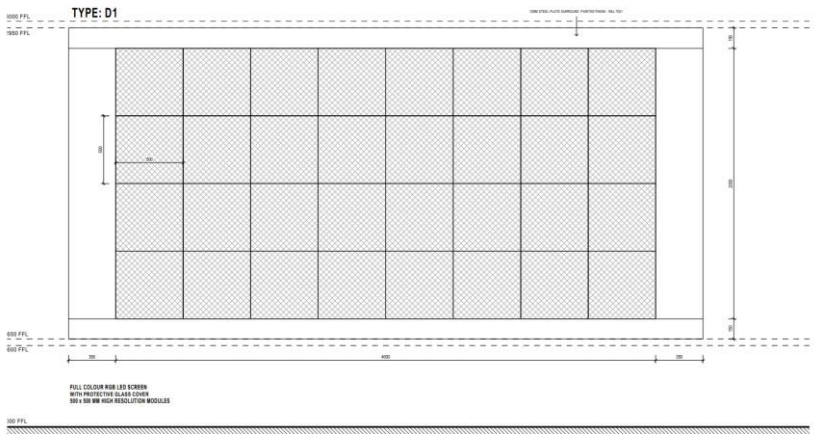


Figure 34 Digital Signage board D1
Source: BVN Architects

Refer to **Figure 35** below for location of signage on elevations.

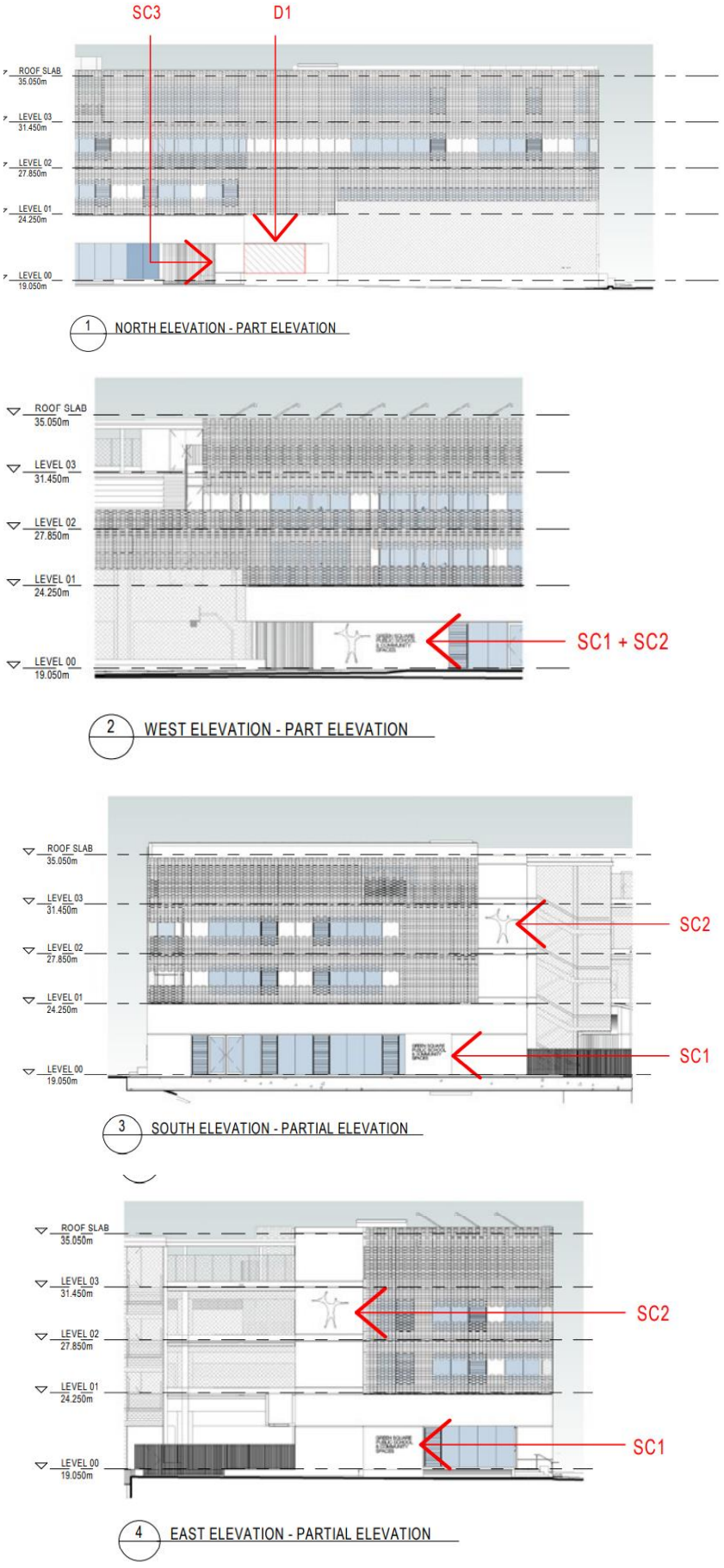


Figure 35 Proposed elevation showing locations for building identification signage types
Source: BVN Architects

3.12 Operational Management

An Operational Plan has been prepared for the GS ICFS which can be found at **Appendix H**. This Plan provides more information on the day-to-day operation and management of the facility, during and outside school hours. **Section 8** of Operational Plan indicates that the GS ICFS intends to transition the intake of students at the school, reaching full capacity in 2029.

3.13 Construction Hours and Duration

Construction duration

The indicative timeframe for the proposed construction works will be from early 2022 to early 2024.

Construction staging

The overall project will be constructed in sequential stages. The stages are defined as follows:

- Stage 1 – Demolition works (subject of a separate planning approval);
- Stage 2 – Remedial Works (subject of a separate planning approval); and
- Stage 3 – Construction of the new GS ICFS.

Construction Hours

The hours of construction are:

- Monday to Friday – 7am to 6pm;
- Saturday – 8am to 1pm;
- No work on Sundays or Public Holidays;

A variation to these hours may be required for out of hours work or where there are special circumstances e.g., for oversized deliveries or works which may need to be carried out. It is noted that a separate application will be made by the Contractor to seek approval for any out of hours work.

3.14 Feasible Alternatives

Green Square is undergoing one of the largest urban renewal projects undertaken in Australia. There are five (5) primary schools that service the Green Square cluster. The cluster is projected to grow substantially through to 2036 with an additional 1,900 government students projected to be living in the area.

In response to the forecast enrolments, the DoE has recently completed capital works at Bourke Street PS and announced further projects at Darlington PS and Alexandria Park CS to increase capacity across the cluster, an intervention that will result in additional 35 of the required 73 teaching spaces to accommodate the forecasted growth to 2031.

Projections show that the intervention of 35 teaching spaces in 2022 will only cater for forecast demand until 2025, at which point demand will exceed supply. In considering future development works to address forecast enrolments, the DoE has identified several limitations in further developing each site in the Green Square Cluster.

All schools are identified either at capacity or with limitations that either restrict or significantly increase the cost of development works. In this regard, the construction of the GS ICFS increases teaching spaces within the cluster by Term 1, 2024 in addition to meeting the provision of community uses planned by Council for the GSTCP.

It is also noted that a condition from Council in offering the opportunity to DoE to develop the site was that the project development must undertake a Design Excellence competition. Through the Design Excellence Competition

undertaken for the site, five (5) architectural schemes were presented to the Competition Jury.

The winning scheme by BVN Architects was selected as it demonstrated the most convincing response to the objectives of the Design Competition Brief. However, the Jury noted that that the majority of schemes demonstrated a clear understanding of the Competition Design Brief, site context and demonstrated a high level of compliance with the relevant planning controls.

All schemes were considered as generally fulfilling the submission requirements. As such, they would have been feasible alternatives to the proposed development.

For further detail regarding the feasible alternatives, refer to the Architectural Design Competition Report prepared by Urbis at **Appendix G**.

3.15 Consequences of Not Carrying Out the Development

The consequences of not carrying out the development would be the demand for public educational and community facilities to support the local community not being accommodated.

In relation to the need for new community facilities, the Royal South Sydney Hospital Master Plan 2013 prepared by Hill Thalis highlights that the Green Square area will need a range of major public and community buildings to support the evolving needs of the community. The proposed development responds to this strategic master plan by proposing the delivery of community facility integrated with a new public primary school.

To summarise, the consequence of not carrying out the development will be lack of educational and community infrastructure to support the existing and future community of Green Square.

3.16 Related Works

Notwithstanding the related planning applications described at **Section 1.7** of this report, there are no other related works associated with the proposed development at the time of writing.

4. Consultation

4.1 Consultation Overview

In accordance with the SEARs issued for this project, consultation was undertaken with relevant public authorities, the community and Council, including:

- City of Sydney Council;
- Government Architect NSW;
- Transport for NSW;
- Transport for NSW (Roads and Maritime Services); and
- Local Aboriginal Land Council.

Engagement of government agencies and the community will continue throughout the public exhibition of the SSDA.

4.2 City of Sydney Council

A formal pre-DA meeting was held on 16 June 2021 with representatives from Council. The key matters discussed, and a response are detailed below.

Table 7 Council Consultation

Comments from Council	Response from the Applicant
Parapet heights have been rationalised to accommodate the PV array and provide consistency. Acceptable, reference to hipped roof ridge line of outpatient building to the south.	The Architectural Design Statement indicates that the masonry screen extends to a constant parapet line to meet safety and security requirements for the level 3 play area, providing a changing background to the screen from glazed facade at levels 1 & 2 to open play space at level 3.
Building generally complies with building envelope controls. Minor variation to 12 metre setback from Waranara building has been previously discussed and is acceptable.	Noted. No action required.
Materials sample board should be submitted with application including glazing sample. Concrete elements should be a single colour, preferably darker than what is shown in the presentation.	The SEARs require a digital material samples board. However, a physical sample board can be provided in this instance. This sample board will be prepared when the BVN studio reopens. Complexity obtaining glass samples for boards as performance specification has been defined, final product will be determined when the contractor is appointed.
Further landscaping package to be provided for review by City's Landscape officer.	Noted. It is anticipated City's Landscape officer will provide comment on any SSDA.

Development is aiming to meet the minimum environmental performance targets set out at competition. However, has the CLT been removed from the project? See #9 in UD comments below.	CLT has been removed from the environmental performance scorecard.
Public art strategy to be provided with application. Please refer to Guidelines for Public Art in Private Development.	This is not a requirement of the SEARs. Although the SEARs do request that Green Square Public Art Strategy is addressed, this Strategy does not warrant a strategy for the development itself. Rather, it provides matters for consideration when preparing a specific public art strategy. In its current form, the Architectural Design Scheme makes future provision for an artwork within the games court on the northeast corner of the site, which is to be visible from Zetland Avenue, the Drying Green and Green Square Plaza.
Signage strategy to accompany application. Consider relationship to public art installation on Joynton Avenue.	A digital signage board is proposed in one (1) location to the northern elevation of the proposed development, adjacent to the main entry. The digital signage board is intended to be a building identification sign. A 4m wide x 2m height signage zone has been nominated on the architectural elevations and will be subject to future design development.
No off-street car parking to be provided. Servicing from rear lane	No off-street car parking is proposed. The proposed development relies on six (6) on-street parking spaces on future Zetland Avenue, for pick-up and drop-off of school students. A queuing analysis has been undertaken to ensure this arrangement is adequate to service the site. Subject to the recommendations of the Draft School Transport Plan, which includes staggered start and finish times for different year groups, it is considered that the on-street parking would be sufficient to cater for the school. In relation to school staff as well as users outside of school hours, it is anticipated that these user groups will rely on other modes of travel to the site, which are in abundance to/from the ICFS. This is provided for under the Draft School Transport Plan. Therefore, it is considered that the absence off-street parking is acceptable in this instance and will not result in any detrimental impacts to surrounds. Servicing is proposed to be undertaken from the one-way shared roadway to the south of the proposed ICFS. Swept path analysis is provided that demonstrates

	that a 8.8m long medium rigid vehicle can enter the site via Portman Street in a forward direction, park and exit the site via Joynton Avenue in a forward direction These matters are discussed in further detail in the Transport and Accessibility Report prepared by Traffix at **Appendix P**, and at **Section 6** of this EIS.
Sufficient waste storage is to be provided to minimise collections to 1 x week for each waste stream. Please use appendices within City's Guidelines for Waste Minimisation in New Developments.	The Operational Waste Management Plan prepared by Elephants Foot Recycling Solutions at **Appendix AA** identifies that bins are to be collected three (3) times weekly. It is noted that reductions in waste collection frequency would require an expansion of the proposed waste room, which would result in the amount of space available for delivering community facilities. Further, if waste collection is to be reduced to 1 x week, this would require reductions to storage for other waste streams.
Please use the Design for Environmental Performance template in place of a long form report.	Refer to Section 2.5 of the ESD Report prepared by Norman, Disney & Young at **Appendix Z**. It should be noted that this Report addressed all sections and requirements outlined in City of Sydney Design for Environmental Performance template.
Cycling to be provided throughout development rather than in central location.	Cycling is to be provided throughout the development as per Section 6.11 of the Traffic and Accessibility Report prepared by Traffix at **Appendix P**, which shows bicycle parking spaces within the central courtyard and on the Portman Street frontage.
Pre-lodgement application will be presented to Design Advisory Panel on 15 July.	The proposed development has since been presented to the Design Advisory Panel (DAP) on 12 August 2021.
In relation to the following point from the Design Competition by the Design Jury: "*The transparency and openness of the ground floor. The clear line of sight provided with respect to the east-west through site connection is to be maintained as it contributes to a very permeable ground floor."* City of Sydney notes that there is an insertion of new vertical circulation stair in the east west connection which does reduce this permeability somewhat.	BVN Architects consider that the transparency and openness of the ground floor has been maintained.

In relation to the following point (#9) from the Design Competition by the Design Jury: *"The Jury provide strong support for the fresh and distinctive character of the cladding, including its colour and natural materiality, and request this is retained and further developed with open and closed panels subject to detail material and system selection and sourcing."* *"The Jury strongly support the benefits of the timber structure, particularly the aesthetic, sustainability, health and education benefits."* *"Principles of sustainability to be maintained in achieving the aspirations of the proponent."* City of Sydney notes that the design is similar to comp with the exception of the clt/glulam structure. Assume this has been replaced with concrete because of large spans – are there any ESD commitments to specify concrete with improved ESD credentials? I assume that the CLT was contributing to their greenstar score in the comp.	The proponent has offset the Green Star credits associated with timber – life cycle with concrete – life cycle and other credits. The project will achieve a 5-star Green Star rating and sustainability goals.
In relation to the following point from the Design Competition by the Design Jury: *Resolution of OSHC and north-south access between 4:30PM and 6:00PM with consideration given to child protection matters.* City of Sydney notes that no north south public access prior to 6:30pm. Management & operation plan not provided.	An Operational Plan has been prepared for the GS ICFS at **Appendix AH**. This Plan provides more information on the day-to-day operation and management of the facility, during and outside school hours. During school hours, the only access will be through the main entrance off Zetland Avenue. At the end of the school day, all students will leave via the Zetland Avenue or other exits as the school determines. The OSHC Manager will control entry and exit at Portman Street for OSHC participants.
In relation to the following point from the Design Competition by the Design Jury: *Review and resolve the address and entry of multi-purposes space 1A and multi-purposes space 1B – levels and ancillary spaces* City of Sydney considers this to be resolved well with lowered internal floor level plus zetland av universal access however my understanding required tactiles cannot be located in the public domain which would require the stairs / ramp move inward inside the site boundary likely impacting on the built form	The address and entry of the Multi-purpose space has been resolved as per the City of Sydney comments.

In relation to the following point from the Design Competition by the Design Jury: *"Resolution of access to substation."* City of Sydney notes that we have indicated no substation required – request they demonstrate energy provider confirmation at next stage.	Noted.
In relation to the following point from the Design Competition by the Design Jury: *"Look for opportunities to increase the generosity of vertical circulation."* City of Sydney considers Lift issues to be resolved but vert circ stairs seem to be similar width to comp – not increased	Two (2) large (2m wide) circulation stairs have been added to the courtyard since the competition proposal to increase the generosity of vertical circulation.
Parapets: Changes to parapet heights to a consistent horizontal datum noted with no UD issue	Noted. No action required.
Materials: Concrete finish required to be integral & consistent colour as noted in the meeting with samples required to be provided	Concrete in-situ concrete forms part of the key material palette.
PV: Expressed PV canopy supported in principle. The proposed details of fixing the PV & its materiality are key given its highly visible nature. Is the underside of the PV to be expressed with a translucent panel similar to: https://www.archdaily.com/931920/upside-down-akubra-house-alexander-symes-architect this would be a nice internal expression of ESD credentials plus reduce its visual scale & bulk	The current PV panel is a solid product. However, the underside of the current PV panel could be coloured to match steelwork. PV cable runs are also to be integrated into supporting steel structure.
ESD – Council had requested a short format report prepared in line with their latest guidelines (May 2021). However, a 'long format' ESD Report has already been prepared by the ESD Consultant in accordance with the SEARs.	Refer to Section 2.5 of the ESD Report at **Appendix Z**. It should be noted that this Report addressed all sections and requirements outlined in City of Sydney Design for Environmental Performance template.

4.3 Government Architect NSW

Consultation with the Government Architect NSW (GANSW) is nominated as a requirement of the SEARs. To satisfy this requirement, GANSW requested that the proposed development be referred to Council's DAP, with at least one member of the competition Jury, to consider the design integrity of the scheme and deviations from the design competition scheme.

Council's DAP met on the 12 August 2021. Refer to **Table 8** for the feedback topics and outcomes resulting from the DAP meeting.

Table 8 Consultation with GANSW

Comments / Feedback topics	Outcomes / Response
Meeting held on 12 August 2021	
– The timber structure proposed in the competition has been changed to concrete. Reasons for the change include cost, provision of a fire-resistant structure, maintenance, and supply. – Timber framing was proposed as an alternative to concrete in the competition process. The competition jury recommended that design development proceed with the timber option but recognised the challenges and concerns regarding durability and fire safety. – Timber structures have inherent sustainability benefits over concrete. The Panel questioned what the proponent would do to offset the carbon footprint now that the proposed structure is concrete? Will it still achieve its green star rating and purported sustainability goals? The Panel recommended that the City request reporting on the sustainability trade-offs. – Facade proportions appear better balanced in the competition scheme than in the current scheme, particularly in relation to the flexbrick screening and concrete spandrel. The overlapping or feathering of flexbrick screens in the competition scheme appears to provide better proportions and by sitting the screens proud of the concrete, it would help with the weathering (rain wash staining) of the concrete below. – The timber structure had the potential to create a warmer interior than concrete. Design of interior spaces must ensure they remain pleasant environments to facilitate better learning.	The proponent has offset the Green Star credits associated with timber – life cycle with concrete – life cycle and other credits. The project will achieve a 5-star Green Star rating and sustainability goals. A sample prototype was located at the supplier's warehouse which was inspected for general sustainability. Further assessments can be made regarding light quality utilising this prototype. The detail regarding the roof structure and photovoltaic cells will be completed in the design finalisation stage. The operational aspects of the project have been developed such that there is no public access through the site on school days until 6:30pm. Consideration of ramp sizing to the school entries has been developed through the design. Further consideration of this observation will be made at the design finalisation stage.

- Made up of stainless-steel rods threaded through brick tiles, the flexbrick system is an innovative façade system. Convinced that use of flexbrick could lead to a high-quality architectural expression, the competition jury supported its use. The Panel however, recommended further analysis of the screens effect on internal spaces - eg. light quality, noting natural light is essential for quality learning spaces.
- The Panel suggests that a sample prototype panel should be tested to ensure an optimum learning environment. Sunlight access and sun-shading also requires careful consideration.
- The Panel noted discussion surrounding glass selection is ongoing.
- More detail is needed in regard to the roof structure and support for the photovoltaic cells.
- The competition jury made comments regarding public access routes through the school, landscaping, and privacy, particularly in relation to the early education areas of the school. The Panel was unsure if the current design addresses these issues and suggests compliance checks during DA assessment.
- Ramps accessing community areas at the primary address to the school could be more generous.

4.4 Transport for NSW and Roads and Maritime Services

Consultation with the TfNSW and RMS is nominated as a requirement of the SEARs. Extensive consultation has been undertaken with TfNSW and RMS with meetings held on 23 February 2021, 30 April 2021, and 12 May 2021.

Refer to an overview of issues raised and responses in **Table 9**.

Table 9 Overview of comments raised by TfNSW

Comments	Outcomes / Response
Meeting held on 23 February 2021	
– Kiss and drop location management – TfNSW does not allow for bike parking on road level – needs to be at higher level – Travel Access guide to accompany the EIS	– Changes to the existing sign posting for kiss and drop spaces. – Confirmation of bike storage to accommodate both school and community.
Meeting held on 30 April 2021	
– Meeting to discuss the SIDRA modelling requirements	– The project team is able to utilise existing SIDRA modelling already undertaken by Council for the immediate locality. – Modal share for the GS ICFS site: 10% cars, 70% walking, 20% riding, 0% bus, 0% train – K-Y6 students typically generate additional car movements.
Meeting held 12 May 2021	
– School route crossings may be too dangerous for children to walk	– Enrolment data to be utilised for flow diagram to detail pedestrian analysis. – School transport plan to be updated to include school enrolment staging. – Recommendation of a smaller catchment.

For further detail, refer to the Community Consultation Report prepared by RPS at **Appendix N**. These comments have been addressed by Traffic in the TAIA at **Appendix P**.

4.5 Local Aboriginal Land Council

An Aboriginal Cultural Heritage Assessment Report (ACHAR) has been prepared for the proposed development.

The assessment process was undertaken in accordance with the Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH 2011), the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW 2010) and the Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010).

Stage 1 consultation for the ACHAR was completed on 27 June 2020. Stage 2 and 3 were completed on 24 August 2020. Stage 4 was completed on 22 September 2020. The consultation is documented in the ACHAR at **Appendix L.**

4.6 Community Consultation

SINSW consulted with the community on the proposal through several channels. The broader local community was consulted via:

- Media release announcing the project;
- Frequently asked questions (FAQs) on the SINSW website;
- Project updates on the SINSW website;
- Information packs and boards via SINSW website;
- Green Square eNewsletter and social media posts across Twitter, Facebook and LinkedIn;
- City of Sydney News Announcements;
- Letterbox drop to approximately 10,000 addresses in and around Green Square;
- Virtual information room held online from that was hosted between 23 September 2021 to 27 September 2021.

The key issues and concerns raised by the community in the survey are summarised in the Consultation report (refer **Appendix N**). These relate to sustainability, construction timeframe, increased traffic and parking demand, safety of students, interface with the Waranara Ealy Education Centre and general layout of the school.

Key issues and concerns have been addressed by proposed development as provided in Section 8.4 of the Consultation Report.

5. Statutory and Strategic Planning Context

5.1 Overview

This EIS includes an assessment of the proposed development against the following strategic plans, policies and guidelines, in accordance with the SEARs.

The proposed development has been assessed and found to be generally consistent with strategies, policies, priorities and strategic land use planning across State, local and precinct levels.

5.2 Strategic Planning

This proposal has been considered against the relevant strategic planning policies in accordance with the issued SEARS. The proposal has been assessed and found to be generally consistent with these, as detailed within Table 10 below.

Table 10 Consistency with relevant strategic plans, policies and guidelines

Strategic planning policy	Response
NSW State Priorities	NSW State Priorities are fourteen (14) priorities unveiled by the NSW Premier, in a commitment to making a significant difference to enhance the quality of life for the people of NSW. Relevant State priorities are: – Bumping up education result for children; – Increasing the number of Aboriginal young people reaching their learning potential; – Greener public spaces; – Greening our city; – Government made easy; and – World class public service. The proposed development seeks to deliver a new school to increase educational capacity in an inner Sydney area. The proposed development will enable the provision of local government community facilities to support the local community. Additionally, it will contribute to an increase in jobs and education, strengthening the local economy.
The Greater Sydney Region Plan – A Metropolis of Three Cities (2018)	The Greater Sydney Region Plan – A Metropolis of Three Cities, was released by the Greater Sydney Commission in March 2018 and is the NSW Government's 40-year vision (to 2056) and establishes a 20 year plan of Greater Sydney to become a city where people will live within 30 minutes of jobs, education and health facilities, services and great places. The GS ICFS is consistent with the vision of the Greater Sydney Region Plan as the proposed scope of works will assist in meeting Sydney's growing education needs. The proposed development is consistent with the objectives and directions of the Metropolis of Three Cities Plan, including:

Objective 1 – Infrastructure supports the three cities

The proposed development is critical in prioritising infrastructure investments for the future of the Green Square community. The proposed development aligns with Objective 1 as it will provide educational services for students, and jobs in the Eastern Harbour City.

Objective 2 – Infrastructure aligns with forecast growth

The Greater Sydney Region Plan identifies that Sydney's population is to grow from 4.7 million to 8 million by 2056. The proposed GS ICFS will provide educational services, jobs, and community facilities to support the future population.

Objective 4 – Infrastructure use is optimised

The proposed GS ICFS will ensure infrastructure use is optimised and land is used more efficiently by co-locating an educational facility and community facilities within one site. The co-location of different uses increases infrastructure capacity to better support communities and has the potential to minimise the need to fund additional infrastructure.

Objective 5 – Benefits of growth realised by collaboration of governments, community and business

The proposed development is a joint venture between the Council and SINSW, demonstrating the collaboration between State Government and Local Government in delivering a new primary school and community facilities in Green Square.

Additionally, extensive collaboration has been undertaken by the project team, to produce good outcomes for the design and function of the site. Collaboration with government, agencies and the community have also assured that the proposed works undertaken will respond to the communities changing needs

Objective 6 – Services and infrastructure meet communities changing needs

Schools are essential infrastructure. As our population is growing, demographic changes are also occurring – with a projected 333,000 more children and young people than today. With this projected growth, the proposed development will help facilitate and support the educational needs of the younger generation.

Moreover, the joint and shared use of facilities at the proposed GS ICFS will function to enhance and promote social connections and networks within the community.

Objective 7 – Communities are healthy, resilient and socially connected

The co-location of schools, and sporting and community facilities will encourage both students and the local community to partake in social and physical activities. The proposed development will foster stronger social networks and in turn, lead to connected communities that healthy, resilient and socially connected.

Objective 8 – Greater Sydney's communities are culturally rich with diverse neighbourhoods

The proposed development will act as a gathering space for people to join together and acknowledge the diverse and culturally rich nature of their local neighbourhood. The shared uses will provide the opportunity for special events, community functions and community classes. Specifically, the sporting facilities which form

	part of the proposed development are social connectors, enabling important social and recreational pursuits that builds resilience and social connections in diverse communities. **Objective 9 – Greater Sydney celebrates the arts and supports creative industries and innovation** The proposed development is consistent with Objective 9 as it includes shared uses supporting educational institutions and facilitating local innovation. The proposed multi-functional and shared spaces provide opportunities for arts, events and creative uses. **Objective 12 – Great places that bring people together** The proposed development seeks to deliver new local community facilities on site. The proposed works will help facilitate and celebrate the local character of the Green Square local community and supports the wellbeing of students, staff and the wider community. **Objective 13 – Environmental Heritage is identified, conserved and enhanced** The proposed development identifies and protects the heritage significance within and surrounding the site. The proposed design of the GS ICFS has responded to the surrounding environment, and incorporated built form and materials and finishes that are sensitive to the environmental heritage identified. Refer to **Section 6.12** for an assessment of heritage impacts. **Objective 14 – A Metropolis of Three Cities – integrated land use and transport creates walkable and 30-minute cities** The Proposal supports the 30 minute city concept through providing educational services, jobs, and community facilities to the Green Square and inner Sydney communities. The proposed works aim to support the operation of the school within peak times and its effect on the local road network and services, through promotion of active transport options – particularly, walking and cycling. **Objective 30 – Urban tree canopy cover is increased** The proposed development expands the urban tree canopy in the public realm by redefining the green character of the surrounding gardens and pedestrian connections, creating an interconnected green environment contributing towards future climate resilience. A target has been set to increase tree canopy coverage to 40% in Greater Sydney. The proposal will improve the urban tree canopy cover from 234m^2 (5% site coverage) under present circumstances to 560m^2 (11.9% site coverage) post development. This represents an increase of 8.1% from the existing canopy cover present at the site.
Eastern City District Plan	The Eastern City District Plan was released in March 2018 to support the role of the Greater Sydney Commission and the implementation of the 'Greater Sydney Region Plan'. The Plan proposes a 20-year vision for the District and provides directions for the District's infrastructure and collaboration, liveability, productivity, and sustainability. The following planning priorities are of relevance to the proposed scope of works: **Planning Priority E1 – Planning for a city supported by infrastructure**

	The proposed development will provide a new primary school to support students, community facilities for the local community, and deliver jobs in the Eastern City District. **Planning Priority E2 – Working through collaboration** The proposed development is a joint venture between Council and SINSW, demonstrating the collaboration between State Government and Local Government in delivering a new primary school and community facilities in Green Square. Collaboration with government, agencies and the community have also assured that the proposed works undertaken will respond to the communities changing needs **Planning Priority E3 – Providing services and social infrastructure to meet people's changing needs** The development is responsive to projected growth, particularly the anticipated increase in children and the overall population growth of 102,600 people from 2016-2036 in the District. The proposed development is innovative in the way that is co-locates compatible uses such as a new primary school and community facilities, close to transport facilities. **Planning Priority E4 – Fostering healthy, creative, culturally rich and socially connected communities** The proposed development will provide for community connecting and building through increased opportunity for social interaction and physical activity. **Planning Priority E6 – Creating and renewing great places and local centres, and respecting the District's heritage** The proposed design of the GS ICFS has carefully responded to the heritage significance of the site, and incorporated built form and materials and finishes that are sensitive to the environmental heritage identified. **Planning Priority E17 – Increasing urban tree canopy cover and delivering Green Grid connections** The proposal will improve the urban tree canopy cover from 234m^2 (5% site coverage) under present circumstances to 560m^2 (11.9% site coverage) post development. This represents an increase of 8.1% from the existing canopy cover present at the site **Planning Priority E18 – Delivering high quality open space** The proposed development enables public use to the two multipurpose rooms facing Zetland Avenue. Additionally, the landscapes internal courtyard, through site link and multi-purpose games court are available for public use at agreed times.
State Infrastructure Strategy 2018 – 2038 Building the Momentum	The State Infrastructure Strategy 2018-2038, released by Infrastructure NSW in February 2018, is a 20-year strategy that outlines the NSW Government's major long-term infrastructure plans across all key sectors – transport, energy, water, health, education, justice, social housing, culture, sport and tourism. The Strategy notes that enrolments in government and non-government schools are expected to increase by about 25 per cent over the next 20 years, with more than 80 per cent of the growth occurring in Sydney. The proposed development seeks to deliver a new school with modern learning environments to increase educational capacity in the inner Sydney suburb of Green Square.

Future Transport Strategy 2056	The Future Transport Strategy 2056 provides a framework for delivery of integrated and modern transport systems. The plan acknowledges the vital role transport plays in the land use, tourism, and economic development of towns and cities. The Future Transport Strategy 2056 addresses Transport's role in moving towards sustainability by achieving reductions in emissions. The proposed development supports more environmentally sustainable travel as it is situated near to several public transport services including the Green Square railway station, and is well serviced by bus services, with 13 bus stops conveniently located within 400 metres of the proposed development. The availability of public transport connections to the site encourages students, staff, and members of the community to utilise sustainable transport methods when accessing the site, and overall reduces the need to rely on private motor vehicles. As part of the Vision for Transport, the Strategy highlights an aim towards encouraging active transport by providing better connections and improving amenity of places through the development of an active transport network. The proposed development enhances active travel by providing end of trip facilities to staff, and providing bike parking for use by students, staff and visitors. Additionally, the proposed development enhances active travel such as walking, shown through elevated pedestrian connections from a north-south and east-west through site link.
Sydney's Cycling Future 2013	The goal of Sydney's Cycling Future is to make cycling a safe, convenient and enjoyable transport option for short trips. School Infrastructure is supportive of students, staff and visitors using bikes as their main mode of transport to and from GS ICFS. The site will provide bike locations for students and staff to park their bicycles.
Sydney's Walking Future 2013	The goal of Sydney's Walking Future is to encourage people to walk more, to make it more convenient, better connected and safer mode of transport. The proposal supports walking by providing multiple pedestrian access points to the site for students, staff and visitors. Additionally, the proposed development enhances active travel such as walking, shown through elevated pedestrian connections from a north-south and east-west through site link.
Sydney's Bus Future 2013	Sydney's Bus Future Strategy is the NSW Government's long term plan to redesign the bus network to meet customer needs now and into the future. The site is well serviced by bus services, with 14 bus stops conveniently located within 400 metres of the proposed development. These services provide connections to the Eastern Suburbs and Sydney CBD. Bus services include route 301, 309, 309X, 310X, X93, 320, 343, 348 and 370.
Crime Prevention Through Environmental Design	Refer to **Section 6.4** of this EIS.
Better Placed: An integrated design policy for the built environment of New South	Better Placed is an integrated design policy for the built environment of NSW. It seeks to capture our collective aspiration and expectations for the places where we work, live and play. The proposed development aligns with the objectives for good design, including;

Wales (GANSW, 2017)	– Better fit: contextual, local and of its place – Better performance: sustainable, adaptable, 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 – Better look and feel: engaging, inviting and attractive The seven principles of Better Placed have been used throughout the briefing, consultation with the Government Architect, and design process, ultimately shaping and guiding the proposed development. Consultation with the Government Architect is further explained in **Section 4** of this EIS. Refer to the Architectural Design Report at **Appendix F** for further detail of how the proposed development aligns with Better Placed.
Design Guide for Schools – GANSW	The GANSW Better Places: Design Guide for Schools provides guidance on how to meet the Education SEPP Design Quality Principles. The Design Guide identifies 7 principles from the SEPP to be considered during the design of the school. The proposed development aligns with these principles as discussed below in **Section 5.5**. Refer to the Architectural Design Report at **Appendix F** for further detail of how the proposed development aligns with the Design Guide for Schools.
Green Square Town Centre Public Domain Strategy	This Green Square Town Centre Public Domain Strategy translates the vision, goals and targets identified in Sustainable Sydney 2030 and supporting urban renewal policies, into a guiding blueprint for the design of the Green Square Town Centre's public spaces and streets. The proposed development achieves a strong public domain to Zetland Avenue through building height, mass, form, colours and materials which are reflective of the site's local heritage. The proposed development can achieve an adaptable public domain capable of accommodating a broad range of uses through the provision of an internal courtyard, multi-purpose games court and multi-purpose spaces. These areas will enhance the usability of Green Square Town Centre, encourage social interaction and use by the community, and deliver both formal and casual meeting spaces suitable for different age groups in the community. The proposed development is inclusive of particular needs and desires of key community groups, as it proposes uses as community facilities/rooms and a primary school with various spaces for various groups. The landscape design, plant selection, incorporation of the public artwork on the northeast corner of the site and the proposed artwork in the multi-purpose games court help engage the community in the public domain. The proposed development has integrated the management of stormwater and floodwater into the design.
Green Square Community and Cultural Precinct Public	The Green Square Public Domain Coordination Plan aims to provide a cohesive, comprehensive and innovation plan that defines the scope of the public domain and open space within the South

Domain Coordination Plan	Sydney Hospital site, and sets framework principles and strategies to direct design of the public domain of the site. The proposed development responds to the four Key Building Principles outlined in the Plan: **Maintain the Heritage Campus Character** The proposed development maintains the heritage campus character of the site by retaining and reinforcing the building setback to Joynton Avenue. The location, form and historical significance of existing surrounding buildings have also informed the proposed development. **Site Permeability to be reinforced** Site permeability and pedestrian circulation has been enhanced through the site by carefully considering building siting. **Respond to the site context** The proposed development reinforces Zetland Avenue built edge and also provides built edge opposite Drying Green Park. **Optimise future use potential** The proposed development optimises future use potential by maintaining equivalent floor space to Hill Thalis Master Plan. It defines the most efficient building envelope and reserves majority of the Green Square Infrastructure Centre for future use.
Green Square Public Art Strategy 2012	The incorporation of the public artwork on the northeast corner of the site and the proposed artwork in the multi-purpose games court help engage the community in the public domain.
Sydney Landscape Code Volume 2: All development except for single dwellings	The Landscape Code guides the creation of high quality, sustainable landscape spaces in the City of Sydney. The landscape design reflects the sites original Botany aquifer character. The ancient sand basin which once featured open heathland vegetation, ridges, lagoons and soaks have been expressed through the planting character, materiality and play space forms. Landscape Plans and a Landscape Report have been prepared for the proposed development by Turf Design Studio at **Appendix I** and **Appendix J,** respectively.

5.3 Legislation

Environmental Planning and Assessment Act 1979 (EP&A Act)

The proposed development is consistent with the objects of the EP&A Act, in particular:

- Promotes social welfare of the community;
- Facilitates ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment;
- Promotes the sustainable management of built and cultural heritage;
- Promotes good design and amenity of the built environment;
- Promotes the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants;
- Promotes the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State; and
- Provides increased opportunity for community participation in environmental planning and assessment.

State Significant Development

Section 4.36 of the EP&A Act provides that the Minister, or a State Environmental Planning Policy may declare development to be State Significant Development. Clause 15 of Schedule 1 of the *State Environmental Planning Policy (State and Regional Development) 2011* (SEPP SRD) specifies development for the purpose of a new school (regardless of the capital investment value) is to be assessed as State Significant Development:

> *"15 Educational establishments*
>
> *(1) Development for the purpose of a new school (regardless of the capital investment value)."*

The proposed development is for a new primary school; hence, it qualifies for SSD.

Biodiversity Conservation Act 2016

A total of 28 trees are approved for removal from the site to facilitate the GS ICFS (subject of a separate planning approval). The separate planning application (D/2020/1683) has been determined by Council for this tree removal.

Despite this, a BDAR Waiver Request was prepared by Cumberland Ecology and is provided at **Appendix H** which considers this tree removal. It concludes that the project is highly unlikely to have significant impacts upon defined biodiversity values as impacts are limited to highly modified areas, containing planted native vegetation only. Moreover, it is considered unlikely that a significant impact to threatened species would occur as a result of the proposed development.

It is noted that approval to waive the need for a BDAR report as part of the SSD application has been provided by the Directors within the Planning and Assessment Division of DPIE on 1 September 2021. Additionally, the delegated *Environmental Agency Head* in the Environment, Energy and Science Group of DPIE has also granted a waiver on 5 August 2021. Refer to **Appendix AF**.

5.4 Environmental Planning and Assessment Regulation 2000 (EP&A Regulation)

The EIS has addressed the criteria within Clause 6 and Clause 7 of Schedule 2 of the EP&A Regulation. As required under Clause 7, additional approval under the Roads Act 1993 will be required in order to permit the proposed development to occur.

The EP&A Regulation supports the EP&A Act and provides specific requirements for the preparation of Environmental Impact Statements under Schedule 2.

5.5 Environmental Planning Instruments

This proposal has been considered against the relevant environmental planning instruments (**EPIs**) in accordance with the issued SEARS. The proposal has been assessed and found to be generally consistent with these, as detailed within **Table 11**.

Table 11 Environmental planning instruments

Relevant EPI	Response
State Environmental Planning Policy (State & Regional Development) 2011 (SRD SEPP)	The SRD SEPP identifies development or infrastructure types that are of state or critical significance. Under Schedule 1, Clause 15 State Significant Development includes development for the purpose of a new school (regardless of the capital investment value). The proposed development constitutes SSD as it is development for the purpose of a new school.

State Environmental Planning Policy (Infrastructure) 2007 (ISEPP)	The ISEPP provides the legislative planning framework for infrastructure and the provision of services across NSW. Clause 104 and Schedule 3 of ISEPP trigger referral to the Roads and Maritime Services (former – now Transport for NSW) as the proposal is considered as: “Any other purpose” “with access to a road (generally)” with size or capacity of “200 or motor vehicles per hour”. Accordingly, Transport for NSW has been consulted during the preparation of the EIS.
State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 (ESEPP)	The ESEPP aims to streamline the planning system for education and childcare facilities. Under Schedule 4 of State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017, proposals for schools need to address the School’s design quality principles. The Proposal demonstrates these principles, through; **Principle 1 – Context, built form and landscape** For the reasons discussed within this report and the supporting Architectural Design Report at **Appendix F**, the proposal is suitable with regard to its context, built form and landscaping. The form of proposed development is the result of a design competition brief, which will provide a four-storey perimeter building that presents a strong urban street wall to new Zetland Avenue whilst respecting the heritage values of the site and locality. The proposed building has sought to ensure that landscaping, areas of open space and play space are integrated in a manner that enhances the overall design. **Principle 2 – Sustainable, efficient and durable** The proposed works will implement a range of sustainability measures, including passive ventilation and lighting, implementation of rooftop solar panels as well as the harvesting of rainwater and other water sensitive urban design measures incorporated across the school. The design achieves a 5 star Green Star design and as-built rating. **Principle 3 – Accessible and inclusive** The proposal can comply with relevant provisions for accessibility as outlined in the Access Report included at **Appendix W**. **Principle 4 – Health and safety** The proposal has a key focus on health and safety of students, through the provision of bicycle parking at the site, which will encourage the uptake of cycling to/from the school. In terms of safety, the Architectural Design Report (**Appendix F**), demonstrates how CPTED principles have been implemented throughout the school to help security and access for the school. **Principle 5 – Amenity** The proposal will deliver modern, state of the art facilities, spaces and equipment for use by students and staff. Students will be able to enjoy a facility that provides naturally ventilated classrooms which benefit from good sunlight and are acoustically rated to ensure a noise environment that is protected from any external noise disruptions. **Principle 6 – Whole of life, flexible and adaptive** Material choices are durable, long-lasting, and attractive. The concrete frame of the building enables the internal spaces to be readily re-configured during the life of the building, including the potential for a change of use in the future.

	Principle 7- Aesthetics Extensive streetscape facades and massing have been carefully considered to respond to the existing local context. Further to durability matters above, the proposal will have high quality external finishes, which will be aesthetically pleasing by achieving a built form that has good proportion and a balanced composition. Overall, the proposal is of an appropriate scale and form within the surrounding context.
State Environmental Planning Policy No. 64 – Advertising and Signage	State Environmental Planning Policy No. 64 – Advertising and Signage (SEPP 64) applies to advertising and signage within NSW. The building utilises three primary signage types for name identification and communicating information. These signs are proposed on the northern, southern, eastern and western elevations of the building A Digital community information signage board is proposed on the northern façade of the building (Zetland Avenue). Refer to discussion 3.11 of this EIS and the Architectural Design Report at **Appendix F** for further details of signage. Clause 8 of SEPP 64 requires the signage is consistent with the objectives of that Policy and satisfies the assessment criteria in Schedule 1 of that Policy. Each are addressed in turn below.
Objectives	The signage is compatible with the desired amenity and visual character of the area. It provides effective communication along each street frontage for identification to the ISCF. It will have high quality design and finish that integrates with the building façade.
Character of the area	The building has been designed with regard to the character of the area, particularly the character of other buildings within the site of heritage significance. All signage, except for the LED screen, will be cast into the coloured concrete structure of the building, in sizes and positions that ensures that it complements the overall building design. The LED signage has been located to the northern façade so that it is physically and separated from heritage significant buildings located on the site.
Special areas	A view analysis has been completed of the proposed building from prominent public domain locations and adjoining areas of heritage significance. Refer to Section 6.6 below. This finds that there is limited visibility of the building from most of these vantage points.
Views and Vistas	Refer above response.
Streetscape, Setting or Landscape	The signage does not extend beyond the building facades and is in keeping with the form and scale of the building. The signage has been positioned and sized so as not result in cumulative visual clutter on and around buildings
Site & Building	Refer above response.
Associated devices and logos and advertisements and advertising structures	Details of any safety devices and logos will be developed at a later stage
Illumination	Illumination details will be developed at a later stage. Any illumination will be designed to avoid unacceptable glare or light spill.
Safety	The proposed signage zones will not reduce road, pedestrian or cyclist safety

State Environmental Planning Policy No.55 – Remediation of Land	SEPP 55 requires the consent authority to consider whether the subject land of any development application is contaminated and can be made suitable for the proposed use. All demolition, earthworks and site preparation works have been consented under D/2020/923, as detailed under **Section 1.7** of this EIS. Compliance with the provisions of SEPP 55 was demonstrated in the assessment of approval of D/2020/923. As the proposed development is wholly consistent and within the parameters of this related application, it is therefore also considered to be consistent with the provisions of SEPP 55. For further details refer to the Phase 2 Site Investigation, prepared by JBS&G (**Appendix S**), Remedial Action Plan, prepared by JBS&G (**Appendix T**), and Interim Audit Advice letter, prepared by Ramboll (**Appendix U**).
State Environmental Planning Policy (Vegetation in Non-Urban Areas) 2017	Note SEPP (Vegetation in Non-Urban Areas) 2017 is not applicable as no tree removal is proposed under this application.
Draft State Environmental Planning Policy (Remediation of Land)	Draft SEPP 55 contains similar content that is not dissimilar to the gazetted SEPP 55. For the reasons discussed above, the proposal aligns with the aims and objectives of Draft SEPP 55.
Draft State Environmental Planning Policy (Environment)	The Draft SEPP (Environment) is a proposed new SEPP that will form part of the broader land use planning framework in NSW. The proposed new SEPP aims to deliver a planning framework that protects the four catchments, maintaining: – Water quality and flows within watercourses; – Native plants, animals, habitats and ecosystems; and – Recreational, scenic and environmental amenity. The proposal aligns with the aims and objectives of the Draft SEPP (Environment).
Sydney Local Environmental Plan 2012	Except where expressly referenced within this report, such as the identification of surrounding heritage items, the SLEP 2012 does not apply to the subject site or proposed development.
South Sydney Local Environmental Plan 114 (SSLEP 114)	SSLEP 114 applies to the subject site by virtue of subclause (2) of the LEP. The applicable provisions of the SSLEP 114 are considered in **Table 12** below.
South Sydney Local Environmental Plan 1998	The subject site is zoned No.11 (a) Green Square Town Centre Zone and No 11 (b) Green Square Town Centre Public Domain Zone. However, these zones are classified as 'Deferred Matter' and their provisions including the land use table are not relevant to the proposed development. In this regard, SSLEP 1998 only applies to the site to extent that Schedule 2 relates to the land. Schedule 2 identifies heritage items within South Sydney. Schedule 2 of the SSLEP 1998 identifies the site as heritage item 554A/ Former Royal South Sydney Hospital Group. This heritage item is of local significance
Sydney Local Environmental Plan (Green	SLEP 2013 does not apply to the site as the land is identified as a "deferred matter". There are no provisions relevant to the site under SLEP 2013.

Square Town Centre Stage 2) 2013	

5.6 South Sydney Local Environmental Plan 114 (Southern Industrial and Rosebery/Zetland Planning Districts)

Table 12 South Sydney Local Environmental Plan 114

Provision	Response
Clause 9. Zone objectives and development control table	The site is identified in the 5(a) Special Uses Zone. The permitted uses in this zone, relatively includes "any other purpose which by virtue of its type, function, scale and services provided is, in the opinion of Council, consistent with the objectives of the zone." Given that the objectives of the zone are to provide community facilities, the proposed use is therefore permitted within the zone.
Clause 10. Floor Space Ratio	No height or FSR controls apply to the site.
Clause 11. Height of Buildings	
Clause 13. Community use of school facilities	Aside from dedicated multi-purpose rooms for community use, the hall, games court, and multi-purpose rooms will be shared with the community outside of school hours.
Clause 22. Development on all land to which this plan applies	The proposed development will be serviced by water, sewerage and drainage services sufficient for its purpose.
Clause 23. Flood liable lands	The floor levels of the GS ICFS have been set with regard to the maximum 1% AEP on Joynton Avenue.
Clause 24. Contaminated land	The subject site is contaminated and will be remediated and made suitable for use in accordance with SEPP 55 prior to occupation of the site.

5.7 Development Control Plans

Whilst Clause 11 of the SRD SEPP states that development control plans do not apply to state significant development, for completeness, the following have been considered in the design and environmental assessment of the proposed development:

- Royal South Sydney Hospital Master Plan 2013 (as called upon by the Green Square Town Centre Development Control Plan 2012);
- Green Square Town Centre Development Control Plan 2012;
- City of Sydney Access Development Control Plan 2004 (Access DCP 2004);
- City of Sydney Heritage Development Control Plan 2006.

5.8 Royal South Sydney Hospital Master Plan 2013

The South Sydney Hospital has been identified as a critical site for the development of new community facilities; specifically, as outlined in the Green Square Town Centre Development Control Plan 2012. This is reflected in the Royal South Sydney Hospital Master Plan 2013, prepared by Hill Thalis which presents the objectives, planning constraints and design principles of a new community precinct, to be located on this site.

A Competitive Design Process was commenced in accordance with the Design Competition Brief prepared by Urbis and endorsed by Council, SINSW and GANSW. The brief required that the competitors consider the relevant controls, policies and frameworks for the site and precinct.

Notably, the brief stipulated that any design must meet the design principles detailed in the Hill Thalis Master Plan. The brief also defined a series of setbacks for the site which were informed by both the Green Square Town Centre DCP 2012 and Hill Thalis Master Plan.

BVN's architectural scheme was unanimously selected by the Jury as the winning scheme as it was the most convincing response to the requirements of the Brief. As the winning competitor, BVN and the consultant team have continued to develop the design to the current scheme.

It is considered the current design improves on the Design Excellence Competition scheme which ensures consistency with the relevant controls, policies, and frameworks of the Green Square Town Centre DCP 2012 and Hill Thalis Master Plan.

5.9 Green Square Town Centre Development Control Plan 2012

Compliance of the proposal with the GSTC DCP 2012 controls is summarised below:

Matter to be considered	Comment
GSTC 1: Introduction	
GSTC 1.4 Objectives	The redevelopment of the site for the purpose of community use will result in a model example of sustainable urban renewal that responds in an appropriate manner to its context, including the heritage significance of the former Hospital.
GSTC 2: Desired Future Character	
2.1 Locality Statement	The proposal is consistent with the locality statement as it enhances the east-west spine from Epsom Park precinct to the Green Square Town Centre and station.
GSTC 3: Local Infrastructure	
3.1 Open Space	The proposed development does not encroach into the heritage curtilage of the main administration building as referred to in the Conservation Management Plan for the South Sydney Hospital site.
3.3 Street Network	<u>Street Network</u> The Zetland Avenue extension as indicated in the DCP is currently under construction. The proposed development is situated clear of the planned road reserve. <u>Vehicular Access</u> In relation to vehicular access, there is no access proposed along or within proximity of Zetland Avenue, including street intersections. <u>Through site links</u>

	Through site links as indicated in the DCP are not being compromised because of the proposed development.
3.4 Flooding and Stormwater Management	The site is identified as being flood prone. The proposal is generally compliant with the City's Interim Floodplain Management Policy.
GSTC 4: Land Uses	
4.3 Active frontages	The DCP nominates active frontages along Zetland Avenue and Portman Street. A high level of activation is achieved to all street frontages. The proposal results in a strong urban street wall to Zetland avenue and Portman Street. Public uses on the ground floor and levels above have been designed with public address along these frontages. Access to the site is achieved via distinct entry points on Zetland Avenue and Portman Street. The proposed development also activates Joynton Avenue whilst maintaining a recessed building alignment with the early education centre to the south.
GSTC 5: Heritage	
5.1 Heritage Impact Statements	A Heritage Impact Statement (HIS) has been submitted for consideration of the developments impacts to existing heritage items at the site and surrounds.
5.2 Development affecting a heritage item	A Conservation Management Plan was prepared for the Hospital Site in 2011 which is still active in the management of the site. The submitted HIS has utilised the CMP to inform the understanding on the site's history and significance and is assessed against the relevant policies of the Conservation Management Plan. In addition, the development does not encroach into setbacks as required by the DCP except for the 12-metre setback to the northern elevation of the Outpatients Building. A setback of only 11 metres has been provided. This is a minor encroachment and is adequately justified in the submitted HIS. In summary, it concludes that the proposed distance between the two buildings still retains adequate space around the entirety of the Outpatients Building, ensuring the ability to appreciate and engage with the heritage significance of the building as a standalone feature of the site is not compromised.
GSTC 6: Building layout, form and design	
6.2 Design and architectural diversity	The proposal is for a perimeter block building that is primarily three storeys with a fourth storey component located on the northwest corner. The building presents a 73-metre-long elevation to Zetland Avenue and an 82-metre elevation to Portman Avenue. These elevations are relieved by the two-storey volume of the multi-purpose games court on the Zetland/Portman corner as well as the large break in the Portman elevation above the western entry. This diversity physically separates the northern and western ‘bars’ of the buildings L shape.
6.3 Building Layout	The proposal is for perimeter block building with a central courtyard. This layout creates a strong urban street wall to Zetland avenue and Portman Street. The fourth storey proposed at the north-western corner of the site reinforces the Zetland/Portman corner.
6.4 Height in storeys and street frontage	The building is primarily three storeys with a fourth storey component located on the northwest corner. The proposed number of storeys are substantially less than that anticipated in the DCP. It is noted that these provisions of the DCP were improved upon by the

	Hill Thalis Master Plan, which recommends a consistent datum of 3 to 4 storey street wall buildings.
6.5 Building Alignments and Setbacks	The building has been setback 1.5 from Portman Street to accommodate the required footpath widening setback in the DCP.
6.6 Roof form	Plant and lift overruns are designed in a manner that are visually unobtrusive.
6.10 Amenity	Sun access The shadow diagrams illustrate that the proposal receives adequate sunlight to facilities and does not result in any adverse overshadowing to adjoining properties, including the existing childcare centre. External lighting The lighting design looks to incorporate low level lighting, in a layered arrangement, to allow different scenes within the site. Lighting balances the needs of security and accessibility with ambience and in the areas facing the site boundary, a limitation on any upward or outward light spill. Privacy There are residential buildings to the north (35m separation across Zetland Avenue), south east (across 24m separation at the closest point across Portman Street) and south (44m separation). The separation provided exceeds the minimum building separation requirements of the Apartment Design Guide.
6.12 Safety and design	The proposed development provides adequate passive surveillance and is generally designed in accordance with CPTED principles.
6.13 Landscaping and open space	A landscape plan has been prepared by a suitably qualified landscape architect. Green roofs are proposed at the site.
GSTC 7: Signage and Advertising	
7.1 Signage Strategy	The Architectural Design Report in **Appendix F** provides details of signage.
7.3 General requirements for signs	The building utilises three primary signage types for name identification and communicating information that relates to the use on the site. Signs are integrated into the architectural design of the building in terms of colour, material and size relative to the scale of the building facade. The signs are positioned so as not to create visual clutter on each building façade or to be the dominant feature of the façade. All signs except for the LED screen are to be cast into the concrete. The LED screen has a marginal projection of 12mm. All cabling associated with the LED screen is to be concealed.
7.4 Illumination and animation of signage	The LED screen will be communicating information that relates to the use on the site (i.e., school and community facilities). Illumination details will be developed at a later stage. Any illumination will be designed to avoid unacceptable glare or light spill.
7.5 Number of business and building identification signs	Building identification signage is proposed along each street frontage. SC1 and SC2 are located on the western elevation and

	eastern elevation, while D1 and SC3 will be located on the northern elevation of the building. Albeit greater than limits provided in the DCP, it is considered that the signage is well integrated into the overall building design and will not contribute to a cumulative visual clutter along the streetscape.
7.6 Building identification or name signs	Signage on upper parts of the building is limited to two SC2 signs on the southern and eastern elevation of the building. It does not obstruct any significant elements of the buildings architectural design. All other signages are in the vicinity of the entryways. Building name signs are to be restricted to a small element of the building sign. Logos have been incorporated in some instances. The building is not to have additional structures supporting signs. Sky signs are not proposed.
7.12 Signs on heritage items	The building is located on heritage item 554A-Former Royal South Sydney Hospital Group and includes buildings of local significance. Refer to Section 2.12 for a description of buildings of significance within the site. Notwithstanding, it is noted that the building has been designed so that signage is integrated into the overall design of the building. All signage except for the proposed LED screen on Zetland Avenue will be cast into the concrete façade. Furthermore, externally illuminated LED screen is located on the northern façade of the new building which does not have an interface with buildings of heritage significance. All cables and conduits will be concealed. In this regard, the proposed signage will not detract from the heritage significance of buildings in the vicinity.
GSTC 8: Environmental Management	
8.1 Ecologically Sustainable Development	An ESD report has been submitted with the SSDA which achieves a 5-star Green Star Design.
8.2 Energy	
8.3 Materials	The proposed materials are considered to be suitably durable and adaptable in accordance with the DCP.
8.4 Waste	A Waste Management Plan has been submitted that details how waste is to be minimized during construction and operation of the proposed development.
8.5 Water	<u>Water</u> All fittings and fixtures will exceed the minimum WELS Standards in Table 8.1 of the DCP. <u>WSUD</u> Water being discharged from the site will meet the post-development pollutant load standards of City of Sydney Council via the incorporation of water quality devices into the on-site drainage system, including enviropods and stormfilters.
8.6 Biodiversity	The ecological impact of the proposed works is detailed in the BDAR Waiver Request prepared by Cumberland Ecology. Replacement native vegetation is proposed, details of which are included in the landscape plan.

GSTC 9: Social Sustainability and Impact	
9.1 General Provisions	A Social Impact Assessment has been prepared for the development
GSTC 10: Transport and Parking	
10.1 Managing Transport Demand	The proposal is accompanied by a traffic report with a swept path analysis for the proposed vehicular entry on Portman Street.
10.3 Vehicle parking	There provisions do apply to the proposed development given the unique land uses proposed. The traffic consultant considers the provisions of South Sydney DCP No.11: Transport Guidelines for Development 1996 in the Traffic and Accessibility Impact Assessment.

5.10 City of Sydney Access Development Control Plan 2004

The City of Sydney Access Development Control Plan 2004 (Access DCP 2004) seeks to provide non-discriminatory, equitable and dignified access for all people who use the City of Sydney, regardless of disability. An Access Assessment Report has been submitted with the application which indicates that the design for the most part complies or can comply with relevant accessibility standards and legislation during the detailed design stage. An Access Report prepared by Philip Chun for the proposed development is at **Appendix W**.

5.11 City of Sydney Heritage Development Control Plan 2006

The site is subject to the provisions of this DCP. A HIS prepared by City Plan Services (at **Appendix M**) has been prepared consider the impact of the proposed works on buildings in the RSSH site and the adjacent heritage items and Conservation Areas in the immediate vicinity of the works.

The HIS concludes that the proposed works, having regard to the relevant matters of consideration, results in minimal to no adverse impact on the heritage significance of the subject site and heritage items in proximity. Accordingly, it is considered that the proposal generally complies with the relevant aims, objectives and controls of the DCP.

5.12 Section 7.11 Contributions Plan

The relevant contributions plan is the City of Sydney Development Contributions Plan 2015. However, pursuant to subclause 1.3 of the Plan, this development is excluded from the need to pay a contribution.

The Department of Education does not agree to a condition of consent requiring it to pay developer contributions under section 7.11 or 7.12 of the Environmental Planning and Assessment Act 1979. Planning Circular D6 represents the consistently held view that the Department of Education, as a Crown authority, provides critical community infrastructure and that to levy any developer contribution on provision of public education facilities increases the cost of such infrastructure for all taxpayers in the State.

6. Environmental Assessment

6.1 Overview

This section assesses those matters as required under Section 4.15(1) of the EP&A Act and responds to the matters for consideration set out in the SEARs. The mitigation measures at **Section 7** complement the findings of this section.

6.2 Built Form and Scale

The proposed development has been strategically established by the surrounding built form context and locality.

The built form of the proposed development is a perimeter L-shaped building of four storeys with a central courtyard. This courtyard is shared at an urban scale with the Waranara Early Learning Centre, although significant setbacks and fencing are provided to the learning centre to delineate the two uses and also for safety reasons.

The built form creates a strong urban street wall to Zetland Avenue and Portman Street, with a zero northern boundary setback to Zetland and a 1.5m western boundary setback to the narrower Portman Street. The form is articulated by a differentiation in material to the eastern and southern ends of the proposed development, whereby materiality at ground level differs to the masonry screen element at level 1 and above. View slots are cut into the masonry screen for the benefit of occupants, and to provide passive surveillance.

The simple L-shaped form of the proposed development is articulated on its inner faces by the primary circulation stairs and the deep verandas that provide horizontal circulation, covered outdoor learning environments and spaces for students.

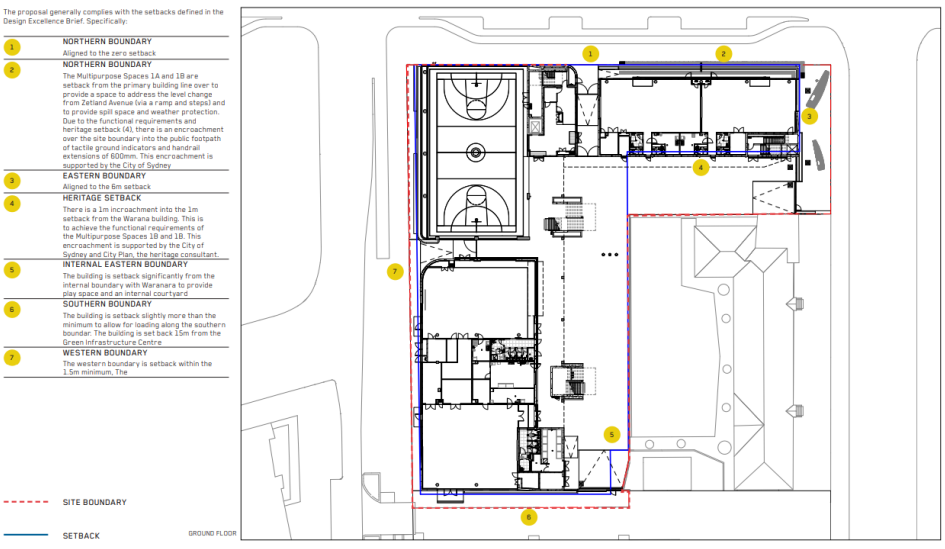


Figure 36 Proposed setbacks and L-shaped built form of Green Square ICFS
Source: BVN Architects

The maximum building height of the proposed GS ICFS, being RL 35.050m, is derived from the following considerations:

- The proposed building height is to be of similar height to surrounding public facilities, including the Gunyama Aquatic and Recreation Centre, the Joynton Avenue Creative Centre and the Green Infrastructure Centre;
- To provide for legibility and wayfinding from the future Zetland Avenue, Joynton Avenue, Portman Street, and Geddes Avenue; and
- To deliver sufficient capacity to accommodate the need for more student enrolment numbers and more community facilities in Greater Sydney.

The bulk of the proposed development presents a 73m elevation to the north at Zetland Avenue and an 82m elevation to the west at Portman Street. These elevations are relieved by the two-storey volume of the multi-purpose games court on the Zetland/Portman corner, reducing the bulk of the proposed development. Refer to **Figure 37**.

Moreover, the overall bulk of the proposed development is further broken down by the large break in the Portman elevation above the western entry, which physically separates the northern and western 'bars' of the buildings L-shape.

Along the northern elevation, the ground level frontage of the community Multipurpose Rooms 1a & 1b are setback from the primary building line, helping to signify their entry points and providing weather and solar protection.

Figure 37 Indicative view of proposed development from Portman Street
Source: BVN Architects

For further discussion on built form, scale, and relationship of the building to context, refer to the Architectural Design Report at **Appendix F**.

6.3 Play space

Having the adequate play space and open space at school, is beneficial to students, the environment, and the local community. Recognising the importance of play space, NSW Department of Education guidelines provide that 10m^2 usable onsite play space per student be provided at each school.

GS ICFS will provide 8.98m^2 of play space per student. Whilst this is below NSW Department of Education guidelines, the extent of outdoor play space is considered acceptable given the constrained nature of the site (refer to Architectural Design Competition Report at **Appendix G**). The Jury Recommendation for the BVN scheme states the following:

"Refinements to maximise outdoor play space – It is acknowledged that with the planning constraints on this site that being slightly under the recommended level may be acceptable."

Thereby, the proposed 8.98m^2 of play space per student on site is considered as appropriate.

6.4 Safety and security

A Crime Prevention through Environmental Design (CPTED) Assessment has been included in the Architectural Design Report, prepared by BVN Architects and is attached at **Appendix F**. The Architectural Design outlines the design elements and CPTED principles included in this proposal that will deter anti-social and criminal behaviour from the site.

Refer to **Table 13** below which highlights the consistency of the proposed development with CPTED principles.

Table 13 CPTED Principles

Principle	Proposed development
Perimeter security and access control	Lines-of-sight through the site have been considered during the design of the proposed development. The various entry points to the site, and the gates at the bottom of the fire stairs, are to be controlled by powered gates which are operated in accordance with the Operational Plan (refer to **Appendix AH**). Doors into the buildings have electronic access control systems.
Natural surveillance	GS ICFS is located near to a number of residential developments in the immediate vicinity, providing natural surveillance. The site and surrounding areas are essentially flat, limiting obstruction of views to and from the site. additionally, the new Zetland Avenue provides further pedestrian, bicycle and vehicular traffic past the time. As such, the site will have plenty opportunity for natural surveillance. The site will also have technical/mechanical surveillance via CCTV coverage as part of its Operational Plan (refer to **Appendix AH**).
Territorial reinforcement	The use of the facility as a shared community and school facility will help build community ownership. The public can access particular areas of the site at agreed times, further reinforcing the idea that the proposed development is to be a shared asset. Additionally, the site is located within the vicinity to several public facilities like the Gunyama Aquatic and Recreation Centre, which will help this reinforcement.
Maintenance	The facility has numerous active users, including as a school OSHC, bookable community rooms, through-site link and public use of the multi-purpose games court. This is managed by the Operational Plan (**Appendix AH**), promoting active usage of the site through the day and evening. This has the benefit of continual occupation of the site, reducing the risk of crime.

6.5 Design Excellence

A Competitive Design Process was commenced in accordance with the Design Competition Brief prepared by Urbis and endorsed by Council, SINSW and the Government Architect NSW on 1 November 2019. Refer to the Architectural Design Report at **Appendix F**.

The competition comprised of five (5) competitors to participate in the Competitive Design Process and prepare design proposals for the site. BVN's architectural scheme was unanimously selected by the Jury as the winning scheme as it was the most convincing response to the objectives of the Design Competition Brief (see **Figure 38**).

Figure 38 BVN Winning Competition Scheme
Source: BVN Architects

In the opinion of the Jury, BVN's scheme was most capable of achieving design excellence subject to incorporating their 'design development recommendations'. As the winning competitor, BVN was appointed as the Lead Design Architect for the project and has lead design decisions affecting the project.

BVN have continued to develop the design, taking the competition scheme and evolving it into the SSDA scheme. The Architectural Design Report prepared by BVN at **Appendix F**, identifies how the design has evolved since the design competition and how it addresses the 'design development recommendation'. Refer to **Figure 39**.

Figure 39 BVN Current SSDA Scheme
Source: BVN Architects

It should be noted that the current design of the proposed development has resulted in the following variations from Architectural Design Competition Brief:

- The Jury strongly supported the benefits of a timber structure. Following further investigation, the timber structure has been replaced with a concrete structure to better suit the requirements of the Department of Education.
- The masonry screen along the future Zetland Avenue extends to the constant parapet line to meet safety and security requirements for level 3 play area.
- The brief required a minimum separation distance of 12m to the northern elevation of the Outpatients building. The proposed development provides for 11 metres building separation as it improves the functionality of the multipurpose rooms.
- The HIS at **Appendix M** considers the visual impact of the reduced setback to be acceptable. In relation to this matter, the HIS concludes that the difference between the 12m setback and the proposed 11m setback is marginal but the gain and benefit from the 1m reduction is significant in terms of layout and functionality of the new building.

  It is therefore considered that the proposed distance between the two buildings retains adequate space around the entirety of the Outpatients Building, ensuring the ability to appreciate and engage with the heritage significance of the building as a standalone feature of the site is uninterrupted.

Considering the minimal impact, the setback will produce both physically and visually as a reduction from an 11m setback, the change is considered acceptable from a heritage perspective

- The brief required that the fourth storey massing should comprise no more than 20% of the building footprint to avoid any additional overshadowing of the site itself and adjacent uses beyond that which would occur from the three-storey structure.

  The current scheme represents a minor variation to this, with a fourth storey mass totalling 24% of the building footprint. Approximately 18% of the mass is for the library while the remaining 6% provides for fire egress stairs and building services comprising of toilets, bulk storage, laundry, garden storage etc.

  Despite the larger footprint, the majority of the fourth storey mass is located at the north-western corner, as far as possible from the internal courtyard. In this regard, the fourth storey component is unlikely to result in any additional shadows to surrounding land uses.

Consultation with the GANSW is nominated as a requirement of the SEARs. To satisfy this requirement, it was requested that the proposed development be referred to Council's DAP, with at least one member of the competition Jury, to consider the design integrity of the scheme and deviations from the design competition scheme. Further detail regarding consultation with the DAP is at **Section 4** above and within the Architectural Design Report at **Appendix F**.

6.6 View Analysis

Visual Impact Assessment

A visual impact assessment of the proposed development has been undertaken by BVN Architects and is included in the Architectural Design Report at **Appendix F**. Views for assessment have been identified from key vantage points. Key vantage points identified include:

- Viewpoint 1: Joynton Avenue from the northeast;
- Viewpoint 2: Joynton Avenue from the southeast;
- Viewpoint 3: From adjacent to Joynton Avenue;
- Viewpoint 4: Geddes Avenue from the southwest;
- Viewpoint 5: Portman Street from the south; and
- Viewpoint 6: Portman Street from the north.

Figure 40 Visual Impact Viewpoints
Source: BVN Architects

City Plan Services has also undertaken a visual impact assessment of the proposed development as it concerns items of heritage significance within the subject site and surrounds. This assessment is included in the HIS at **Appendix M**.

View Analysis

The following section assesses the visual impact of the proposed development from each of the selected viewpoints (shown in **Figure 40**). The analysis by Architectus includes a description of the view from each viewpoint and a discussion of the potential visual impacts of the proposed GS ICFS on that view. BVN Architects have generated the views.

Viewpoint 1: Joynton Avenue from the northeast


Figure 41 Joynton Avenue from the southeast
Source: BVN Architects

As shown in **Figure 41**, there is a moderate level of impact from this viewpoint location; however, it is deemed acceptable because the proposed development will assist with legibility from the street, and will establish a contextual

relationship with the future character of the area. This visual shows the 15 storey mixed use development in the background at 25 Geddes Avenue, demonstrating how the proposed development is in keeping with the site's surrounding built form and context.

Viewpoint 2: Joynton Avenue from the southeast

Figure 42 Joynton Avenue from the southeast
Source: BVN Architects

As shown in **Figure 42**, there is a moderate level of impact from this viewpoint location. The 4 storey proposed development appears to complement the future built form context along Joynton Avenue, becoming a suitable transition between the existing one storey Waranara Child Care Centre, and under construction 7 storey residential building to Elizabeth Street and Joynton Avenue and 15 storey mixed used development to the Zetland Avenue extension. Hence, the visual impact of the proposed development from this viewpoint is deemed appropriate, and is not out of character for the future built context of the locality.

Viewpoint 3: From adjacent to Joynton Avenue

Figure 43 From adjacent to Joynton Avenue
Source: BVN Architects

As shown in **Figure 43**, from this viewpoint the proposed development is dominated by trees in the mid-ground. The proposed GS ICFS will be partially visible from Joynton Avenue, enabling wayfinding and legibility to the site. In addition, the built form and scale of the proposed development appears to be appropriate to the surrounding built form and context, given the GS ICFS is of lower scale to the under construction 7 storey residential building to Elizabeth

Street and Joynton Avenue and 15 storey mixed used development to the Zetland Avenue extension. Therefore, a low/moderate visual impact is expected in this location.

Viewpoint 4: Geddes Avenue from the southwest

Figure 44 Geddes Avenue from the southwest
Source: BVN Architects

As shown in **Figure 44**, the proposed development will be moderately/highly visible from this viewpoint. This visual demonstrates that the proposed development is largely in keeping with the prevailing built form context of the site, given that to the left of the visual is a 9 storey mixed use development, to the right is an 8 storey mixed use development, and in the background is a 15 storey mixed use development. It is demonstrated that some trees in the streetscape help to soften the appearance of the proposed GS ICFS, minimising visual impact. Overall, the visual impact of the proposed development from this viewpoint is deemed acceptable in the context of the surrounding high density locality.

Viewpoint 5: Portman Street from the south

Figure 45 Portman Street from the south
Source: BVN Architects

As shown in **Figure 45**, the proposed development will be moderately/highly visible from this viewpoint (where the 'While I Live I Will Grow' public artwork is located). In the background, a 15 storey mixed use development is visible, demonstrating how the 4 storey proposed development will be appropriate to the surrounding built form context. Additionally, to the right of the visual is the existing three storey Green Infrastructure Centre which is of similar height to the proposed development. Moreover, existing and proposed vegetation will help to

soften the appearance of the proposed GS ICFS, mitigating its visual impact. Overall, the visual impact of the proposed development from this viewpoint is deemed acceptable.

Viewpoint 6: Portman Street from the north

Figure 46 Portman Street from the north
Source: BVN (2021)

As shown in **Figure 46**, proposed development will be moderately visible from Viewpoint 6. This is considered appropriate for the site and its surrounding, considering there are larger scale developments nearby, including a 15 storey mixed used development to the Future Zetland Avenue (left of the visual) and 15 storey mixed use development at 25 Geddy Avenue (right of the visual).

In summary, the view analysis demonstrates how the proposed development will result in some visual impacts ranging from low to moderate however these impacts can be appropriately justified given the proposal is largely keeping with the prevailing built form context. Therefore, the proposed development is deemed acceptable from a visual standpoint.

6.7 Visual Privacy

The proposed new building will be situated at the corner of Portman Road and the future Zetland Avenue. The closest residential receivers are located approximately 24 metres to the south-west of the site opposite Portman Street and 35 metres to the north-west of the site opposite the Zetland Avenue extension. Each of these developments are 15 storey residential flat buildings.

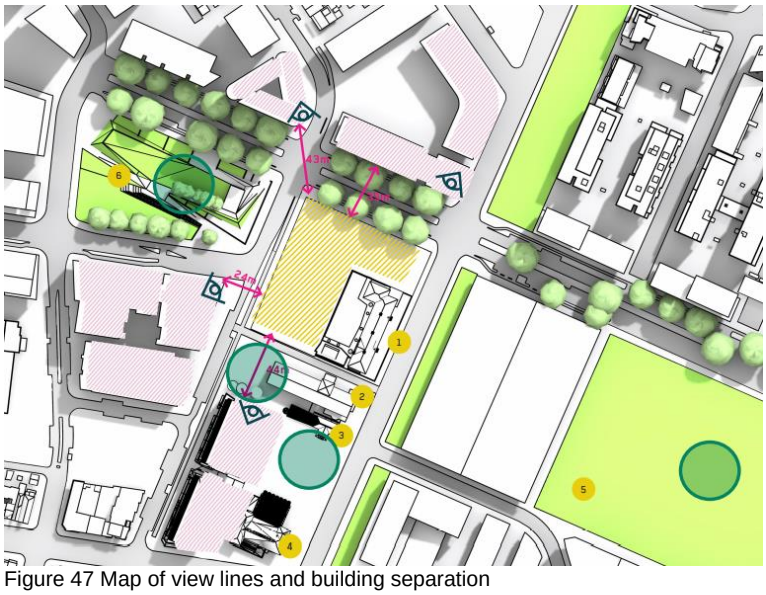


Figure 47 Map of view lines and building separation
Source: BVN Architects

The proposal is appropriate in terms of visual privacy as the separation distances mitigates any instances of overlooking of private open space on the adjoining properties. It is also noted that the distances are greater than the minimum separation distances required under the Apartment Design Guide (ADG), which whilst not relevant to the proposed development is a key reference document for surrounding residential development.

6.8 Environmental Amenity

Solar access and overshadowing

Overshadowing and solar access within the site are detailed in the shadow diagrams prepared by BVN Architects at **Appendix F**.

The following key observations have been made in relation to the proposed development:

- With regard to solar access within the site, shadow diagrams show that the northern 'bar' of the building (including rooftop terrace and solar panels) will be overshadowed by surrounding development for most of the day during the winter solstice (i.e. 21 June). The rooftop open space on the western 'bar' of the building will receive sunlight in the afternoon after 1pm.
- Shadowing of the proposed development appears to emanate from approved buildings on the north-eastern side of Zetland Avenue. Particularly, a 15-storey building directly opposite the site and an approved 23 storey building opposite the future drying green. A contextual massing model from the Draft Design Report is reproduced in **Figure 48.**

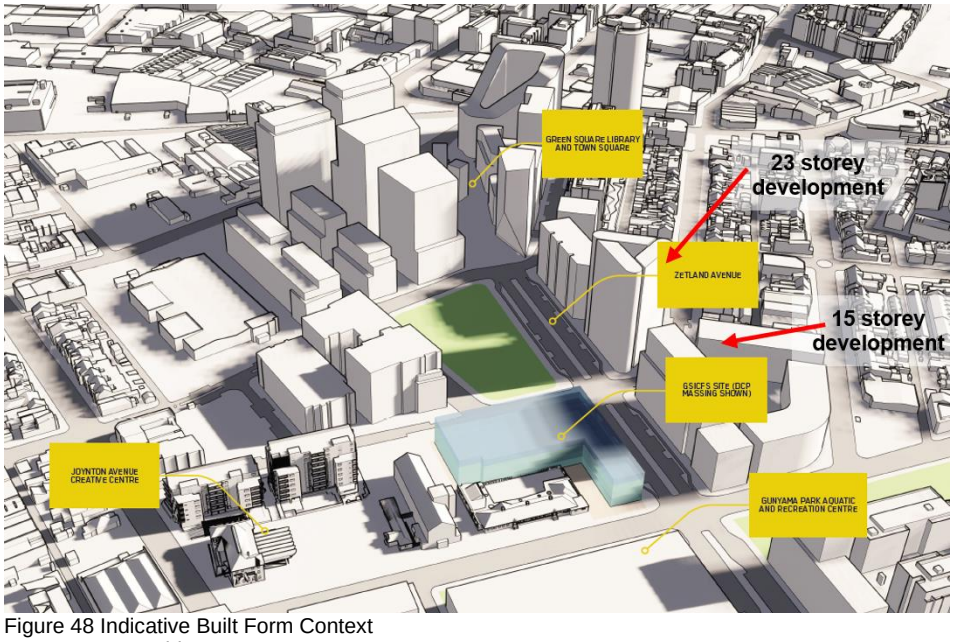


Figure 48 Indicative Built Form Context
Source: BVN Architects

- The form and massing of development shown in **Figure 48** are anticipated by the provisions of the LEP and the Green Square DCP 2012. In this case, overshadowing of the development due to surrounding building masses, is an unavoidable result of these planned densities within the Green Square Town Centre.
- The central courtyard of the school will also be overshadowed for most of the day during the winter solstice, mainly due to the layout and form of the proposed building that has been established in response to the design competition brief. The central courtyard will receive sunlight outside of the winter months, as indicated in the shadow diagrams for the equinox period.
- Regarding the solar impacts generated by the proposed development to surrounding areas, it appears the development is likely to overshadow the

Green Infrastructure Centre and the Waranara Early Education Centre, during the winter solstice.

The Green Infrastructure Centre will experience partial overshadowing of its northern facade mostly in the afternoon. The childcare centre will be overshadowed throughout the afternoon. However, when compared to the existing shadows from the Naomi Wing building, the solar access outcome to the childcare centre has improved as the bulk of the new building has been setback further from the childcare centre.

Review of the planning assessment report for the childcare centre DA (D/2014/1313) acknowledged that the demolition of the Naomi Wing Rehabilitation building would improve solar access to the centre. The childcare centre was approved on the basis that once this building is removed the centre will comfortably achieve 4 hours of solar access to 50% of outdoor play areas. The proposal will provide for this level of amenity to the childcare centre.

- During the design of the proposal, it has been identified that both the Green Infrastructure Centre as well as the Waranara Early Education Centre have rooftop solar panels which may be impacted by the proposal. See **Figure 49** below.

  The accompanying shadow diagrams shows that the solar panels on the Green Infrastructure Centre are not likely to be overshadowed during winter solstice. However, the proposal overshadows solar panels on the childcare centre rooftop which has approximately 15sqm of panels facing north and 30sqm of panels facing west (refer to D/2014/1313). Assessment of the shadow diagrams appear to show that west-facing panels will receive 3 hours of direct sunlight while north-facing panels will be fully overshadowed during mid-winter.

  The north-facing panels of the childcare centre will achieve uninterrupted solar access during the equinox (i.e. 22 March). In other words, aside from the winter months, these panels will still have access to direct sunlight during the day, for most of the year. This is considered to be acceptable overshadowing outcome.

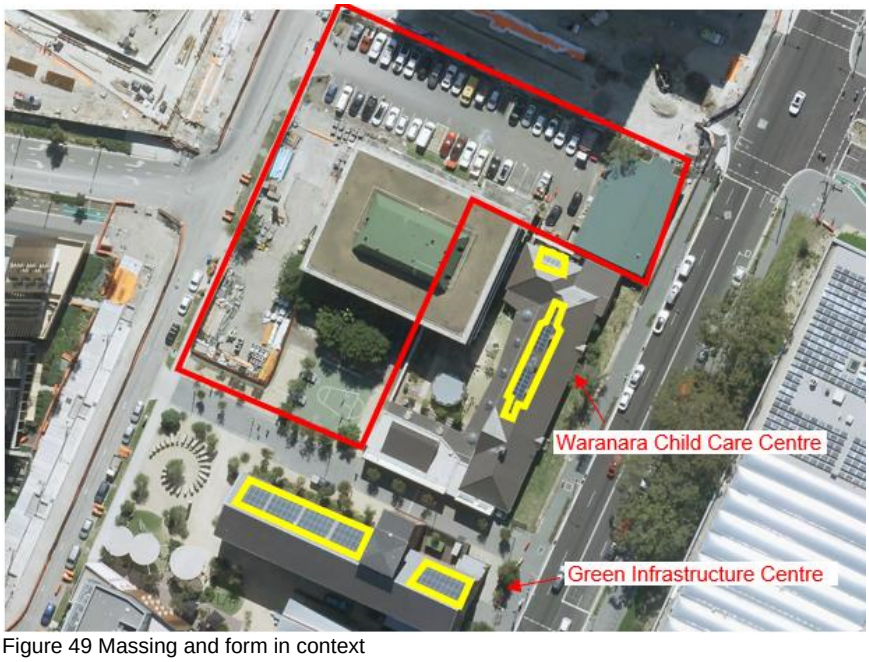


Figure 49 Massing and form in context
The site is outlined in red
Source: Metromap with Architectus overlay

Wind Impacts

The Pedestrian Wind Environment Statement prepared by Windtech (**Appendix AJ**) indicates three predominant wind directions for the region, namely the north-easterly, southerly, and westerly winds.

The statement carries out a study of the wind effects relating to the proposed development in the context of the local wind climate, building morphology and land topography. The study focuses on wind effects to outdoor trafficable areas such as ground level pedestrian areas, terraces and outside learning areas and rooftop terrace.

These trafficable areas have been assessed with consideration of the following pedestrian comfort criteria established by A.D Penwarden, 1973:

- Walking Criterion for general circulation and pedestrian thoroughfares e.g. footpaths, private balconies/terraces, through-site links etc.
- Standing Criterion for stationary activities generally less than an hour e.g. waiting areas, communal terraces, main entries, café seating etc.
- Sitting Criterion for stationary activities longer than an hour e.g. outdoor cinemas, outdoor fine dining etc.

All areas are also assessed with consideration to a pedestrian safety criterion.

The study indicates that the majority of these trafficable outdoor areas are suitable for their intended uses. However, there are some areas of the development as well as the public domain that may be exposed to stronger winds.

However, with the inclusion of recommendations in Section 5 of the Assessment, it is expected that wind conditions for the various trafficable outdoor areas within and around the development will be suitable for their intended uses, and that the wind speeds will satisfy the applicable criteria for pedestrian comfort and safety.

It is anticipated these considerations can be incorporated as part of subsequent detailed design processes. Wind tunnel testing is also recommended to be undertaken at a more detailed design attesting the outcomes of this study and required treatments. It is anticipated this can be addressed through suitable conditions of consent.

6.9 Traffic, Parking and Access

A Transport and Accessibility Impact Assessment (TAIA) has been prepared by Traffix and is appended at **Appendix P.** The assessment forecasts potential travel characteristics of the proposed development to measure its impacts on the future performance of the planned road network of the Green Square Town Centre Precinct (GSTCP).

The future performance of the planned road network has been addressed by AECOM Australia Pty Ltd in the *Green Square Town Centre – Essential Infrastructure and Public Domain 2031 Traffic Modelling Synopsis* which accompanied D/2012/1175 for essential infrastructure within the GSTCP. The modelling prepared by AECOM accounts for the urban renewal of GSTCP in its end-state.

The TAIA considers the implications of the proposed development on the results of the modelling, including the likely traffic generation of the site, any changes to traffic volumes derived for the assessment and its impacts on the future performance of the road network, particularly the signalised intersections.

Enrolment Catchment

The NSW Department of Education provided three (3) potential enrolment boundaries for the proposed school. In this regard, the outermost extent of all three (3) boundaries was used to create an enrolment boundary extent. The Transport and Accessibility Impact Assessment encompasses the enrolment boundary extent.

Future travel characteristics

Although a catchment analysis has revealed that current primary school students within the enrolment boundary extent live within a 15-minute walk (64.6%) or 10-minute cycle (100%) from the proposed school, a range of alternative transport scenarios were explored by the consultant.

To develop alternative transport scenarios, online travel mode questionnaire surveys were prepared and distributed to Bourke Street Public School, an inner-city primary school. This survey included a range of questions to gain an understanding of the average car occupancies and travel modes in the morning and afternoon school peak periods. The existing mode shares for the Bourke Street Public School were then used to inform a 'base case' scenario for the proposed school.

The 'base case' scenario indicates that approximately 33% of staff will travel to school by car with the remainder using active travel or public transport. The base case also assumes that approximately 53% of students walk to and from school, approximately 14% will cycle to and from school and approximately 31% will travel by car.

However, noting that Green Square will become one of the most densely populated areas in the country and the extent of the enrolment boundary that is within a good walking/cycling distance from the school, another scenario was developed for the proposed school.

This scenario is referred to as the 'moderate' case and lies between the 'base case' scenario just described and the 'reach' scenario of the catchment analysis. Compared to the 'base' scenario, this scenario sees a reduction in private vehicle trips and an uptake of sustainable transport options such as walking/cycling.

A summary of the three transport scenarios as it relates to both student and staff user groups is provided at **Figure 50** and **Figure 51** for ease of reference:

Travel Modes	Base Case – Ave. Data		Moderate Case	
	No. Staff	Mode Share	No. Staff	Mode Share
By Car (as driver) – Parked nearby	20	33%	0	0% (-33)
By Car (as passenger – dropped off/picked up)	5	8.5%	3	5% (-3.5)
By Car (as passenger – carpool with other staff who park at/near school)	0	0%	0	0%
Public Transport - Bus	0	0%	0	0%
Public Transport - Train	5	8.5%	5	8.5%
Walk	20	33%	32	52.5% (+19.5)
Cycle	10	17%	20	34% (+17)
TOTAL	**60**	**100%**	**60**	**100%**

Figure 50 Transport Scenarios – Staff
Source: Traffix

Travel Modes	Base Case – PM Data		Moderate		Reach Target	
	No. Students	Mode Share	No. Students	Mode Share	No. Students	Mode Share
By Car (as a passenger – car driven by parent/guardian and parked nearby)	187	31.1%	65	10.8%	0	0%
By Car (as a passenger – dropped off with driver not staying)						
Motorcycle/Motor-scooter	-	-	-	-	-	-
Bus	-	-	-	-	-	-
Public Transport - Train	5	0.8%	0	0%	0	0%
Walk	323	53.8%	375	62.6%	388	64.6%
Cycle or other rideable	86	14.3%	160	26.6%	212	35.4%
TOTAL	**600**	**100%**	**600**	**100**	**600**	**100%**

***Student numbers have been normalised to the enrolment capacity** of 600 students

Figure 51 Transport Scenarios – Students
Source: Traffix

The 'moderate case' scenario is the most likely scenario for the site and has informed the trip generation rates applied in the SIDRA analysis for the future Zetland Avenue/Joynton Avenue and Zetland Avenue/Portman Street intersections.

Traffic Generation Rates

The TAIA undertakes an assessment of impacts on anticipated future performance of the planned road network of the GSTCP, particularly the intersections of Zetland Avenue/Joynton Avenue and Zetland Avenue/Portman Street. In this case, the future intersection volumes outlined in the AECOM Report are relied on for the purpose of any traffic assessment, which are forecasted as follows:

- Zetland Avenue/Joynton Avenue has a volume of 2,538 vehicles/hr in the AM peak;
- Zetland Avenue/Joynton Avenue has a volume of 2,039 vehicles/hr in the PM peak;
- Zetland Avenue/Portman Street has a volume of 965 vehicles/hr in the AM peak; and
- Zetland Avenue/ Portman Street has a volume of 812 vehicles/hr in the PM peak.

These traffic volumes are based on a traffic generation assessment of the GSTCP. In other words, these traffic volumes are the aggregate amount of vehicle trips which are anticipated due the urban renewal of GSTCP, in its end-state. Regarding the subject site, the AECOM report assumes a future yield of 1,438sqm Commercial GFA and 25,705sqm Residential GFA, culminating in the following vehicle trips:

- 70 vehicle trips per hour in the morning peak period (12 in, 58 out); and
- 57 vehicle trips per hour in the evening peak period (46 in, 11 out).

As there are changes to the use of the subject site from commercial/residential to an integrated school and community facility, these vehicle trips were tested to determine whether they still reflect the likely trip generation associated with the proposal. In this case, the site will result in the following additional vehicle trips during the morning and evening peak network periods:

- Additional 14 vehicle trips per hour during the AM peak period (+30 in and -16 out); and

- Additional 61 vehicle trips per hour during the PM peak period (+72 in and -11 out).

This equates to an additional vehicle trip every four minutes in the AM peak and an additional vehicle trip per minute during the PM peak.

The morning peak period is based on the 'moderate' case scenario for private vehicle usage of the proposed student population (10.8%). In relation to staff movements, it is expected that most staff will travel via public transport of active modes of transport. In instances where staff travel by car, it is considered that these vehicle trips will be outside the peak travel periods.

Traffic generated by the facility during the afternoon peak period is to be generated by the games court users, communal hall users and multi-purpose room users, as it assumed that most of the staff and students will have vacated the site by 6.00pm. The trip generating rates are based on these spaces operating at full capacity and a private vehicle modal split of between 50% to 60%.

Traffic Impacts

The additional traffic volumes generated by the development have been added to the SIDRA models prepared by AECOM in their Report (base) to understand any difference in the peak period intersection performance because of the proposed development (base plus development). The results from this SIDRA analysis are at **Figure 52**.

Intersection	Control	Period	Scenario	Degree of Saturation (DoS)	Average Delay	Level of Service
Joynton Avenue and Future Zetland Avenue	Signal	AM	Base	0.666	29.3	C
			Base + Development	0.807	29.7	C
		PM	Base	0.592	26.4	B
			Base + Development	0.686	29.1	C
Portman Street and Future Zetland Avenue	Signal	AM	Base	0.419	28.8	C
			Base + Development	0.432	29.1	C
		PM	Base	0.368	32.5	C
			Base + Development	0.512	34.3	C

Figure 52 Base Case and Proposed Intersection Performance
Source: Traffix

As a result of the proposal, the SIDRA modelling demonstrates that the key intersections are likely to experience minor increases in average delay (under 3 seconds) during the AM and PM network peaks and that both intersections will continue to operate at a LoS 'B' or 'C' with spare capacity. Only the Joynton Avenue/Zetland Avenue intersection during the peak evening period will experience a reduced level of service from 'B' to 'C'.

It is important to note that the afternoon school pick-up period has not been taken into consideration of the modelling as it does not coincide with the network PM peak. Notwithstanding this, a queuing analysis has been undertaken during the afternoon peak period of the school to assess the adequacy of the six (6) on-street drop-off and pick-up spaces proposed on Zetland Avenue to cater for the development.

A queuing analysis for these spaces during the afternoon peak period has been undertaken based on the vehicle modal share of the 'base case' scenario. The analysis revealed that the six (6) car spaces would be sufficient to accommodate the demands of the school with the appropriate management strategies as detailed in the School Transport Plan (STP). A Draft STP is provided in Section 14 of this Report.

Importantly, the STP recommends that the school adopt staggered start and end times to allow for a greater spread of peak traffic generations. The details of the staggered start time and finish times are presented below:

- Years Kindergarten to 2: start time of 9:15am; and departure time of 3:15pm; and
- Years 3 to 6: start time of 8:45am; and departure time of 2:45pm.

Given the analysis, it is considered that the likely traffic impacts of the development are minor and no improvements to the existing or future planned road network is required because of the proposed development.

Car Parking, Bicycle and Motorcycle Parking

Reference is made to the South Sydney DCP No 11 Transport Guidelines for Development 1996 which provides parking requirements for the primary school development as well as the communal hall/multipurpose rooms and games court. **Figure 53** and **Figure 54** indicate the DCP parking rates and provision of spaces provided for this development:

Type	No.	Parking Rate	Spaces Permitted*	Spaces Provided
Child Education and Care – Primary Schools				
Staff	60 staff	½ staff numbers	30	0
Parent Drop-off and Pick-up		¼ staff numbers (on- street considered)	15	6 (on-street spaces)
		Total	**45**	**6**

*The permissible number of car parking spaces is to be rounded to the nearest whole number.

Figure 53 SSDCP11 Parking Rates and Provision
Source: Traffix

Type	Area	No. of Seats	Maximum Parking Rate	Maximum Spaces Permitted*	Spaces Provided
Places of public worship/Entertainment facilities					
Communal Hall/Multi-purpose Spaces	1,254.2m²	536	1 space for every 10 seats, or 1 space for every 30m² of GFA	54	0

*The maximum number of car parking spaces is to be rounded to the nearest whole number.

Figure 54 SSLEP114 Parking Rates and Provision
Source: Traffix

Use	Players	Spectators	Total	Private Vehicle Arrivals[1]	Car Occupancy [2]	Change over Factor[3]	85%ile Design
Indoor Court	20	20	40	24	11	14	12

1 60% private vehicle modal split
2 2.2 car occupancy rate
3 30% change over factor

Figure 55 Multi-Purpose Games Court Parking Provision
Source: Traffix

No on-site parking is provided. However, it should be noted that 6 on-street parking spaces are to be provided on future Zetland Avenue.

Despite the shortfall, the proposed parking arrangements are considered acceptable in the context of the site, being in an urban renewal area that is to be well serviced by various sustainable transport options. The absence of any parking would encourage the uptake of these alternative modes.

In relation to bicycle parking, the DCP indicate the following rates for the proposed school:

Type	Staff/Student No.	Bicycle Parking Rate
Educational Facility		
School	60 Staff	1 space per 10 staff
	600 Students	1 space per 10 students over year 4

*If the minimum number of bicycle parking spaces is to be rounded to the nearest whole number.

Figure 56 SSDCP11 Parking Rates
Source: Traffix

In this case, bicycle parking is to be provided in excess of the DCP requirements to facilitate the anticipated uptake in cycling to/from the proposed development. Having regard to the modal split for cycling assumed under 'moderate case' scenario, a total of 160 students and 20 staff are anticipated to travel to/from the school.

In response, the proposed development provides 170 bicycle parking spaces, which is sufficient to cater for the anticipated demand in cycling infrastructure. These will also serve the community facilities after school hours. Scooter helmet storage will be provided as well as two (2) unisex shower cubicles and two (2) change rooms.

The above bicycle parking provision will also serve the community uses of the development, noting that these uses do not coincide with school hours. Therefore, this provision will readily accommodate any demand for bicycle parking from community facilities, noting the above modal splits that informed the traffic generation assessment.

No motorcycle parking is to be provided as part of the school development.

Infrastructure Gaps

The existing infrastructure system present within this boundary was examined including public transport, speed zonings, cycling infrastructure and a gap analysis of pedestrian infrastructure. The findings are shown in **Figure 57**.

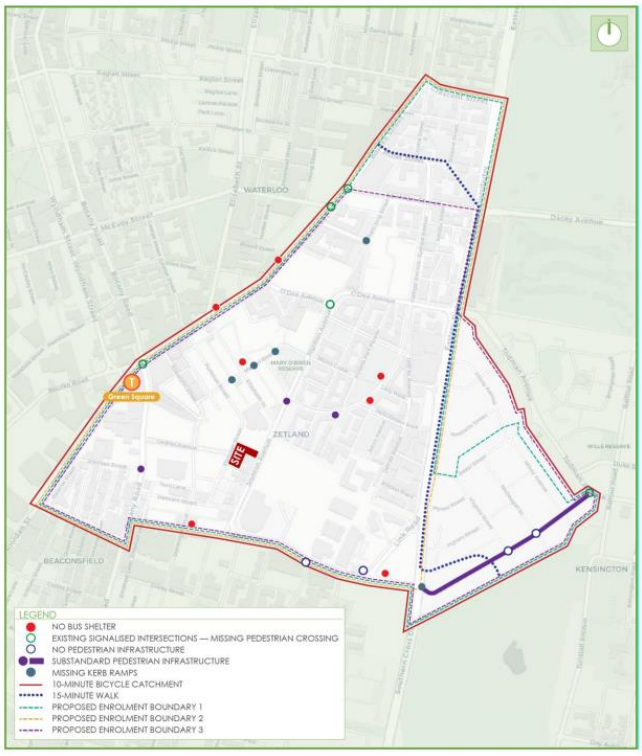


Figure 57 Pedestrian Infrastructure Gap Analysis
Source: Traffix

In this case, there are several gaps in existing infrastructure that should be considered by the City of Sydney and Randwick City Council to improve pedestrian and cycling connections to and from the proposed school. The works are described in **Section 9.4** of the TAIA.

The gaps analysis also identified that seven existing bus stops do not have shelters. Whilst the stops will unlikely be used by students, they may be utilised by staff and visitors to the community uses. Therefore, it is recommended that options be explored by City of Sydney to improve bus stop amenity.

It should be noted that Lenthall Street is located within the Randwick City Council LGA. Accordingly, these priority measures along Lenthall Street will require concurrence of the Randwick City Council.

School Transport Plan

A Draft School Transport Plan is provided in Section 14 of the Traffic and Accessibility Impact Assessment. The aim of the Draft School Transport Plan is to increase sustainable uptake, decrease the mental and social impacts of community and encourage the uptake of healthier active transport options.

It sets out the mode share targets of the proposed school, provides a plan for the day-to-day school operations, including management of pick-up/drop-off area including staggered start and end times, servicing and waste collection, transport encouragement programs, communication plans, data collection and monitoring and governance.

In terms of governance, a travel coordinator will be appointed to monitor the operation of the site, collect data regarding the operation of the facility and communicate with relevant stakeholders (including internal and external transport working groups), to evaluate performance and discern any issues that need to be addressed.

Having regard to the community uses, a separate Workplace Travel Plan/Green Travel Plan is proposed for staff and visitors of the Community Facility and this can be conditioned prior to Crown Certificate (CC). This plan will encourage the use of public transport and alternative modes of transportation.

Access for Loading

Two loading bays are proposed along the southern frontage of the school adjoining the existing through-site link. Swept paths are provided which demonstrate that an 8.8m long Medium Rigid Vehicle can access enter the site in forward direction via Portman Street, park the vehicle into the loading bays and then exit the site via Joynton Avenue, also in a forward direction.

Construction Traffic and Parking

A Preliminary Construction Pedestrian and Traffic Management Plan has been prepared by Traffix and is appended at **Appendix AB.** This plan provides the framework for a comprehensive CPTMP to be developed once the construction methodology for the proposed development has been determined following appointment of the builder.

In the interim, the Preliminary CPTMP outlines general principles to manage traffic impacts during the construction phase, including:

- scheduling truck movements outside peak network periods and when there is capacity to accommodate the truck on the site to avoid on-street queuing;
- vehicular access to be achieved via the existing driveway crossing on Portman Street;
- Preliminary truck routes have been developed for potential works zones along Joynton Avenue and Portman Street frontages;
- Potential work zones will be detailed in the comprehensive CPTMP;

- Liaise with neighbouring developments under construction to stagger large deliveries and concrete pours, if required;
- The comprehensive CPTMP will include Traffic Control Plans (TCP) for all stages of construction, as necessary;
- Contractors will be encouraged to use public transport. Carpooling will be encouraged if driving to the site; and
- Temporary bicycle parking and end of trip facilities are to be provided within the site compound.

It should be noted that swept paths at the intersections along the preliminary truck routes have been provided using a 19.0m long truck and dog vehicle. These swept paths confirm that satisfactory access to the site along these routes can be achieved.

6.10 Ecologically Sustainable Development

In accordance with the SEARs requirements, this EIS is accompanied by an ESD report prepared by Norman Disney and Young and is appended at **Appendix Z.**

In accordance with GSTC 8.1 of the Green Square Town Centre DCP, all development is encouraged to use an environmental rating tool, such as Green Star, to demonstrate the degree to which it is ecologically sustainable development.

Green Star is a voluntary sustainability rating tool for buildings, tenancies and communities in Australia. It was launched in 2003 by the Green Building Council of Australia (GBCA).

The proposal aligns with targeted initiatives under the Green Star scorecard and proposes a 5-star Green Star Design and As Built equivalency design. The 5 Star Green Star rating is deemed to represent Australian Excellence in development.

In conjunction with the Green Star Design & As-Built rating, the project will be developed in line with the sustainability frameworks set out by Schools Infrastructure NSW's and City of Sydney, nominally: The Educational Facilities Standards and Guidelines; and the Sustainable Design Technical Guidelines.

Through early design input the proposal has incorporated the following sustainability initiatives:

- Passive design elements to reduce the energy demand of the building in operation and improve indoor environment quality and thermal comfort for students and staff;
- High performance façade and glazing, efficient lighting and lighting zoning, solar PV, selection of appliances with high energy efficiency ratings;
- Preliminary consideration of the building design's resilience to climate change impacts;
- Good daylight, visual comfort and acoustic design in both buildings to support their functions as training and teaching spaces and private staff areas;
- Best practice waste management principles in operation and for the demolition works to avoid waste to landfill;
- Enhanced greening to improve air quality and reduce the urban heat island effect, water efficient fixtures and fittings (high WELS ratings), and rainwater collected from the roof and stored for use on-site; and
- Verification of the above initiatives will be undertaken through Green Star Design & As Built v1.3 formal certification.

A climate change risk assessment was undertaken as part of the ESD report. Outcomes of the assessment have shown that there are no major risks remaining in the design at this early stage of development. Key design elements have been highlighted for consideration in design development, and appropriate maintenance after project completion should ensure that the project remains resilient to climate change.

The four principles of ecological sustainable development have been incorporated into the proposed development. The proposal's response to these principles is analysed below.

Precautionary Principle

A climate change risk assessment has been completed for the site, identifying potential risks because of a changing climate and nominating design measures to mitigate these risks. This assessment was completed with stakeholders and design team members.

A large solar array (125kW) has been included on the roof of the project, as well as generating enough electricity to power the site for a significant proportion of the year, this array will reduce the peak electrical demand of the site on extremely hot days and will reduce stress on the electrical grid.

The site is connected to the City of Sydney district recycled water plant, to use recycled stormwater for toilet flushing and irrigation when the on-site rainwater tank does not have capacity. This is in response to the likelihood of increased periods of drought in the future, reducing the sites potable water consumption.

Intergenerational equity

A climate change risk assessment was completed for the site identifying potential risks because of a changing climate and nominating design measures to mitigate these risks. This is an effort to ensure that future generations receive the same amenity and resources as current generations.

A large solar PV array and connection to 100% green power for the site means that the site is not powered by burning fossil fuels, providing future generations the same access to available resources as current generations.

Sourcing of responsible materials with low embodied carbon to minimise to provide future generations the same access to the resources as current generations.

Conservation of biological diversity and ecological integrity

Landscape design for the site using drought tolerant principles and use of Australian natives demonstrates that the ecological value of the site will improve from the current site to the proposed site upon practical completion.

Improved valuation, pricing and incentive mechanisms

Whilst the project is not directly in a position to influence how these evaluation, pricing and incentive mechanisms are implemented, initiatives have been incorporated throughout the design to reduce pollution (through large PV array and connection to 100% Green Power), reduce embodied carbon (through selection of low embodied carbon materials and materials with recognised environmental certifications) and pursued environmental goals through smart design decisions, that ensure the project meets the budget requirements as well as sustainability goals.

6.11 Biodiversity

A total of 28 trees have been approved for removal from the site to facilitate the GS ICFS (subject of a separate planning approval). The separate planning application (D/2020/1683) has been determined by Council for this tree removal.

Notwithstanding this, a Biodiversity Development Assessment Report (BDAR) Waiver Request was prepared for the development which considered this tree removal. Refer to the Waiver Request at **Appendix H**. The BDAR Waiver Request was prepared by Cumberland Ecology and provides evidence that the proposed development is not likely to have any significant impact on biodiversity values within the site.

It is noted that approval for waiver of the need for a BDAR report as part of the SSD application has been provided by the Directors within the Planning and Assessment Division of DPIE on 1 September 2021. Additionally, the delegated *Environmental Agency Head* in the Environment, Energy and Science Group of DPIE also granted a waiver on 5 August 2021. Refer to **Appendix AF**.

6.12 Tree Management

The Draft Greener Places Design Guide sets an overall target for the CBD to achieve 15% tree canopy cover. A total of 9.8% tree canopy cover is proposed for the site (an increase of 4.8% from the existing canopy cover present at the site).

In this case, the shortfall of 5.2% (equivalent to approximately 140sqm) is acceptable noting a large extent of the rooftop area is being used for solar panels, thereby reducing opportunities for additional planting on the rooftop.

It is considered that the use of solar panels will offset the minor shortfall in urban tree canopy cover, providing alternative shading to the outdoor area, that will also generate energy for the operation of the proposed GS ICFS.

6.13 Non-Aboriginal Heritage

Built Heritage

The HIS prepared by City Plan Services is appended at **Appendix M**. It has been prepared to consider the impact of the built heritage of the site and within the locality.

The HIS been prepared in accordance with the Heritage NSW publications, Statements of Heritage Impact, 2002 and Assessing Heritage Significance, 2001. It is also guided by the philosophy and processes included in The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance, 2013 (Burra Charter).

As noted in **Section 2** of this EIS, the subject site is located at the northern end of the local heritage item listed in Schedule 2 of the South Sydney Local Environmental Plan (LEP) 1998 (amendment 17) as "Former Royal South Sydney Hospital Group" (item no. 554A). The subject site is also located in proximity to several heritage items and Heritage Conservation Areas (HCAs).

The proposed works while substantial do not involve impact on existing significant heritage fabric, therefore consideration of the proposed works relates largely to visual and functional impacts of the development on buildings in the Royal South Sydney Hospital Site (RSSH) as well as Heritage Items and HCAs in proximity.

The HIS concludes that the proposed works, having regard to the relevant matters of consideration, results in minimal to no adverse impact on the heritage significance of the subject site and heritage items in proximity. In particular, the HIS concluded the following key findings:

- The proposed location of the building avoids any physical impact on significant elements of the site and retains the visual integrity of the site's historic buildings both within the site and from the public domain. Further, the setback of the complex from the nearby Outpatients Building (i.e., Waranara Child Care Centre) and the creation of accessible open space at the centre of the site will also work to retain the ability to appreciate the entirety of the site from the internal public domain.
- The design of the new infill building has also considered the existing aesthetic context and significant character of the site to help its visual integration within the changing urban context of the site. Through a mixture of traditional materials and contemporary design a composition has been produced that is aesthetically sympathetic to the surrounding built environment, while being easily identifiable as new element of the site's layered history. This has helped to ensure that while the complex is a considerable addition to the site, its introduction does not obscure or distract from the cultural significance of the subject site.
- With the exception of item no. I12280 at 146-158 Joynton Avenue and item no, I2219 at 71-75 Portman street, which have very limited visual relationship with the proposed works, none of the items have been identified as having unobstructed views to the area of proposed works. Therefore, it is considered that any change to the subject site as part of the proposed works will have little to no impact on the heritage significance or setting of any of the heritage items in proximity or their subsequent appreciation.
- The volume of visitors to the site will also be increased as the new use of this complex comprises important public functions through its use as a school and community facility, allowing more people to appreciate and experience the significant historic spaces of the former South Sydney Hospital site, this is positive from a heritage perspective

The HIS has also considered the policies of Conservation Management Plan (CMP) adopted for the RSSH site. The proposed development is consistent with the policies in the CMP. Having regard to Policy 88 of the CMP, the HIS recommends the following condition of consent to ensure that this policy is met by the development:

- A built heritage specialist is to develop a heritage interpretation plan for the proposed development in accordance with the Heritage NSW, Department of Premier and Cabinet publications, Interpreting Heritage Places and Items (2005) and Heritage Interpretation Policy (2005).

In making this recommendation, the HIS notes that the preparation of an interpretation plan may further enrich the landscaping of the site. This may result in changes to any landscape strategy for the site. In this case, any changes to landscaping warranted due to the outcome of a heritage interpretation plan, is likely to have minimal implication on the overall landscape design and could be dealt with as a condition of consent.

Historical Archaeology

The development site was subject of a separate planning approval for remediation and site preparation works to facilitate the GS ICFS (subject of D/2020/923), including bulk earthworks. Although the site has approval to be disturbed, a Historical Archaeology Assessment (HAA) has been prepared by AMAC Archaeological in response to the issued SEARs. A copy of the HAA can be found at **Appendix K.**

Based on historic phases and later instances of redevelopment, the site is identified as having:

- Moderate to high archaeological potential for evidence of formalised manmade masonry or timber dam embankments, or physical evidence of grading/ human modification of natural embankments;
- High potential for evidence of late 19th to early 20th century decommissioning fills associated with backfilling the dam and raising ground levels;
- Moderate to high potential for in situ deposits (rubbish, industrial waste) at the base of the dam; and
- Moderate to high archaeological potential for masonry structural remains relating to c.1913 Female Ward and c.1930s laundry.

Refer to **Figure 58** for archaeological potential zoning map overlayed on an aerial photograph of the site.

Figure 58 Archaeological potential zonal map
Source: Archaeological Management & Consulting Group (2021)

An assessment of the significance of the site's archaeological potential was undertaken which determined that the anticipated archaeological remains at the study site are unlikely to contribute unique and rare knowledge, or extensive research values that no other resource can provide for this region.

Therefore, while the potential for archaeological remains associated with Waterloo Dam or Royal South Sydney Hospital to physically survive are moderate to high, the research potential of these remains is not considered to meet the threshold of local or State heritage significance and therefore are not considered to be 'relics' as defined by the Heritage Act 1977.

On this basis, as the site is unlikely to hold any known archaeological relics of state or local significance, the proposal is likely to have nil heritage (historical archaeology) impact. A historical field program is not required in advance of any development work at the site. However, should unexpected archaeological relics of local of state significance be uncovered during site works, workers are expected to follow an unexpected finds procedure.

6.14 Aboriginal Heritage

The development site was subject of a separate planning approval for remediation and site preparation works to facilitate the GS ICFS (subject of D/2020/923), including bulk earthworks. Although the site has approval to be disturbed, an ACHAR (**Appendix L**) has been prepared by Archaeological Management and Consulting Group (AMAC) in conjunction with Streat Archaeological Services (SAS) Pty Ltd in response to the issued SEARs.

There is a nil-low probability that Aboriginal objects and/or deposits of value may be present at the site. However, due to logistical constraints, test excavation under the Code of Practice for the Investigation of Aboriginal Objects in NSW (DECCW 2010) could not be undertaken to identify the potential for objects of archaeological and cultural heritage value to be present in any intact soil below fill material.

The plans indicate that the development will require several subsurface works all of which will impact on potential intact soils that are likely to be present below fill material. Therefore, a program of test excavation has been recommended by the consultant to assess the nature and extent of any potential objects or features that may be present in intact soils below fill material at the site. The results of the archaeological test excavations would enable the consultant to effectively assess any potential harm to objects and features that may be found.

If deposits or objects are found, an Aboriginal Cultural Heritage Management Plan (ACHMP), is recommended to be produced to allow the development to proceed. An ACHMP will need to be subject to review by the Department of Planning, Industry and Environment (DPIE), with input from Heritage NSW. If no objects or deposits are found, either an ACHMP will need to be in place for the post remediation and development works or no further works under the ACHAR, with the development activity. Continued consultation with the Registered Aboriginal Parties is also recommended throughout this process.

Notwithstanding Section 4.41(1)(d) of the EP&A Act which provides that an Aboriginal heritage impact permit under section 90 of the National Parks and Wildlife Act 1974 is not required for a SSDA consent, an application for an Aboriginal Heritage Impact Permit (AHIP) was sought for the “proposed Green Square Integrated Community Facility and School”.

Heritage NSW issued an AHIP for the proposed works on 3 September 2021 (AHIP number 4809). Considering this, and in the context of the information provided, there is nothing to impede the project from proceeding, subject to the recommendations made in the ACHAR and the conditions of the AHIP.

It is considered that these matters can be dealt with via appropriately worded conditions of development consent.

6.15 Noise and Vibration

A Noise and Vibration Impact Assessment has been prepared and is attached at **Appendix AI.** This Assessment considers noise impacts to surrounds during both construction and operation of the proposed development.

Method

A preliminary Noise Impact Assessment (NIA) has been undertaken to consider noise impacts to surrounds. The NIA identifies the following sites in **Figure 59** to be the surrounding receivers most likely impacted by the proposed development.

Figure 59 Location of sensitive receivers and noise monitors
Source: Acoustic Logic

Background noise measurements were undertaken for a seven-day period via the use of noise monitors. Unattended monitors were placed along Portman Street, Joynton Avenue and to the north of future Zetland Avenue.

Attended monitors were undertaken between 5pm and 6pm on Tuesday 25th of August 2020 at the unattended monitoring location on Portman Street and Geddes Avenue (adjacent to the existing residential receivers).

These measurements were undertaken to confirm the measured background noise level was consistent with that of the unattended monitors, and that the measurement of the unattended monitors was not impacted by surrounding construction noise.

After establishing background noise levels, noise emission criteria for both construction and operation were determined and likely noise emissions from the proposed development modelled to discern its impact, having regard to the applicable criteria.

Operational Noise and Vibration

The following noise standards and guidelines have been applied to determine relevant noise criteria applicable to the operation of the proposed development and measure its impact to the sensitive receivers:

Table 14 Operational noise and vibration assessment

Application	Compliance
State Environmental Planning Policy (Educational Establishments and Child Care Facilities)	
Clause 6 of Schedule 2 has been applied in consideration of the following matters: – Assess potential noise from internal teaching spaces; – Assess potential noise emissions from multipurpose rooms and communal hall during school operating hours.	Yes – subject to: – When used for functions or amplified music, external doors will be closed. – For less noise intensive activities such as general teaching activities (without amplified sound equipment), windows or doors can be opened. – Minimum sound rating for doors and fixed façade elements for multipurpose rooms and communal hall.
NSW EPA Noise Policy for Industry	

Application	Compliance
The NPI has been applied in consideration of the following matters: – Detail plant noise emission criteria to be met by mechanical plant. – Establishes noise intrusive and sleep arousal criteria applicable to the development. – Assess cumulative noise levels from the simultaneous use of the multipurpose rooms/halls and games court against evening (6pm to 10pm) and late evening period criteria (10pm to 7am).	Yes – subject to: – Detailed acoustic review at CC stage when mechanical plant equipment and location has been established. – Soffit of the games court to be lined with acoustically absorptive material. – Community use of the games court to conclude at 10:45pm to allow users to depart prior to 11pm. – No whistles are to be used for games court after 10pm. – It is recommended that a management plan for the out of hours care be prepared to ensure noise criteria is met
Development near rail corridors and busy roads – Interim guideline	
Have been applied in consideration of the following matters: – Provides maximum noise levels for classrooms. – Traffic noise levels have measured on Joynton Avenue and Portman Street to determine minimum sound insulation for façade elements to achieve classroom noise levels.	Yes – subject to: – Glazing thickness provided in the NIA. Indicative sound insulation to be reviewed during design finalisation.

In addition, the NIA considers waste removal activities as described in the OWMP prepared by Elephant's foot and concludes that there will be no additional noise impacts generated by the proposed development.

In relation to the school bell/public address system, these selections have been not made; therefore, it is not possible to undertake a detailed assessment of the public address and school bell noise emissions.

The Public Address and School Bell Systems shall be designed, installed and operated such that the systems do not interfere unreasonably with the comfort and repose of occupants of nearby residences.

Recommendations have been provided to minimise the impact of external noise emissions associated with the public address and school bell systems of the proposed development to the nearest sensitive receivers. Refer to **Section 8**.

Overall, it is concluded that the proposed development can be designed to have limited acoustic impacts and can meet the applicable environmental noise emission criteria at the nearest sensitive receivers.

Construction Noise and Vibration

In addition to operational noise, the following noise standards and guidelines have been applied to determine relevant noise criteria for construction activities associated with the development and measure its impact to the sensitive receivers:

Table 15 Construction Operational noise and vibration assessment

Application	Compliance
NSW EPA Interim Construction Noise Guideline	
Have been applied in consideration of the following matters: – Establish noise management levels for construction activities. – Preliminary assessment potential noise emissions likely to be generated during construction of the development.	Yes – subject to: – Construction noise impacts to be mitigated as much as reasonably possible in accordance with Control of Construction Noise and Vibration – Procedural Steps. – A detailed noise management plan to be developed for the proposed development. – Quiet work methods/technologies (for instance, it is recommended that concrete pump be located as far as practicable from adjacent residential buildings, to maximise distance between the source and receiver). – Complaints handling procedures.
German Standard DIN 4150 – 3 and **Assessing Vibration: A technical guideline**	
Have been applied consideration of the following matters: – Establish safe limits for building vibration (i.e. peak particle velocity for type of structure)	Yes – subject to: – Vibration impacts to be mitigated at demolition phase. – Initial level of vibration of 3mm/s. – Structural and heritage consultant to determine potential impacts of vibration on heritage buildings. – Vibration monitoring may be needed to ensure levels are not exceeded at the structure.
Have been applied in consideration of the following matters: – Identify recommended vibration levels.	

Regarding cumulative noise impacts, there is potential for other projects in the vicinity of the site to commence construction at the simultaneously with the proposed development. Where this is the case, consideration should be given to the potential for cumulative noise/vibration impacts and implementation of reasonable mitigation measures to minimise acoustic impacts.

Accordingly, it is considered that the proposed development can operate satisfactorily from an acoustic perspective, subject to the recommendations of the NIA.

6.16 Flooding and Drainage

A Civil Design Report has been prepared for the proposed development by Meinhardt-Bonacci at **Appendix X**. This report addresses both drainage and flooding matters.

Flooding

The site is located within the Alexandra Canal catchment. There have been several previous flood studies of the catchment. Until recently, the 2014 Cardno report was Council's adopted flood study for the area for the purposes of setting design flood levels for flood-related development controls. However, this study did not include several recent flood mitigation works in the vicinity of the site.

Some of these changes have reduced the flood risk along Joynton Avenue and Portman Street. In response, an update was prepared by WMAwater, which is now the adopted catchment-wide flood study for flood planning purposes.

Flood information used in this submitted report is based on the results of the "Ultimate Development Scenario" from this Study. The Study indicates a maximum 1% AEP flood level of 18.55m AHD on Joynton Avenue. The City of Sydney Interim Floodplain Management Policy (IFMP) requires that all school and childcare facilities to be located above the 1% AEP plus 500mm freeboard.

In this regard, the finished floor levels (FFL) of the development have been set at minimum 1% AEP flood level (RL 18.55) plus 500mm freeboard, equating to an RL of 19.05. The Study has also considered the impact of climate change to the development, as it relates to predicted rainfall and sea level rise. The study shows an increase of 0.1m to 0.3m because of increased rainfall. The increase in rainfall is within the flood planning level of the development.

The impact of the development on existing flood behaviour has not been undertaken in the Civil Report. However, the site was effectively assumed to be filled completely above flood level in the catchment-wide model. In this regard, the proposed footprint will not affect flood behaviour compared to the assumed conditions in the modelling used by City of Sydney for floodplain management and planning decisions.

Drainage

Stormwater Management

The site is in the Green Square and West Kensington catchment which ultimately drains to Sheas Creek (located west of the site). The primary overland flow path that runs through the catchment is located within that area of the site nominated as the Future Zetland Avenue – which is currently under construction.

Stormwater runoff at the site (including roof drainage) will be conveyed to the OSD basin in the north-eastern corner of the site which has been designed to cater for storms up to and including the 20-year ARI (5%) AEP. Runoff collected will then be discharged at controlled flow rates to existing drainage infrastructure within Joynton Avenue.

Overland flow paths are also provided at the site for storm events up to 100-year ARI (1%) AEP to convey additional runoff to overland flow paths of Zetland Avenue and Joynton Avenue. Earthworks will be undertaken at ground level of the site to ensure the direction of flow as intended.

An underground rainwater tank is included in the design for capture and re-use of rainwater within the site for irrigation. The rainwater re-use strategy (e.g. potential for use in landscaping irrigation, toilet and urinal flushing) and sizing will be further developed during the detailed design phase.

Water Quality

A Stormwater Quality Assessment has been undertaken as part of the Civil Report. The Assessment has been undertaken to ensure that the stormwater management system is designed to improve the quality of water being discharged into Council's stormwater drainage infrastructure.

The Assessment has shown that the water being discharged from the site will meet the post-development pollutant load standards of City of Sydney Council. The Water Quality targets will be met due to the incorporation of water quality devices into the on-site drainage system, including enviropods and stormfilters.

6.17 Sediment, Erosion and Dust Control

A Civil Design Report has been prepared for the proposed development by Meinhardt-Bonacci at **Appendix X**. This report addresses matter concerning sediment, erosion, and dust control.

6.18 Geotechnical

A Geotechnical Investigation Report has been prepared for the proposed development by JK Geotechnics. A copy of the Geotechnical Report can be found at **Appendix R**.

The building is proposed to be constructed at grade and no basement levels are proposed except for drainage and rainwater harvesting infrastructure.

Intrusive sub-surface investigations were carried out including a total of three boreholes and testing to determine sub-surface conditions and make recommendations for construction methodology for the proposed building.

The Sydney 1:100,000 Geological Sheet 9130 indicates that the site is underlain by medium to fine grained marine sands.

The boreholes disclosed a profile of moderately deep fill overlying aeolian/alluvial sand deposits which in turn overlie residual clays transitioning to weathered sandstone bedrock at depths greater than 10m. Groundwater seepage was observed in all boreholes between 3.0m and 4.0m below existing surface levels.

The report then makes recommendations for construction methodologies for the proposed building based on testing, relating to footings, soil aggression, earthquake classification, subgrade preparation, engineered fill and fill compaction and on-grade floor slab. Refer to the report for details.

6.19 Contamination

The development site was the subject of a separate planning approval (i.e. D/2020/923) for remediation and site preparation. The application was accompanied by Phase 2 Site Investigation and a Remediation Action Plan (RAP) prepared by JBS&G. A copy of the RAP can be found appended at **Appendix T**.

The RAP indicates that the land contains elevated levels of several contaminants within fill materials. There is also a disused underground service tank on the north side of the development that is proposed to be removed. The RAP proposes the capping of any material impacted by leakages from the tanks and elevated hot spots of lead with implementation of an environmental management plan (EMP).

The RAP was supported by a letter of interim advice was prepared by NSW Environment Protection Authority Accredited Site Auditor, at **Appendix U**. The letter concludes that the competent implementation of the data gap investigation and the RAP should ensure that the site is suitable for its proposed use as a primary school. State Environmental Planning Policy 55 was satisfied on this basis.

D/2020/923 was approved on 23 December 2020. In issuing approval, conditions were imposing requiring the RAP to be amended in accordance City's standard procedures for managing remediation on land owned or to be dedicated to the City. The amended RAP is to be endorsed by the site auditor and submitted to Council for approval, prior commencement of works.

A condition has also been imposed requiring the issue of Section A Site Audit Statement to confirm that the site has been remediated as per the amended RAP, prior to occupation. For any residual contamination, an EMP is to be prepared for approval of the site auditor and Council prior to the issue of the final Site Audit Statement. A covenant is required on the title of the land to ensure that site is managed as per the EMP.

JBS&G has prepared a letter attesting the validity of the original RAP in addressing SEPP 55 for this SSD application (appended in **Appendix S**). The letter adds that remediation will be undertaken concurrently with the project as landscaping and building works is to form part of the capping layer. This approach is supported by the site auditor in a separate letter accompanying the SSD application (Appended in **Appendix U**).

This integrated approach represents a more orderly and economic manner of redeveloping site. Importantly, it also does not prevent the site from being made suitable for its intended use as an integrated school and community facility, particularly given that the consent for remediation and site preparation (i.e., D/2020/923) anticipates the development of the site for this purpose.

Site suitability can be secured via appropriately worded conditions of consent that ensure conditions imposed in D/2020/923 are still met.

6.20 Construction

Construction hours

The hours of demolition and construction (including the delivery of materials to and from site) will be in accordance with the *Interim Construction Noise Guideline*, DECC 2009:

- Monday to Friday - 7.00am and 6.00pm;
- Saturday - 8.00am to 1.00pm;
- No work on Sundays or public holidays;

A variation to these hours may be required for out of hours work or where special requirements exist e.g., for oversized deliveries or works which need to be carried out. It is noted that a separate application will be made by the Contractor to seek approval for any OOHW.

Construction traffic

The construction vehicle access to the site will be in accordance with the following:

- Portman Street – Primary construction vehicle access point;
- Joynton Avenue – Services access and additional entry; and
- Zetland Avenue – will be the Main Entry once the facility is operative.

All trucks shall enter and exit the site in a forward direction, and an RMS certified traffic controller will be located at the access gate to supervise vehicle movements to/from Portman Street. All trucks shall enter and exit the site in a forward direction, and an RMS certified traffic controller will be located at the access gate to supervise vehicle movements to/from Portman Street.

Construction parking

No construction parking is to be provided on site. The Contractor may apply for a construction zone.

Construction noise

Refer to **Section 6.14** above for an assessment of construction related noise impacts.

Construction waste

Refer to **Section 6.20** above for an assessment of construction related waste impacts.

6.21 Waste

A Construction Waste Management Plan (**CWMP**) and Operational Waste Management Plan (**OWMP**) has been prepared by Elephants Foot Recycling Solutions and is attached at **Appendix Q** and **AA,** respectively. Both plans outline provisions that will inform operational and construction waste management measures required on site once planning approval is sought.

Construction waste

The CWMP provides an informed framework to maximise resource recovery and minimise waste during the construction process, primarily through recycling of building materials. The CWMP estimates waste and recycling volumes during the construction stage and details of facilities authorised to accept different waste streams.

The Construction Contractor will be responsible for implementing the CWMP. An Environmental Management Representative (EMR) will also be appointed to help ensure compliance. Waste audits are to be carried out to ensure that the procedures are effective and carried out effectively by personnel. The CWMP also outlines management procedures for different waste stream such as Hazardous Waste Materials and Excavation Waste.

Operational waste

An OWMP has been prepared by Elephants Foot Recycling Solutions at **Appendix AA**. The OWMP provides an informed framework to maximise resource recovery and minimise waste during the operation of the integrated facility, primarily through recycling of waste.

To manage operational waste on site, the followings bin quantities and collection frequencies for board general waste and general recycling, and cardboard/paper recycling streams are as follows:

- General waste: 4 x 1100L Bins collected three times weekly
- General recyclables: 3 x 1100L Bins collected three times weekly
- Cardboard/Paper Recyclables (school only): 1 x 1100L Bins collected three times weekly

All operations within the building will share bins, Bin Room and collection services. The Bin Room for the building will be located on the ground level, near the loading area. The Bin Room will contain 1100L mobile garbage bins (MGBs) for the collection of the waste and recycling.

A private waste collection contractor will be engaged to service the waste and recycling bins per an agreed schedule.

6.22 Lighting

The Lighting Strategy, appended at **Appendix Y**, details measures taken to reduce the spill light into the surrounding sensitive receivers.

A calculation of the external lighting has been prepared and the initial calculations show compliance with AS4282:1997 Control of the obtrusive effects of outdoor lighting. The calculation that has been completed is with all luminaires on at 100%, or at the fixed dimming ratio, to show the worst case of the installation. This is not planned to be a regular occurrence.

6.23 Utilities

An Infrastructure Management Plan has been prepared by Stantec Australia and is attached at **Appendix V.** The Plan describes existing hydraulic, electrical and communication services for the site and outlines upgrade and augmentation strategies to serve the proposed development.

An Integrated Water Management Plan has also been prepared by Stantec Australia and is attached at **Appendix AD**. The Plan outlines the existing potable water services, and non-potable water services around this site that will cater this development.

6.24 Social Impacts

Social Impact Assessment

A Social Impact Assessment has been prepared for the proposed development by RPS Group. Refer to the Report at **Appendix O**. This report identifies and analyses the potential social impacts of the development and includes mitigation measures for any social impacts, and any proposed enhancement measures.

The SIA identifies several positive social impacts were identified during the assessment including:

- Equity of access to education and associated services for different social and cultural groups.
- Enhancement of public space.
- Changes to environmental values, visual landscape, aesthetic values, and amenity.
- Improvement of community health by public access (walking) to school facilities (e.g. sports facilities).

The positive social impacts are primarily because of the multipurpose rooms and facilities that will be utilised and shared between the primary school and the public. These areas provide a conduit between the school and community through access and design of the proposal.

The SIA also identifies negative social impacts during the construction phase of the project both directly and because of cumulative construction works. Negative impacts include:

- Privacy, peace, and quiet enjoyment for neighbours and the local area, particularly changes to people's daily lives and activities.
- How people get around if traffic/parking demands or noise levels increase.
- Restrictions on residents accessing local services during construction.
- Safety of children/pedestrians, especially with increased traffic.
- Impacts on neighbours, including their ability to sustain themselves.

Mitigation measures (standard mitigation measures and project-specific mitigation measures) are recommended in the SIA to reduce negative social impacts. These mitigation measures are also discussed in **Section 8** of this EIS.

Overall, the proposed development is likely to result in a positive social impact to the locality. Any negative social impacts are to be limited to the construction phase of the project. Subject to the implementation of standard and project-specific mitigation measures, such negative social impacts will be effectively curtailed.

A monitoring and management plan is also provided in the SIA, which can be used to review and if required, improve the efficacy of the adopted mitigation measures and the monitoring program itself, in consultation with community.

Health Impact Assessment

The report also features a health impact assessment of local and regional impacts associated with the development.

The proposed development is in a locality defined by easy pedestrian access to public transport – bus and trains – and cycle networks. In this regard, the proposal maximises the opportunity for users to choose active modes of travel which is a positive impact on individual health. Shared multi-function spaces for community use will enable a greater level of social and community interactions at the local and regional level.

Negative health impacts of the GS ICFS project would be largely confined to temporary and short-term impacts associated with dust and noise during construction and changed pedestrian access arrangements around the perimeter of the site. During construction a construction environmental management plan will be in place to help minimise dust, noise and traffic conflicts to individual health.

6.25 Economic Impacts

The economic impacts of the proposed development are positive as jobs will be created (+227 construction jobs and additional thirty-six (36) full time equivalent operational school staff jobs). The construction works with CIV of $56,521,350 (excluding GST) will stimulate the economy. Government infrastructure works are particularly important in this Covid-19 environment to generate jobs and stimulate the economy.

6.26 Cumulative Impacts

Traffic impacts

Traffic impacts resulting from the urban renewal of Green Square Town Centre have been addressed by AECOM Australia Pty Ltd in the *Green Square Town Centre – Essential Infrastructure and Public Domain 2031 Traffic Modelling Synopsis*. The traffic assessment included a traffic generation assessment of GSTCP based on assumed retail, commercial and residential land uses. The following yields were used:

- 67,204m^2 of Commercial GFA;
- 12,760m^2 of Retail GFA; and
- 330,784m^2 of Residential GFA or 4,218 dwellings.

The above yields were likely endorsed by the City of Sydney, and the traffic volumes derived for the assessment were indicative of the end-state of GSTCP. As such, the traffic modelling prepared by AECOM account for a level of development within the GSTCP including all surrounding lots of the proposed development.

The TAIA prepared by Traffix considers the implications of the proposed development on the results of the modelling, including the likely traffic generation of the site, any changes to traffic volumes derived for the assessment and its impacts on the future performance of the road network, particularly the signalised intersections.

Accordingly, no further cumulative assessment of surrounding developments is required.

Stormwater and flooding

As detailed within this EIS, the proposed stormwater resulting from the development can be appropriately managed and will not result in any cumulative impact on water quality and downstream properties.

Visual Impact

Due to existing and under-construction developments surrounding the site, the proposed development will generally have an acceptable visual impact from all vantage points. For further detail, refer to the view analysis at **Section 6.5** above.

Construction Impacts

Several developments are occurring and approved to occur within the vicinity of the site, including public works and private developer works. The surrounding road network is undergoing improvements and augmentation (i.e. Future Zetland Avenue and Portman Street upgrade). To the west of Portman Street, the future Drying Green Park is also planned for delivery.

In relation to private developer works, both a 15-storey building directly opposite the site and an approved 23 storey building opposite the future drying green is currently under construction. Accordingly, should construction of the proposed development coincide with the construction of these developments, there is potential for cumulative construction impacts, such as traffic and noise.

In this regard, it is considered that any potential impacts can be mitigated via the preparation and implementation of construction management plans that account for cumulative impacts of surrounding development. Preliminary Management Plans can be found at **Appendix AC**, **Appendix Q**, and **Appendix AB** of this EIS.

Overall, it is considered that the cumulative visual impacts of the proposed development in context of surrounding developments and the locality are low, and therefore do not constitute a reason to hinder planning approval on visual impact grounds.

6.27 Suitability of the site

There are no known site conditions which would prevent the development including geotechnical conditions, contamination, flooding, biodiversity, historical archaeological constraints, Aboriginal cultural heritage or other.

While existing trees will be impacted under a separate DA currently under Council assessment, and this is a consequence of being a constrained site, their removal will be compensated by proposed tree planting to increase the number of trees on site and tree canopy cover.

The site is well serviced by existing public and private transport connections. Ongoing improvements to the surrounding road network and associated infrastructure will enhance these existing transport connections. The GS ICFS has been designed to provide end-of-trip facilities on-site to facilitate a greater uptake of cycling and walking that is envisaged in Green Square.

The impacts on surroundings during construction and operation are not significant and can be adequately ameliorated.

The development site has been unused relative to the remainder of the RSSH site which has been repurposed from former hospital uses to a modern community precinct. Therefore, the redevelopment of the development site for the purpose of the GS ICFS is a welcome addition to the site that meets the community demand for public education and community uses, whilst providing a sensitive design response to the heritage significance of RSSH site.

The site is therefore suitable for the proposed development.

6.28 Public Interest

Generally, the proposal will deliver a significant public benefit because it is for the purpose of important public social infrastructure that will meet the local demand for educational facilities, and will meet the social needs of the local community. It will result in greater access to quality education.

The environmental, social, and economic impacts of the proposed development have been evaluated above. This assessment finds that the impacts of the proposed development will provide significant benefits to the public. Any adverse impacts have been mitigated with measures already incorporated into the design of the development or can be incorporated into the construction and operation of the development through the implementation of the proposed mitigation measures detailed in **Section 7** of this EIS.

The benefits of the proposed development include:

- It will provide permanent and state of the art teaching facilities for students and staff that meet current standards and best practice requirements.
- Provide community access to the site and its facilities, for example, the multi-purposes spaces 1A and 1B (at ground level) are solely for community use, and the Communal Hall, Multi-purposes space and ground level courtyard have been designed on the ground floor to support outside of school hours use.
- The new building will be designed to equivalent 5-star Green Star Design, providing a progressive sustainability outcome for the community.
- It will provide play space, tree numbers, tree canopy, and shade cover for students. The proposed landscaping will provide urban amenity for users of the space.
- Improved and coherent landscaping strategy for the site which will provide a more appropriate setting for its heritage buildings and provide amenity benefits for users and visitors.
- Generates construction and additional operational jobs, and together with the value of the project to the economy, will stimulate the economy.

On balance, accounting for site suitability, environmental impacts, risk assessment and key benefits detailed further above, the proposed development is in the public interest.

7. Environmental Risk Assessment

In accordance with the SEARs, this section addresses the following significant environmental risk issues:

- Adequate baseline data;
- Consideration of potential cumulative impacts due to other development in the vicinity; and
- Measures to avoid, minimise and if necessary, offset the predicted impacts, including detailed contingency plans for managing any significant risks to the environment.

The following table sets out the anticipated impacts, the level of respective impact in terms of severity (low, medium, high), identifies mitigation measures, and once these measures are applied, identifies residual risks (low, medium, high).

Table 16 Environmental Risk Assessment

Impact Theme	Impact Detail	Level of Impact	Mitigation Measures	Residual Risk
Traffic				
Construction	As mentioned in the Preliminary Construction Pedestrian & Traffic Management Plan (CPTMP) and the Preliminary Construction Management Plan, Traffix and JBS&G identified that the construction activity can be managed so as to have minimal impacts on daily traffic and pedestrian activity. The Social Impact Assessment, prepared by RPS Group also provides mitigation measures.	Medium	Construction Traffic and Pedestrian Management - A comprehensive CPTMP will be required to be prepared as a condition of consent. This is to address cumulative impacts of other on-site and surrounding development including truck movements. Also, the comprehensive CPTMP is to include Traffic Control Plans (TCP) for all stages of construction, as necessary. Pedestrian mobility – If necessary, alternative pedestrian accesses to be established to allow free flow of foot traffic and provide access to business and services. Worker travel – Contractors will be encouraged to utilise public transport, nothing the proximity of bus services and railway station. Also, temporary bicycle parking and end-of-trip facilities are expected to be provided on-site. Worker parking - Any on-site parking would be provided to workers who carpool to and from the site.	Low
Operation	It has been determined that the proposed development will likely increase the traffic generation by 14 trips in the morning peak and 61 trips in the afternoon peak hours.	Medium	School Transport Plan – A School Transport Plan (STP) has been drafted that provides a strategy to manage travel to/from the school, for all modes of transport. Importantly, the STP	Low

	This is subject to the travel assumptions of a 'moderate case' scenario which depends on a greater uptake of cycling and walking to/from the site. For instance, having regard to the modal split for cycling assumed under 'moderate case' scenario, a total of 160 students and 20 staff are anticipated to travel to/from the school. Furthermore, although the afternoon school pick-up period does not coincide with the network PM peak, a queuing analysis has been undertaken to assess the adequacy of the six (6) on-street spaces proposed for pick-up of student. The analysis revealed that the six (6) car spaces would be sufficient to accommodate the demands of the school with the appropriate management strategies.		provides strategies to encourage greater uptake of walking and cycling. The STP also outlines management measurements for drop-off/pick-up of students, including the adoption of staggered start and end times to allow for a greater spread of traffic. Cycling Parking - The proposed development provides 170 bicycle parking spaces, which is sufficient to cater for the demand in cycling infrastructure that is forecasted for the site, whether that be for school of community facilities. Green Travel Plan - a separate Workplace Travel Plan/Green Travel Plan is proposed for staff and visitors of the Community Facility and this can be conditioned prior to CC. This plan will encourage the use of public transport and alternative modes of transportation. Infrastructure upgrades – to ensure the uptake of cycling anticipated for students, several upgrades are identified on key pedestrian/cycling routes to/from the site. Wayfinding Strategy – In addition to the infrastructure upgrades listed above, it is recommended that City of Sydney explore installing school wayfinding signage.	
Noise & Vibration				
Construction	Based on the results of the preliminary assessment, noise levels are expected to generally be below the noise affected management level, except for when concrete pumps or similar equipment would operate close to residential boundaries. In terms of vibration, an initial level of 3mm/s is suggested. However, if required, the contractor must engage a structural and heritage consultant to determine the potential impact of vibration of nearby structures, and current structural adequacy. It is likely that vibration monitoring will be required to ensure that vibration levels are not exceeded at the structure.	Medium	A Detailed Noise and Vibration Management Plan (NMP) will be prepared before construction. Consideration should be given to potential for cumulative noise/vibration impacts and reasonable mitigation measures. Quiet work methods/technologies are to be explored. It is recommended that concrete pump be located as far as practicable from adjacent residential buildings, to maximise distance between the source and receiver. Complaints handling procedure is to be implemented during construction works. Site induction to familiarise workers with NMP and complaints handling procedure.	Low
Operation	The GS ICFS is expected to result in additional noise emissions in the area. However, noise emissions associated with operation of the school are expected to comply with the applicable noise criteria, subject to mitigation measures.	Medium	Teaching spaces - it is expected that these spaces will generate low to medium levels of noise. Due to their distance from any residential receiver, these spaces are expected to comply with the Education SEPP noise criteria. Multipurpose rooms and communal hall - these spaces are expected to comply with the noise criteria from the Education SEPP, subject to the following mitigation measures:	Low

			When used for the purposes of amplified music or functions, external doors will be closed. Doors are to have a minimum sound insulation rating of R_w30. Fixed façade elements are constructed of 12.38mm glazing with minimum performance of R_w37. For less noise intensive activities without amplified sound equipment, windows or doors can be opened, while meeting noise criteria. Mechanical plant equipment - it is recommended that a detailed acoustic review is undertaken at CC stage when mechanical plant equipment and location has been established, to ensure it meets the criteria in Section 6.2 of the NIA. Public Address and School Bell Systems – are to be designed, installed and operated in accordance with the recommendations in Section 6.4 of the NIA. Games Court - Noise from this space is expected to comply with the applicable criteria, subject to an absorptive treatment to the soffit above the games court and have a minimum performance of NRC>0.9. Noise Management Plan - The NIA recommends that a management plan be prepared for the OSHC detailing the measures required to meet the applicable noise emission criteria. Hours of operation – community use of the school building is acceptable up to 11pm. However, community events should be organized to conclude by 10:45pm, so that occupiers exit the grounds prior to 11pm.	
Wind Impacts				
Operation	The Pedestrian Wind Environment Statement prepared by Windtech indicates that the majority of trafficable outdoor areas are likely to be suitable for their intended uses. However, there are some areas that are likely to be exposed to stronger winds. It is expected that the wind effects identified in the report can be ameliorated with the consideration of the treatment strategies:	Medium	With the inclusion of report recommendations, it is expected that wind conditions for the various trafficable outdoor areas within and around the development will be suitable for their intended uses, and that the wind speeds will satisfy the applicable criteria for pedestrian comfort and safety. These recommendations can be incorporated at a more detailed design. Wind tunnel testing is also recommended to be undertaken at a more detailed design attesting the outcomes of this study and required treatments. Appropriately worded conditions are recommended in this instance.	Low
Built Heritage				
Construction and Operation	There are no built heritage impacts arising from the proposed works.	N/A	None required.	N/A

Historical Archaeology				
Construction and Operation	As the site is unlikely to hold any known archaeological relics of state or local significance, the proposal is likely to have nil heritage impact. A historical field program is not required in advance of any development work at the site.	N/A	None required. However, should unexpected archaeological relics of local or state significance be uncovered during site works, workers are expected to follow an unexpected finds procedure.	N/A
Aboriginal Heritage				
Construction and Operation	There is a nil-low probability that Aboriginal objects and/or deposits of value may be present at the site. However, due to logistical constraints, test excavation under the Code of Practice for the Investigation of Aboriginal Objects in NSW (DECCW 2010) could not be undertaken to identify the potential for objects of archaeological and cultural heritage value to be present in any intact soil below fill material. The plans indicate that the development will require several subsurface works including piers as foundations, an on-site detention tank, a lift pit as well as new electrical and hydraulic services, all of which will impact on potential intact soils that are likely to be present below fill material. Therefore, if any subsurface Aboriginal objects and/or deposits are present, they are likely to be impacted by the proposed development.	Medium	A program of test excavation has been recommended by the consultant to assess the nature and extent of any potential objects or features that may be present in intact soils below fill material at the site. The results of the archaeological test excavations would enable the consultant to effectively assess any potential harm to objects and features that may be found. If deposits or objects are found, an ACHMP, is recommended to be produced to allow the development to proceed. An ACHMP will need to be subject to review by the DPIE, with input from Heritage NSW. If no objects or deposits are found, either an ACHMP will need to be in place for the post remediation and development works or no further works under the ACHAR, with the development activity. Continued consultation with the Registered Aboriginal Parties is also recommended throughout this process.	Low

8. Recommendations and Mitigation Measures

The collective measures required to mitigate the impacts associated with the proposed development are detailed in **Table 17** below.

These measures have been derived from the previous assessment in **Section 6** and those detailed in appended consultant's reports.

Table 17 Mitigation Measures

Item	Mitigation Measures
Heritage	A built heritage specialist is to develop a heritage interpretation plan for the proposed development in accordance with the Heritage NSW, Department of Premier and Cabinet publications, Interpreting Heritage Places and Items (2005) and Heritage Interpretation Policy (2005).
Aboriginal Heritage	A program of test excavation under an has been recommended by the consultant to assess the nature and extent of any potential objects or features that may be present in intact soils below fill material at the site. The results of the archaeological test excavations would enable the consultant to effectively assess any potential harm to objects and features that may be found. If deposits or objects are found, an Aboriginal Cultural Heritage Management Plan (ACHMP), is recommended to be produced to allow the development to proceed. An ACHMP will need to be subject to review by the Department of Planning, Industry and Environment (DPIE), with input from Heritage NSW. If no objects or deposits are found, either an ACHMP will need to be in place for the post remediation and development works or no further works under the ACHAR, with the development activity. Continued consultation with the Registered Aboriginal Parties is also recommended throughout this process.
Historical Archaeology	As the site is unlikely to hold any known archaeological relics of state or local significance, the proposal is likely to have nil heritage impact. However, should unexpected archaeological relics of local of state significance be uncovered during site works, workers are expected to follow an unexpected finds procedure.
Operational Traffic	Traffic and accessibility management measures will be addressed in accordance with the Transport and Accessibility Impact Assessment prepared by Traffix at **Appendix P**.
Construction Traffic	Construction traffic measures will be addressed in accordance with the Preliminary Construction Pedestrian and Traffic Management Plan prepared by Traffix at **Appendix AB**.

	A detailed Construction Traffic and Pedestrian Management Plan will be required to be prepared as a condition of consent. This is to address cumulative impacts of other on-site and nearby developments and account for their truck movements.
Geotechnical	The proposed development is in accordance with the recommendations outlined in the Geotechnical Investigation Report prepared by JK Geotechnics at **Appendix R**.
Contamination	The development site was also subject of a separate planning approval (D/2020/923) for remediation and site preparation works. This DA was approved on 16 December 2020 by Council. Appropriately worded conditions are recommended in this instance to ensure that the remediation work approved under this application is undertaken in accordance with all conditions of consent prior to the occupation of the GS ICFS.
Ecologically Sustainable Development	The proposal aligns with targeted initiatives under the Green Star scorecard and proposes a 5-star Green Star Design and As Built equivalency design. The 5 Star Green Star rating is deemed to represent Australian Excellence in development. Through early design input the proposed design has incorporated various sustainability initiatives.
Accessibility	The works have been designed in accordance with the relevant statutes and Australian Standards for disability access. The proposal will be delivered in accordance with the Accessibility Report, prepared by Philip Chun at **Appendix W**.
Waste	Construction and operational waste will be managed in accordance with the measures identified in the Construction Waste Management Plan and the Operational Waste Management Plan prepared by Elephants Foot at **Appendix Q** and **Appendix AA**, respectively.
Infrastructure Management	The proposed upgrade works have been designed in accordance with the measures outlined in the Infrastructure Management Plan (**Appendix V**) and Civil Plans (**Appendix X**) prepared by Stantec and Bonacci Group, respectively.
Hydraulic Services	The proposed upgrade works have been designed in accordance with the Integrated Water Management Plan prepared by Stantec (**Appendix AD**).
Noise and Vibration	A detailed noise management plan should be developed by the main contractor that describes in detail the construction phases, programme, processes and equipment used, noise impact assessment and proposed mitigation and management. The Proposal will align with noise and vibration mitigation measures and recommendations outlined in the Noise and Vibration Impact Assessment report, prepared by Acoustic Logic at **Appendix AI**.
Construction Management	Construction will be managed in accordance with the measures identified in the Preliminary Construction Management Plan prepared by JBS&G and appended at **Appendix AC**.

	A Detailed Construction Environmental Management Plan (CEMP) is to be prepared prior to construction commencing on site.
External Lighting	To reduce lighting spill, the spill reduction measures are to be carried out in accordance with the Lighting Strategy prepared by Stantec at **Appendix Y**. Measures relate to luminaires, luminaires positioning, and light control.

9. Conclusion

This Environmental Impact Statement has been prepared for the proposed Green Square ICSF in accordance with the SEARs issued by DPIE on 15 November 2019, Schedule 2 of the EP&A Regulation, and Section 4.15(1) of the EP&A Act. It includes assessment of the proposal against the relevant strategic and statutory planning framework, undertakes a merit assessment of the environmental impacts including assessment of site suitability, a risk assessment, and an evaluation of the public interest.

Having regard to the above, the carrying out of the project is justified for the following reasons:

- It will provide permanent and state of the art teaching facilities for students and staff that meet current standards and best practice requirements.
- Provide community access to the site and its facilities, including, however not limited to, the multi-purposes spaces 1A and 1B (located at ground level), which are solely for community use. The proposed Communal Hall, Multi-purposes space and games court have also been designed to support outside of school hours use.
- The new building has been designed and certified to equivalent 5-star Green Star Design, providing a progressive sustainability outcome for the community.
- It will provide extensive play space, tree numbers, tree canopy, and shade cover for students. The proposed landscaping will provide urban amenity for users of the space.
- Improved and coherent landscaping strategy for the site which will provide a more appropriate setting for its heritage buildings and provide amenity benefits for users and visitors.
- The proposed development will generate construction and additional operational jobs, and together with the value of the project to the economy, will stimulate the economy.

On balance, accounting for site suitability, environmental impacts including cumulative impacts, the principles of ESD, the risk assessment and key benefits, the proposed development is in the public interest.

Given the above it is considered that the SSD Application has merit and can be supported by the City of Sydney Council, as Delegated Authority for the Department of Planning, Industry and Environment and the Minister for Planning and Public Spaces.