



Upgrades to Chatswood Public School and Chatswood High School

State Significant Development Assessment SSD-9483

November 2020



Published by the NSW Department of Planning, Industry and Environment

dpie.nsw.gov.au

Title: Upgrades to Chatswood Public School and Chatswood High School

Cover image: Artist's Impression of Chatswood Public School new central play area (Source: Applicant's Response to Submissions, October 2020)

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Glossary

Abbreviation	Definition
ACHAR	Aboriginal Cultural Heritage Assessment Report
AIA	Arboricultural Impact Assessment
BC Act	<i>Biodiversity Conservation Act 2016</i>
BDAR	Biodiversity Development Assessment Report
CHS	Chatswood High School
CIV	Capital Investment Value
CPS	Chatswood Public School
Council	Willoughby City Council
COLA	Covered Outdoor Learning Area
DCP	Development Control Plan
Department	Department of Planning, Industry and Environment
Education SEPP	State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017
EESG	Environment, Energy and Science Group of the Department of Planning, Industry and Environment
EIS	Environmental Impact Statement
EPA	Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
EPI	Environmental Planning Instrument
ESD	Ecologically Sustainable Development
Heritage NSW	Heritage NSW, Department of Premier and Cabinet
HIS	Heritage Impact Statement
HOB	Height of Building
ICNG	Interim Construction Noise Guidelines
LEP	Local Environmental Plan
LoS	Level of Service
Minister	Minister for Planning and Public Spaces
NIA	Noise Impact Assessment
OOSH	Out of School Hours

PCT	Plant Community Type
PCTMP	Preliminary Construction Traffic Management Plan
Planning Secretary	Secretary of the Department of Planning, Industry and Environment
RAP	Remediation Action Plan
RL	Reduced level
RtS	Response to Submissions
SEARs	Planning Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy
SEPP 55	State Environmental Planning Policy No 55 – Remediation of Land
SRD SEPP	State Environmental Planning Policy (State and Regional Development) 2011
SSD	State Significant Development
STP	School Transport Plan
TEC	Threatened Ecological Community
TfNSW	Transport for NSW incorporating Roads and Maritime Services
TIA	Traffic Impact Assessment
WDCP	Willoughby Development Control Plan 2006
WLEP	Willoughby Local Environmental Plan 2012

Executive Summary

This report provides an assessment of a State significant development (SSD) application for upgrades to Chatswood Public School and Chatswood High School located at 5 and 24 Centennial Avenue, Chatswood, respectively. The application has been lodged by the NSW Department of Education (the Applicant) and the site is located within the City of Willoughby local government area.

Assessment summary and conclusion

The Department of Planning, Industry and Environment (the Department) has considered the merits of the proposal in accordance with relevant matters under section 4.15(1), the objects of the *Environmental Planning and Assessment Act 1979*, the principles of Ecologically Sustainable Development, and issues raised in submissions as well as the Applicant's response to these.

The Department concludes that the height, bulk and scale of the proposal is acceptable in its context given the site constraints and public benefits of the development. The built form has been designed to minimise impacts on heritage, the streetscape and residential amenity as much as possible within the site constraints and context. Functional access, car parking and drop-off / pick-up arrangements are proposed, and implementation of sustainable transport measures would reduce car-based travel that would limit the impacts of the development on the local road network. Mitigation measures and recommended conditions are proposed to manage construction impacts.

The schools have experienced substantial enrolment growth exceeding predicted current and future capacity. There is significant pressure on available space and facilities including indoor learning spaces and outdoor play spaces. The proposal represents critical social infrastructure which would contribute to meeting the increased demand for school enrolments. The Department acknowledges the substantial public benefits associated with the upgrades to the schools. The Department concludes the proposal is in the public interest and recommends the application be approved subject to conditions.

The proposal

The application seeks approval for upgrades to Chatswood Public School and Chatswood High School, consisting of seven new buildings and refurbishment of existing facilities to provide upgraded facilities needed for the current school population as well enabling an increase in student capacity at both schools.

The proposal has a Capital Investment Value (CIV) of \$152,615,795 million and would generate approximately 20 operational jobs and 266 construction jobs.

The site

The existing Chatswood Public and Chatswood High schools are located on two separate sites diagonally opposite one another on Centennial Avenue. Chatswood Public school is located on the corner of the Pacific Highway and Centennial Avenue. Chatswood High School is located 190 metres west of the intersection of Pacific Highway and Centennial Avenue. The sites are located on the edge of the Chatswood Central Business District and located approximately 300m-600m of the Chatswood transport interchange. With the exception of the Chatswood Public School frontage to the Pacific Highway, the sites are predominantly surrounded by low to medium scale residential development.

Statutory context

The proposal is SSD under section 4.36 *Environmental Planning and Assessment Act 1979* (EP&A Act) as the development has a CIV in excess of \$20 million and is for the purpose of alterations or additions to an existing school under clause 15 of Schedule 1 of the State Environmental Planning Policy (State and Regional Development) 2011.

Engagement

The application was publicly exhibited between 3 April 2020 and 30 April 2020. The Department received a total of 28 submissions, including six from public authorities and 22 from the public including 14 objections.

The key issues raised in the submissions include built form, height, bulk and scale, impacts on residential amenity including noise, visual privacy and views, heritage, traffic, car parking, tree removal and biodiversity.

On 2 October 2020, the Applicant submitted a Response to Submissions (RtS) which included minor design amendments. The RtS was referred to public authorities and displayed on the Department's website. An additional five submissions from public authorities were received in response to the Applicant's RtS.

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1 Introduction

This report provides an assessment of a state significant development (SSD) application for upgrades to the existing Chatswood Public School (CPS) and Chatswood High School (CHS) located at 5 and 24 Centennial Avenue, Chatswood respectively. Both schools have experienced significant enrolment growth exceeding predicted and future capacity, with resulting pressure on available space and facilities. The proposal would provide additional teaching spaces and facilities to meet the current demand and enable increased student capacity for both schools.

The application has been lodged by NSW Department of Education (the Applicant). The site is located within the City of Willoughby local government area.

1.1 Site description

CPS and CHS are located on two separate sites at 5 and 24 Centennial Avenue, Chatswood. The sites are located approximately 12 kilometres (km) north of the Sydney Central Business District (CBD) and less than 1km west of the Chatswood CBD and the Chatswood transport interchange, as shown in **Figure 1**.

CPS is located on the northern side of Centennial Avenue and has primary street frontages to both Pacific Highway and Centennial Avenue. CHS is located on the southern side of Centennial Avenue, diagonally opposite the CPS site (**Figure 2**).

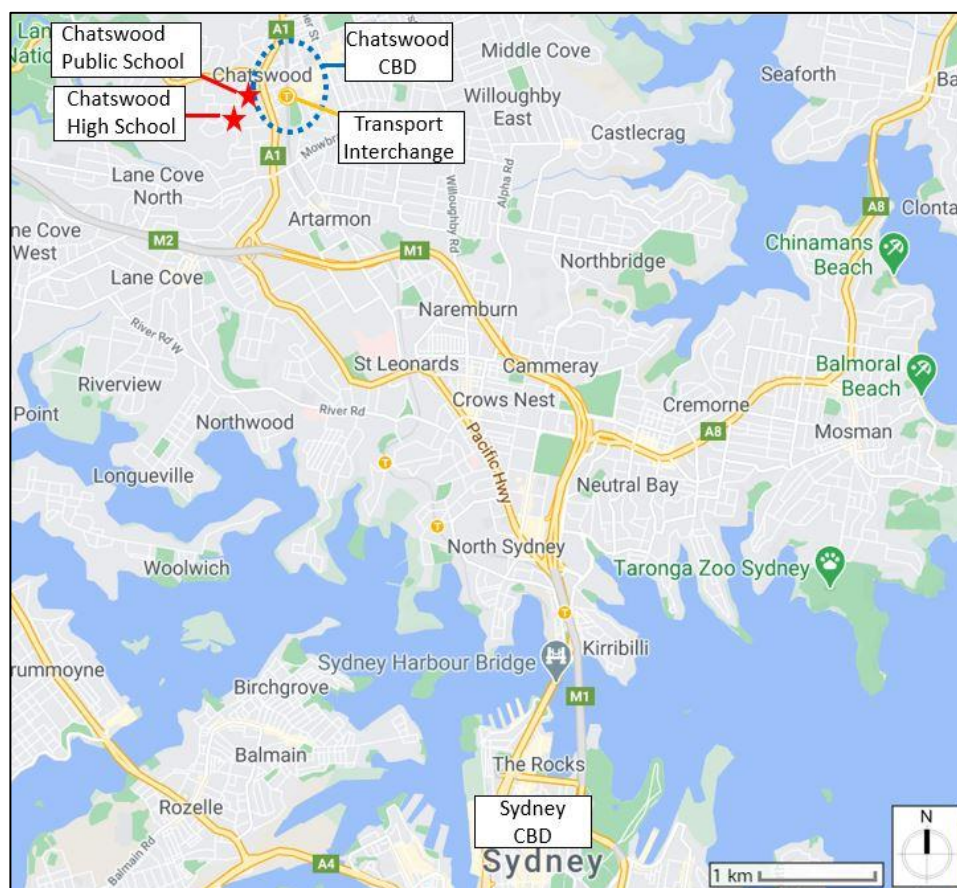


Figure 1 | Context map (Base source: Google Maps 2020)



Figure 2 | Local context map (Base source: Nearmap October 2020)

1.1.1 Chatswood Public School

The CPS site is commonly known as 5 Centennial Avenue, Chatswood and is legally described as Lots 1 and 2 in DP 812207, Lot 2 in DP 812207 and Lot C in DP 346499. The site is irregular in shape and has an area of approximately 1.57 hectares. The site has three street frontages:

- Pacific Highway to the east with a frontage of approximately 120 metres (m).
- Centennial Avenue to the south with a frontage of approximately 168m.
- Jenkins Street to the west with a frontage of approximately 38m.
- James Street which partially adjoins the site's northern boundary.

The site falls steeply to the west from reduced level (RL)106.82 at the Pacific Highway frontage to RL96.52 at the Jenkins Street frontage, a fall of approximately 10.3m. Along the site's western frontage there is a gradual fall of 1.86m from north to south. At the site's southern frontage there is a fall from east to west of 7.44m. The site's western frontage has a gradual fall from south to north of 1.29m. However, from this point of the site onwards to the north, Jenkins Street and the immediately adjoining land falls very steeply to the north.

The site is elevated above the adjoining footpaths along the Pacific Highway, Centennial Avenue and Jenkins Street. A brick retaining wall with palisade style fence surrounds the perimeter of the site and is of varying height due to the site's topography.

An aerial view of the site is provided at **Figure 3**.



Figure 3 | Aerial view of CPS site (Base source: Nearmap October 2020)

The existing school contains a range of buildings that have been constructed and expanded at various stages since 1895, including classrooms, staff facilities, amenities, a multi-purpose hall and outdoor play facilities. The entire site is a local listed heritage item (I106) on the Willoughby Local Environmental Plan 2012 (WLEP). However, only some of the buildings on the site are of heritage significance, as detailed below. The existing buildings and structures on-site (**Figure 4**) are:

- Building A is a two storey Federation Arts and Crafts style building constructed in 1895, and is of local heritage significance.
- Building B is a part two storey, part four storey brick building constructed between 1925-1927, and is of local heritage significance.
- Building D is a two storey demountable building.
- Building H is a single storey brick building and adjoins the south-western portion of Building A.
- Building I is a two storey brick building containing six teaching spaces which was funded under the Building the Education Revolution program in 2009.
- 'The Lowers' are three terraced areas containing sports courts at different levels with perimeter brick retaining walls and is of local heritage significance.



Figure 5 | Aerial view of CHS site (Base source: Nearmap October 2020)

The existing school contains a range of educational, recreation and ancillary buildings which have been constructed and expanded at various stages since 1959. The main existing buildings and structures currently on the site (**Figure 6**) are as follows:

- Buildings A - E are two and three storey classroom buildings forming part of the original campus layout, with access from a common forecourt assembly area.
- Building F is a part two, part three storey building comprising administration, staff and classroom facilities forming part of the original campus layout.
- Building H is a multi-purpose hall of brick construction with a height equivalent to a two storey building.
- Building I is a single storey classroom building located centrally within the original campus layout, with access from the common forecourt assembly area.
- Building J is a performing arts hall with frontage to Centennial Avenue.
- Building K is a two storey classroom building with stairwell and ramp access to surrounding areas, overlooking the sports fields to the east.
- Building M is a three storey classroom building situated behind Building F, which is connected to Centennial Avenue via an elevated walkway.
- Building N is a single storey demountable addition to Building J used as classrooms for music and performing arts.
- Building R is a proposed to be constructed under a Complying Development Certificate (see **Section 2.4**). Building R would be central to the staged delivery of the project by providing additional learning spaces during construction works proposed under this SSD application.
- Sports Facilities include recently upgraded sports courts, comprising two full sized basketball courts, one half sized basketball court and one full sized artificial turf football pitch. These facilities are subject to a joint-use agreement with Willoughby City Council (Council).

- Intensive English Centre buildings comprise a collection of approximately 14 demountable structures on the western side of Buildings A - D.
- 'Bush Campus' buildings comprise a collection of approximately 15 demountable structures on the eastern side of the sports field. The Bush Campus was established to address enrolment demand of CPS and currently accommodates Years 3 and 4 of CPS.

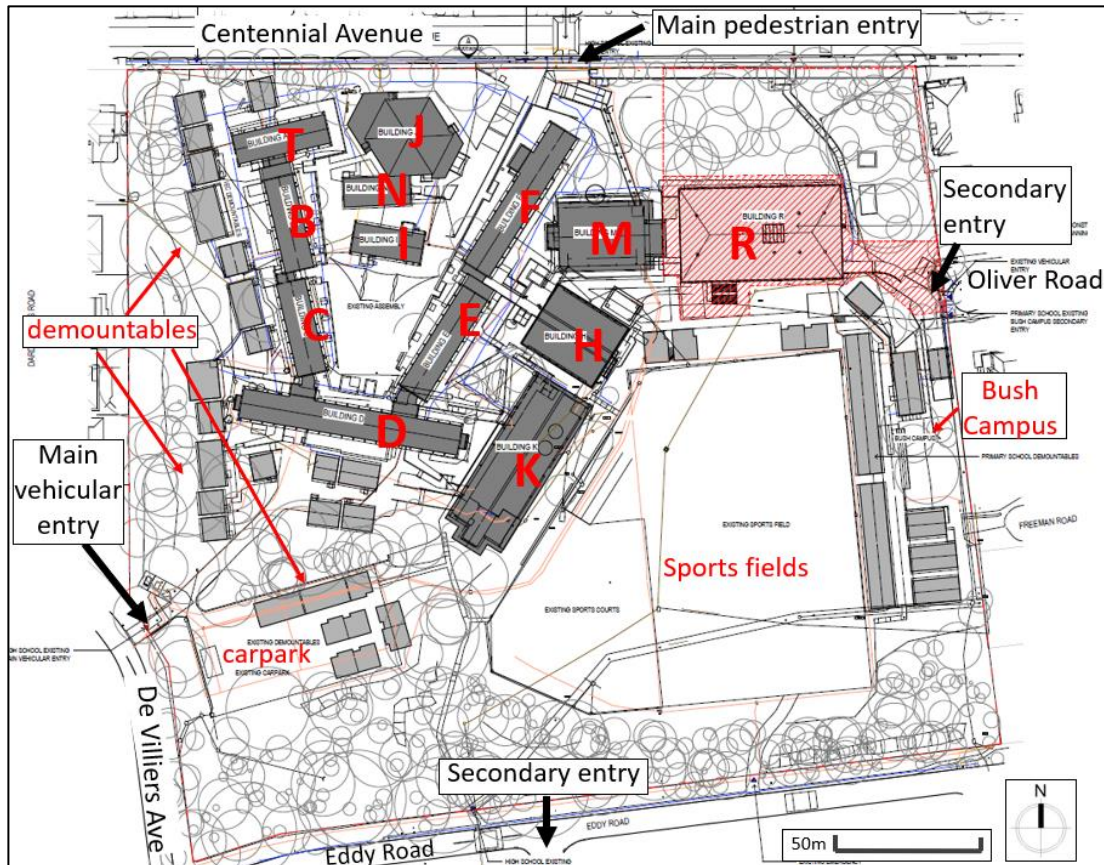


Figure 6 | Existing CHS site plan (Base source: Applicant's EIS)

The permanent and demountable buildings are supported by a network of covered walkways, COLAs and landscaped areas across all levels of the site. The site does not contain any heritage items.

On-site car parking includes a main parking area for 102 staff vehicles accessed from De Villiers Avenue and a secondary parking area for 18 staff vehicles including two spaces for drop-off/pick-up servicing the Bush Campus accessed from Oliver Road.

The main pedestrian entrance is on Centennial Avenue, directly opposite a raised pedestrian crossing. Secondary pedestrian entrances are located on Eddy Road directly opposite a raised pedestrian crossing and at Oliver Road where a pedestrian gate is separated from the existing vehicular access gate.

The site is substantially vegetated with remnant vegetation still prevalent across the site. The eastern portion of the site is identified by Council as being subject to minor flooding impacts. However, the proposed works are not located on the flood affected portion of the site.

1.2 Surrounding context

1.2.1 Surrounding built form

Immediately adjoining the Pacific Highway to the east is the Chatswood CBD which contains a variety of medium to high density development including commercial and residential towers up to a maximum of approximately 170m in height (**Figure 7**).

The western side of the Pacific Highway currently comprises a range of commercial buildings, including a number of car dealerships, with buildings being generally two to three storeys in height. Redevelopment of the western side of the Pacific Highway is underway with higher density development recently constructed further south of the CPS site.

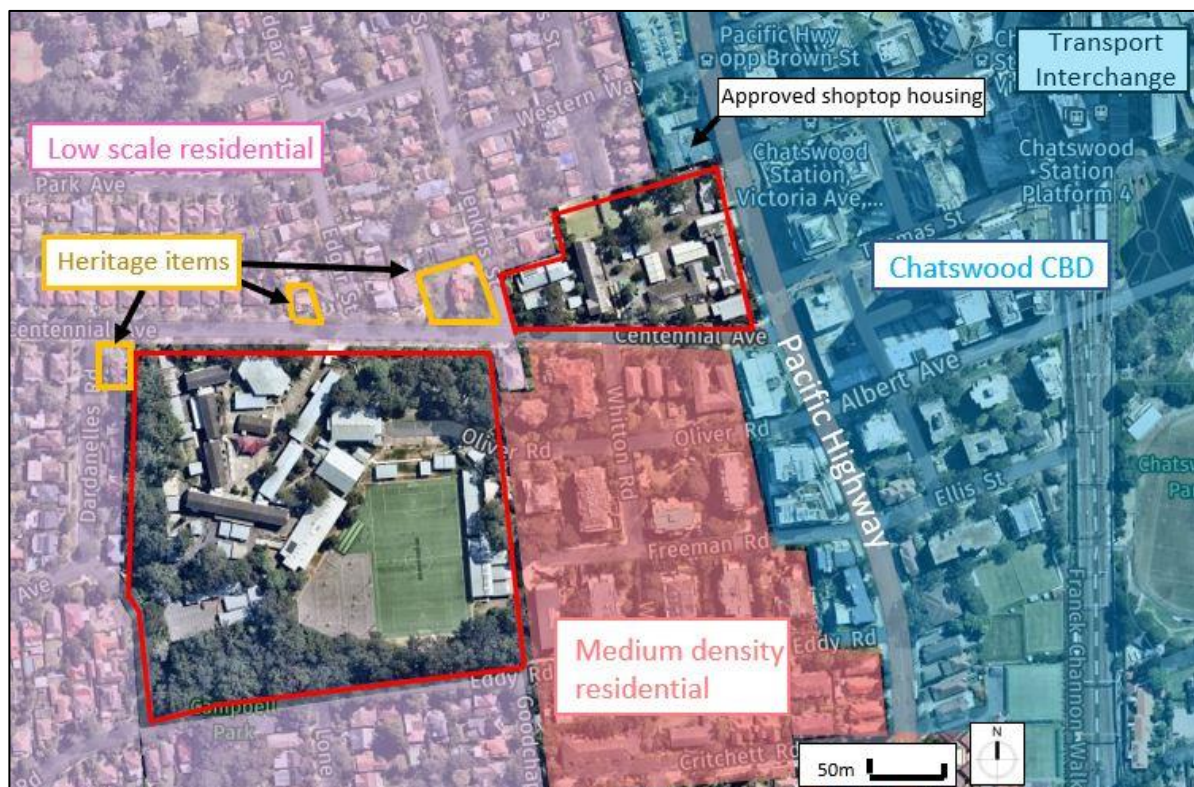


Figure 7 | Surrounding development context (Base source: Nearmap October 2020)

Immediately adjoining the CPS site to the north, at 688 - 692 Pacific Highway, are two separate commercial buildings two to three storeys in height. Development consent was granted by Council for the demolition of these two buildings and construction of a five storey shop-top housing development (see **Section 4.3**). With the exception of 688-692 Pacific Highway, land to the north and west of the CPS along James Street and Jenkins Street is characterised by low scale dwelling houses.

The southern side of Centennial Avenue, directly opposite CPS and to the east of CHS, is predominantly characterised by medium density housing up to four storeys in height. The rest of Centennial Avenue, west of CPS, is predominantly characterised by low scale dwelling houses between one and two storeys in height. Land immediately adjoining the CHS site to the west contains low scale residential with these dwelling houses fronting Dardanelles Road. The land to the south-west along Eddy Road also predominantly contains low density residential development.

Medium density residential development ranging between four to eight storeys in height is located south-east along Eddy Road and to the east of the CHS site. Some lower scale residential dwellings are interspersed amongst residential flat buildings.

There are three heritage items located near both sites at 9, 19 and 60 Centennial Avenue. All of the properties are listed as ‘house (including original interiors)’ of local significance under the WLEP.

1.2.2 Surrounding transport and access

The sites have excellent access to public transport services, being located within 300m-600m of the Chatswood transport interchange. The interchange facilitates a variety of high frequency train, Metro and bus transport services. The site’s proximity to public transport services is provided at **Figure 8**.

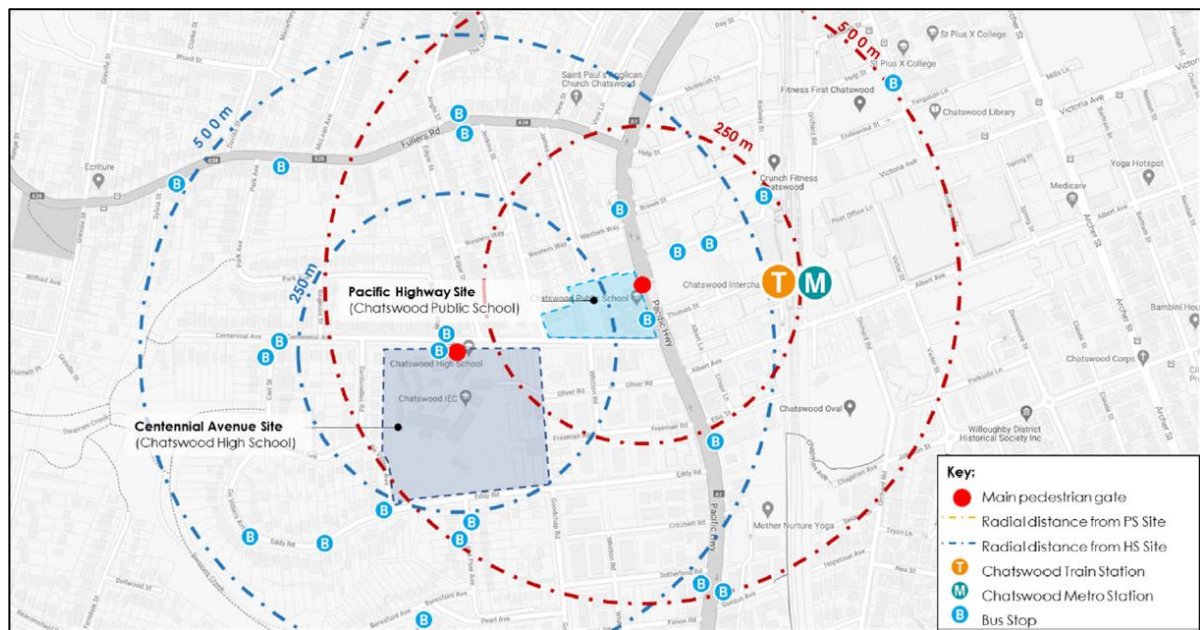


Figure 8 | Proximity to public transport services (Source: EIS 2020)

The sites are surrounded by a network of the following roads (**Figure 9**):

- Pacific Highway is a Transport for NSW (TfNSW) classified state road located along the eastern boundary of CPS. The road serves as a major north-south arterial link, providing connectivity between the Warringah Freeway and M1 Pacific Motorway. Within the vicinity of the site, it has a posted speed limit of 60 kilometres per hour (kph), with 40kph school zone restrictions applicable during school hours. The road is generally configured with six traffic lanes, with three traffic lanes in each direction. Traffic flow arrangements are in place during evening peak periods to provide four traffic lanes northbound and two in the southbound direction.
- Centennial Avenue is a two-way, two lane local road with on street car parking provided on both sides of the road. It has an east-west alignment and predominantly provides access to and from key drop-off areas for both CPS and CHS. It has a speed limit of 50kph with 40kph school zone restrictions.
- Jenkins Street is a two-way local road, generally aligned in a north-south direction. Jenkins Street was observed in the Applicant’s Transport Impact Assessment as one of the main drop-off/pick-up areas during school hours for CPS.

- Oliver Road is a one-way, one lane westbound road and contains a dedicated marked bicycle lane on the northern side of the road. Unrestricted kerbside parking is provided on the southern side of the road and is generally well occupied throughout the day. The road provides good connectivity between the Pacific Highway and Whitton Road.
- Eddy Road is a local road, generally aligned in an east-west direction along the southern boundary of the CHS site. Access to this road is generally provided off Pacific Highway at the western end of the road. Kerbside car parking is generally available on one or both sides of the road. It has a posted speed limit of 50kph, with 40kph school zone restrictions.
- De Villiers Avenue is a local road, generally aligned in a north-south direction along the western boundary of the CHS site and provides access to the on-site car park. Consistent with other local roads surrounding the schools, it has a speed limit of 50kph with a 40kph school restriction zone. No kerbside car parking is available on either side of the road between De Villiers Avenue and Eddy Road.
- James Street adjoins the northern side of the CPS site. Only pedestrian access is available to CPS from James Street. The street serves local residents only and while being two-way, it is essentially a laneway in width and function.
- Some of these roads surrounding the sites have steep slopes which may create challenges to pedestrians, especially wheelchair users and carers with prams, and cyclists. Roads with steep slopes include Jenkins Street north of CPS, Eddy Road and De Villiers Avenue.



Figure 9 | Surrounding road network (Base source: SIX Maps, October 2020)

2 Project

The key components and features of the proposal (refined by the RtS) are provided in **Table 1**.

Table 1 | Main components of the project

Aspect	Description
Project summary	Upgrades to the Chatswood Public School (CPS) and Chatswood High School (CHS) involving demolition of selected buildings, retention of heritage items, construction of new school buildings, new and refurbished learning spaces, specialist teaching facilities, improvements to existing outdoor play spaces, new outdoor play spaces and sports facilities, new library, new performing arts and administration facilities, changes to vehicular access and car parking, tree removal, landscaping and site remediation.
Demolition	<p>CPS - Demolition of Buildings D, H and I and three COLAs.</p> <p>CHS - Demolition of buildings are being carried out through separate planning approval pathways (see Section 2.4).</p>
New built form	<p>CPS:</p> <ul style="list-style-type: none"> • Building P1 – seven storey building containing 17 home bases and consisting of five storeys of built form and two storeys of COLAs. • Building P2 – part four, part five storey building comprising 12 home bases, COLA, canteen, amenities, kiln, staff facilities and rooftop uncovered play space. • Building G (Hall) – with stage and seating for 264 people and Out of School Hours (OOSH) facilities. • 18 space carpark off Jenkins Street with structure above containing a sports court. <p>CHS:</p> <ul style="list-style-type: none"> • Building Q (Administration) – part three, part four storey administration and staff building including reception, library, general learning spaces and COLA. • Building S (Science and General Learning) – part four, part five storey building comprising 42 general learning spaces and two workshops. • Building T (Hall) – two storey multi-purpose hall including stage, sports room facilities and four general learning spaces.
Heritage	CPS: Retention of Buildings A and B and the retaining wall surrounding 'the Lowers' which are of local heritage significance under WLEP.

Site area	<p>CPS: 1.57 hectares (ha).</p> <p>CHS: 5.97 ha.</p>
Proposed gross floor area (GFA)	<p>CPS: 4,214.01 square metres (sqm).</p> <p>CHS: 2,366.83 sqm.</p>
Uses	<p>CPS:</p> <ul style="list-style-type: none"> Continued use as a primary school from Kindergarten to Year 6 and OOSH care. Increase in student capacity from 1,337 up to 1,600 students. <p>CHS:</p> <ul style="list-style-type: none"> Continued use as a high school from Year 7 to Year 12. Increase in student capacity from 1,670 up to 2,000 students. Continued public use of the sports facilities outside of school hours, subject to an existing agreement with Council. Continued use of the site for Saturday School of Community Languages.
Access, parking and drop-off/pick-up	<p>CPS:</p> <ul style="list-style-type: none"> Main vehicular access and staff car parking relocated from Pacific Highway to a new carpark off Jenkins Street containing 18 staff car parking spaces. Retention of the existing Pacific Highway vehicle entrance for emergency vehicles and out of hours ad hoc deliveries. Pick-up/drop-off facilities to remain as existing from Centennial Avenue and Jenkins Street. 60 new bicycle parking spaces. Retention of existing pedestrian entries. <p>CHS:</p> <ul style="list-style-type: none"> No change to location of the existing main vehicular access point on De Villiers Avenue and retention of existing carpark. Replacement of the existing small carpark off Oliver Road with a special support drop-off/pick-up area, resulting in overall reduction in on-site car parking from 120 to 104. 84 new bicycle spaces. Retention of existing pedestrian entries.
Tree removal and landscaping	<ul style="list-style-type: none"> Removal of 38 trees from the CPS site and 24 trees from CHS site. Planting of 77 new trees, hedges, shrubs, grasses and native planting. Specific gardens and landscaping features including a kitchen terrace garden, shade garden, sensory garden, water sensitive

urban design, native planting, climbers on existing tensile wires, turf and synthetic turf.

Hours of operation	<p>Current operational hours of CPS and CHS are to remain.</p> <p>CPS:</p> <ul style="list-style-type: none">• OOSH care: 6.45am to 9am and 3pm to 6.15pm.• School hours: 9am to 3pm.• Extra-curricular activities: 3pm to 4pm. <p>CHS:</p> <ul style="list-style-type: none">• School hours: 8.20am to 3.30pm.• Extra-curricular activities: 7.20am to 9.20am and 2.30pm to 4.30pm.• Saturday School of Community Languages: 7am to 2pm.• Community use of the halls on both sites proposed from 4pm to 10pm on weekdays and 6am to 8pm on weekends.
Signage	No signage is proposed.
Remediation	Capping of contaminated soil at CPS in accordance with the Remediation Action Plan (RAP).
Jobs	266 construction jobs and 20 operational jobs.
CIV	\$152,615,795.

2.1 Physical layout and design

The proposal seeks to utilise space on both sites more efficiently and provide additional learning spaces, administration facilities and outdoor play space. This is to be achieved through removal of demountable classrooms and other buildings which do not serve modern teaching and learning needs of the schools and replacement with more functional buildings. Through improved site planning and physical layout of the new buildings, additional learning spaces can be provided to cater for current and future enrolment demands as well as providing additional outdoor play space per student, particularly on the CPS site.

2.1.1 Chatswood Public School

The proposal seeks to retain the two heritage buildings (A and B) and demolish most of the remaining buildings and structures, as shown in **Figure 10**. The new buildings comprise Buildings G, P1, P2 and a carpark structure with sports court above (**Figure 11**). The new buildings would be positioned along the northern portion of the site. The overall layout and design is based on achieving greater school density, responding to the topographical site constraints, maximising ground level spaces and preserving the views and relationship of heritage buildings A and B to each other and from the streetscape.



Figure 10 | CPS existing site plan with buildings to be demolished shaded red (Base source: RtS 2020)

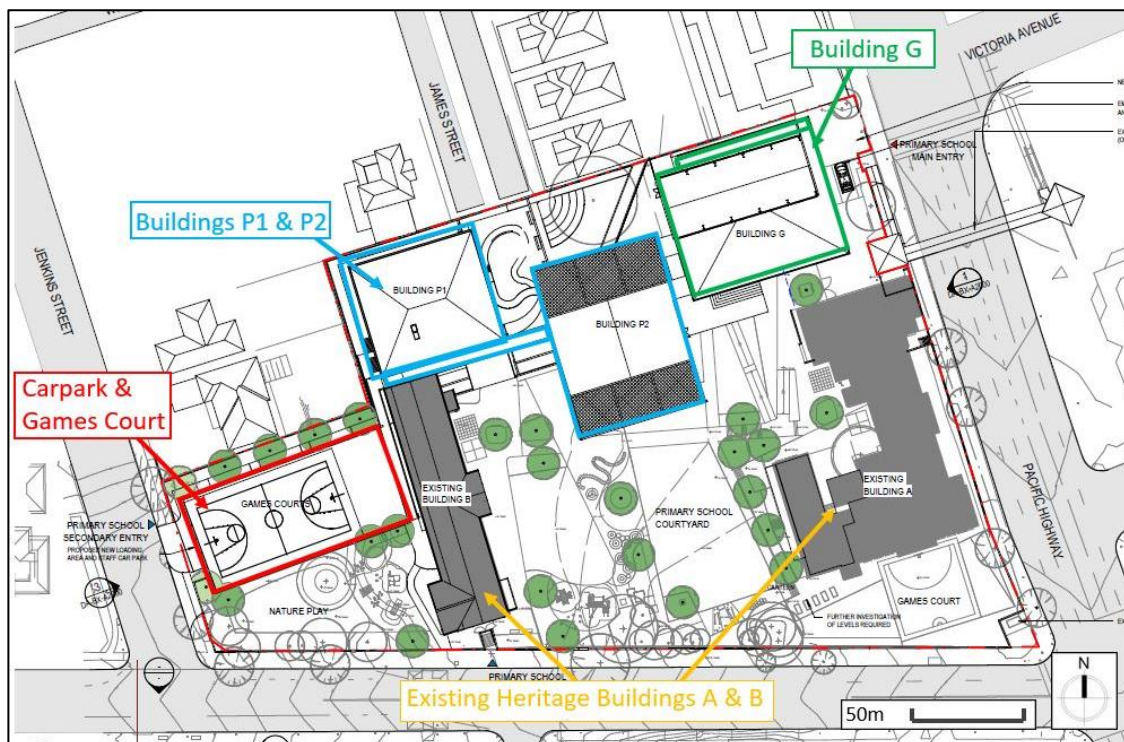


Figure 11 | CPS proposed site plan (Base source: RtS 2020)

Building G would be a single storey hall containing seating for 264 people and ancillary facilities. Building G would be setback approximately 12.8m from the Pacific Highway which preserves southern view corridors from Pacific Highway to heritage Building A. Building G would provide a new interface with the public domain on the Pacific Highway frontage. The publicly accessible location allows for future community use without requiring internal access through the site.

Building P1 would be a seven-storey building consisting of five storeys of built form and two storeys of COLAs. The building would step up the site, predominantly following the site's topography, and encompasses the bottom level of the Lovers play space. Building P2 would be a four-storey building containing uncovered play space on the roof. Building P2 would provide connectivity to the main central play area as well as a walkway connection to Building P1.

The new carpark would be located off Jenkins Street comprising 18 car parking spaces, waste and gardening storerooms at ground level. A structure is proposed above the carpark to provide an additional games court and contains an internal elevated ramp to access Building P1.

Selected drawings of the proposal are shown in **Figure 12** to **Figure 15**.

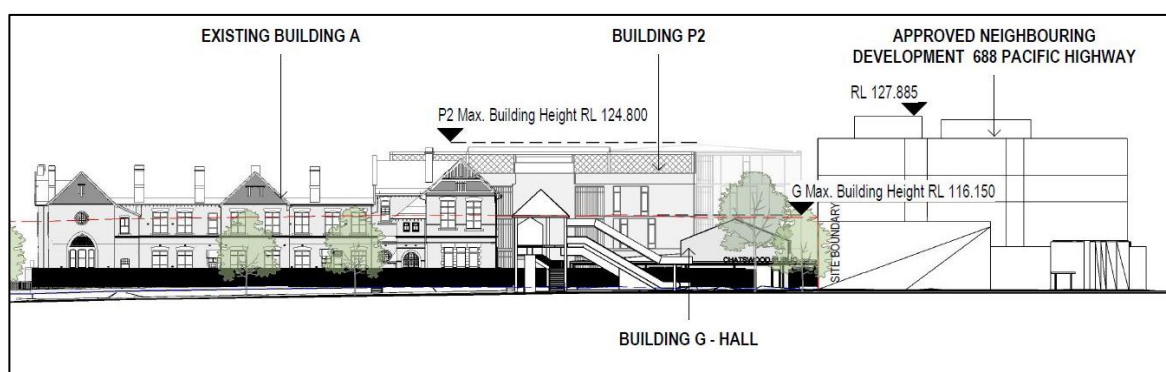


Figure 12 | CPS proposed east (Pacific Highway) elevation (Source: RtS 2020)

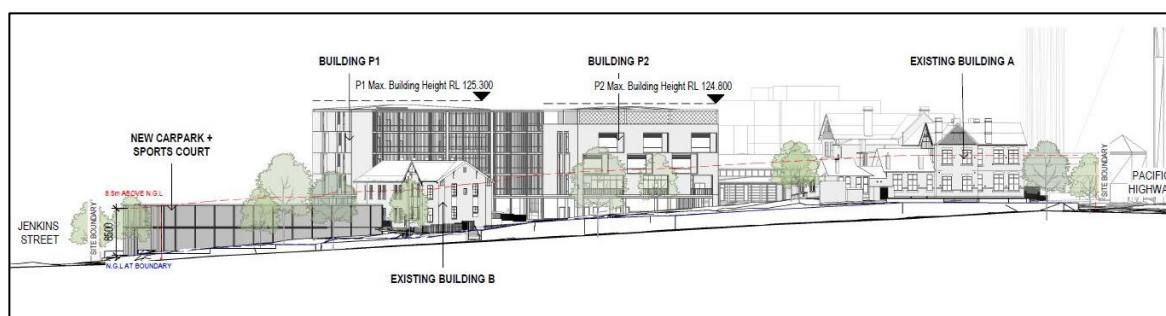


Figure 13 | CPS proposed south (Centennial Avenue) elevation (Source: RtS 2020)

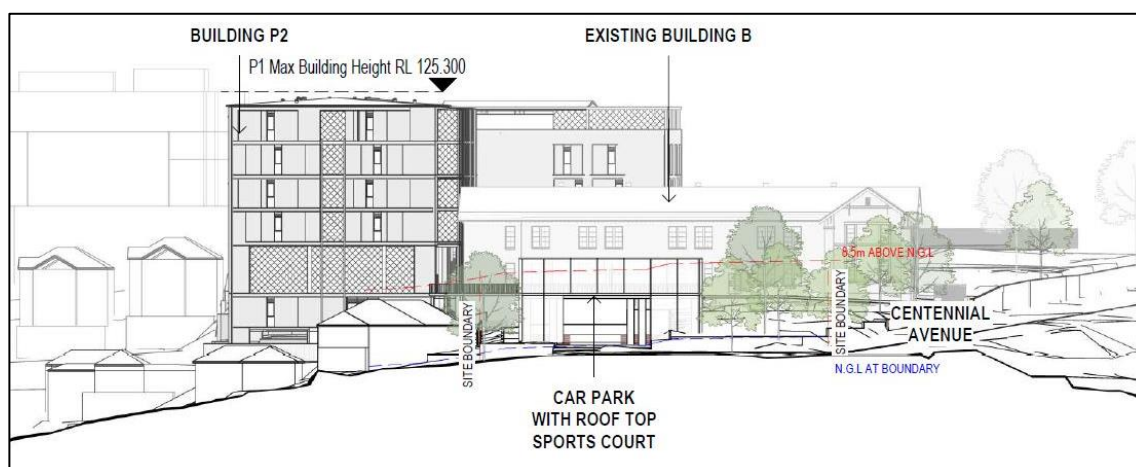


Figure 14 | CPS proposed west (Jenkins Street) elevation (Source: RtS 2020)

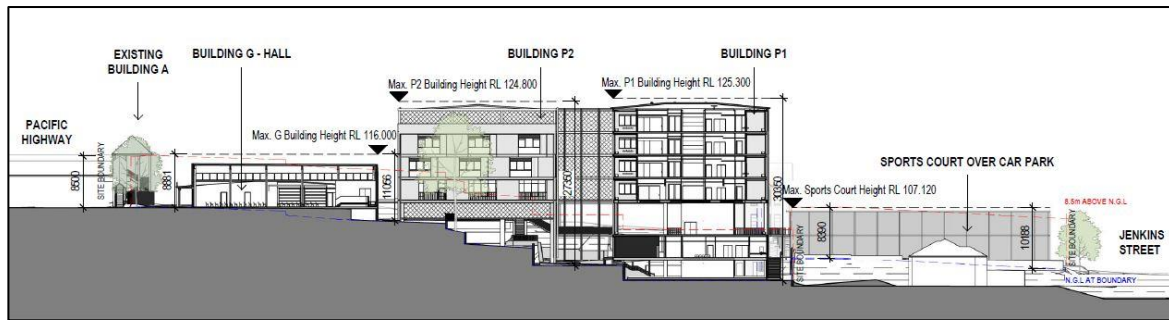


Figure 15 | CPS proposed east – west section, north facing (Source: RtS 2020)

2.1.2 Chatswood High School

The proposal seeks to demolish buildings and demountable buildings as shown in **Figure 16**.

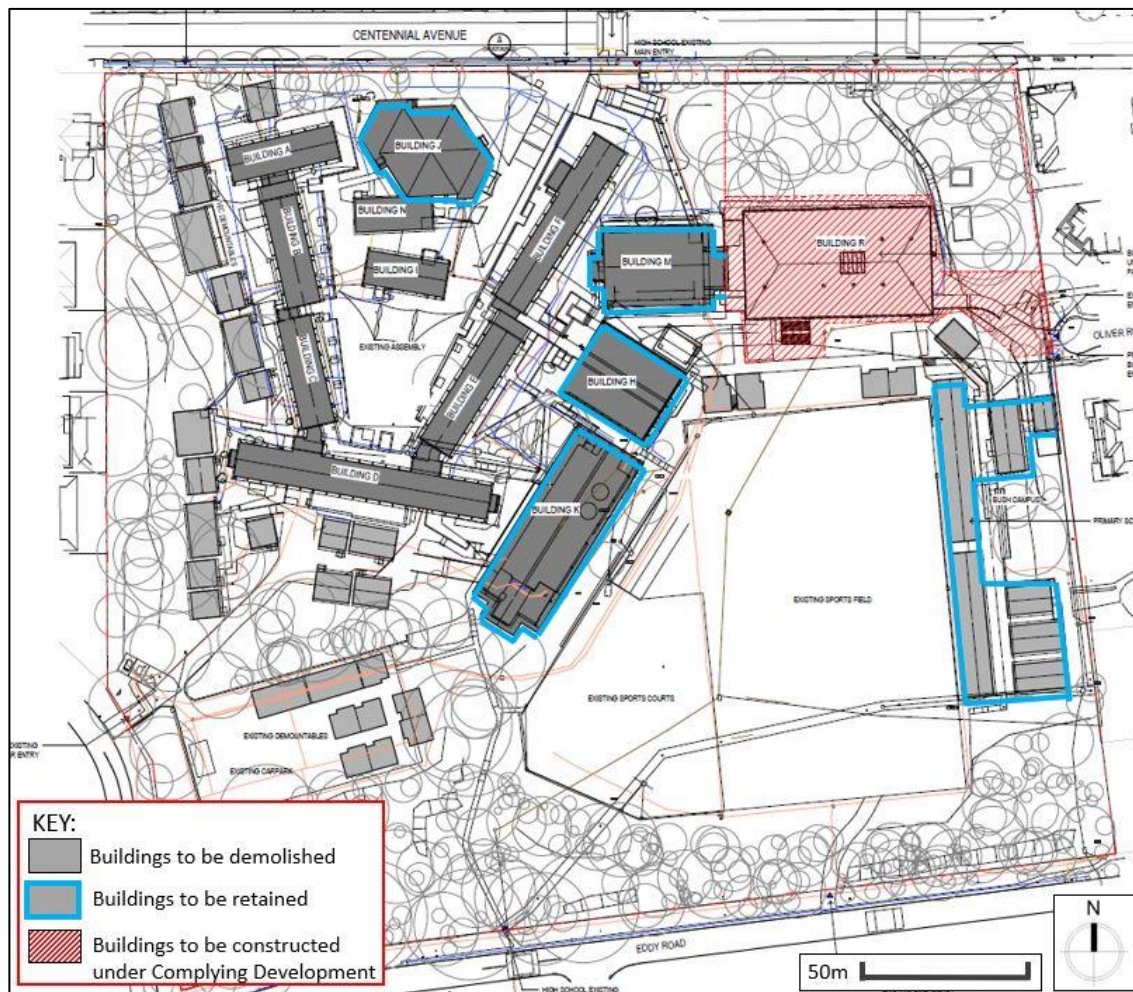


Figure 16 | CHS existing site plan (Base source: EIS 2020)

The new buildings Q, S and T would be positioned generally within the same footprint and alignment as the existing school layout, forming a 'V' shape to create a central courtyard (**Figure 17**). The new buildings generally maintain the existing setbacks from Centennial Avenue and the western boundary. Building heights vary in response to topography and would improve accessibility and connectivity between facilities across the site. The existing sports courts and open space located south of the new built form would generally remain.

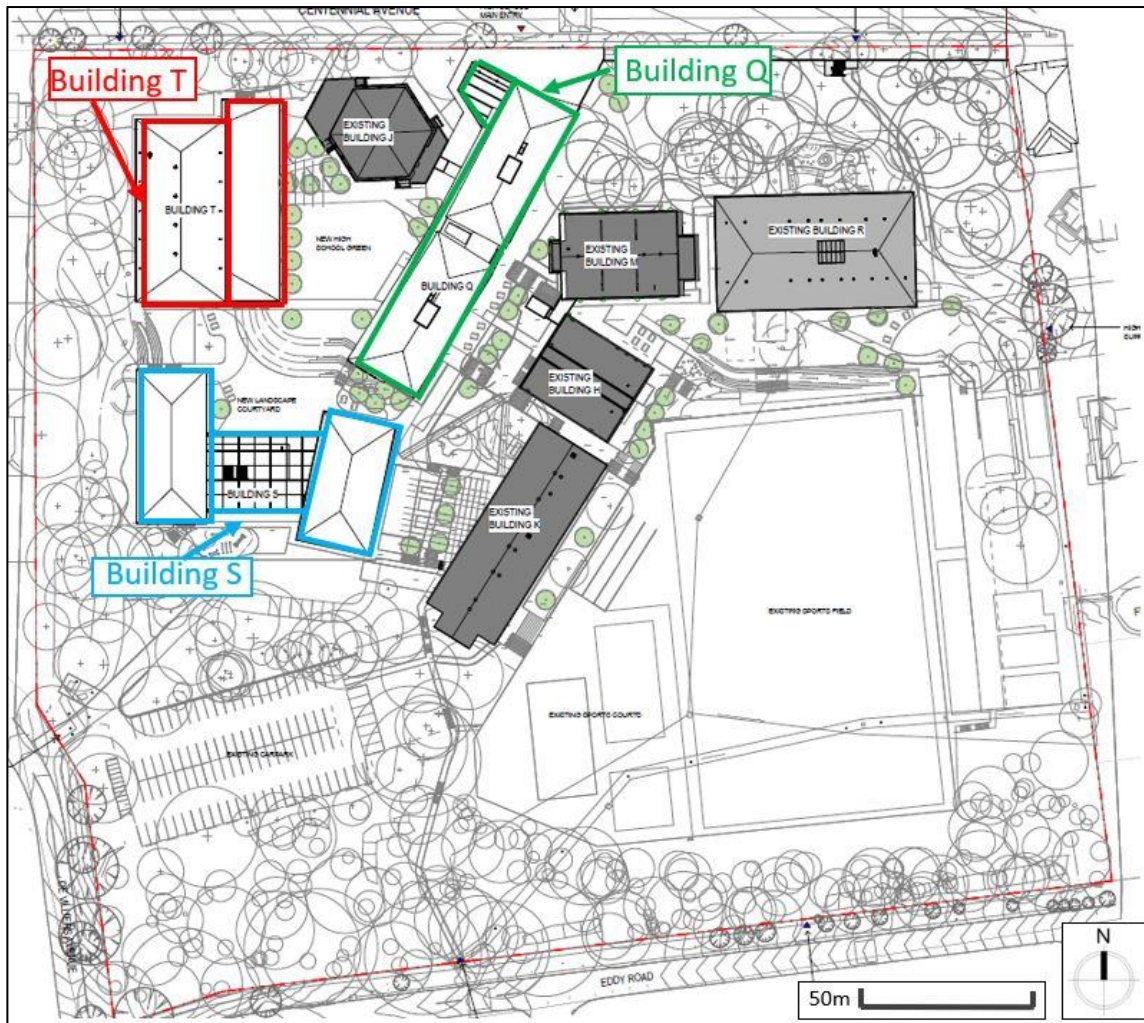


Figure 17 | CHS proposed site plan (Base source: EIS 2020)

Building Q would be a four-storey building adjacent to the main pedestrian entry from Centennial Avenue. It would be setback approximately 12.8m from the street and present as a three-storey building from Centennial Avenue due to the topography of the site. The building would contain 12 learning spaces, library, canteen and administrative facilities. Proposed building facades consist of expressed concrete in a modular, vertical pattern with glazing.

Building S would be the largest of the CHS new buildings and would be located south of Building Q and adjacent to existing Building K. Building S would be a part four, part five storey building containing a combination of general and specialist learning facilities including science labs and workshops. The building would include outdoor learning spaces on the upper levels. Proposed east and west facades consist of expressed concrete in a modular and vertical pattern of similar architectural character to Building Q. The proposed north and south facades contain open external circulation corridors.

Building T would be a new two storey multi-purpose hall, with the external materials comprising brick, concrete and glazing. The building would be in the north-west portion of the site and setback approximately 12.49m from Centennial Avenue. Building T would be sited parallel to the western side boundary with a side setback of approximately 23.88m.

Selected drawings of the proposal are shown in **Figure 12** to **Figure 25**. A link to the full set of architectural and landscape drawings is provided at **Appendix A**.

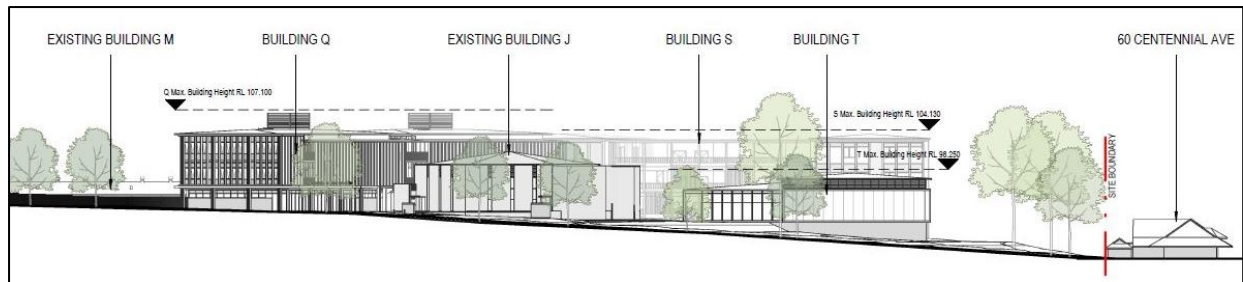


Figure 18 | CHS proposed north (Centennial Avenue) elevation (Source: EIS 2020)

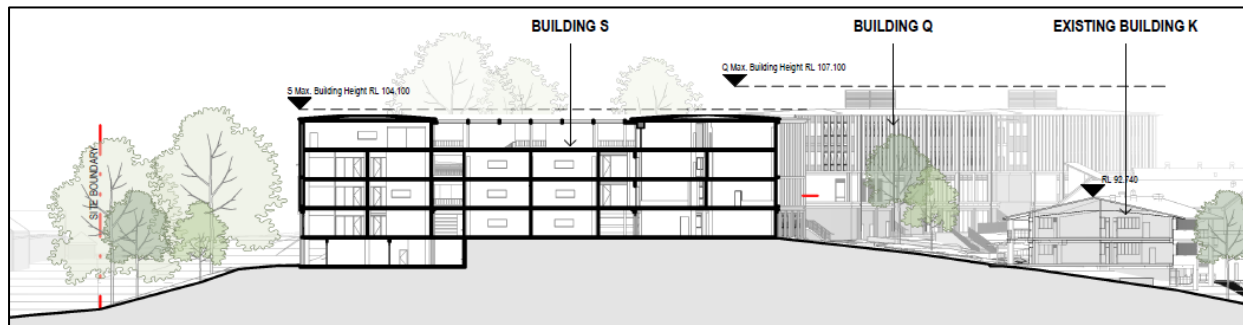


Figure 19 | CHS proposed west to east section, north facing (Source: EIS 2020)

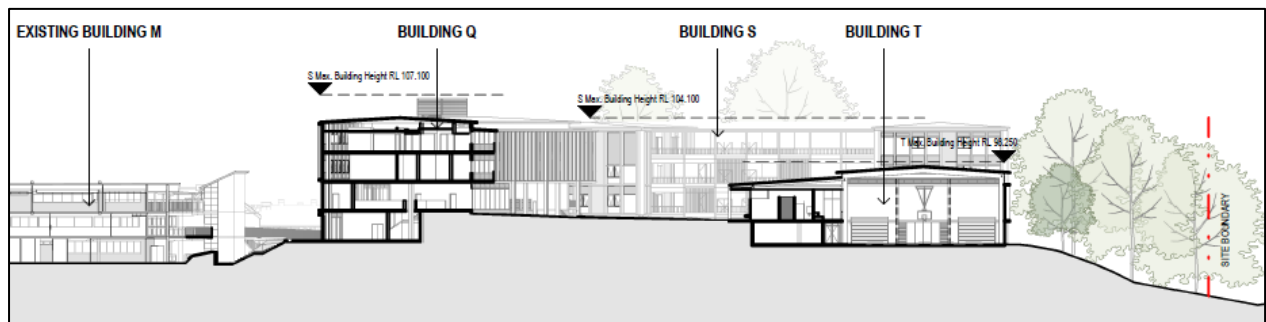


Figure 20 | CHS proposed east to west section, south facing (Source: EIS 2020)

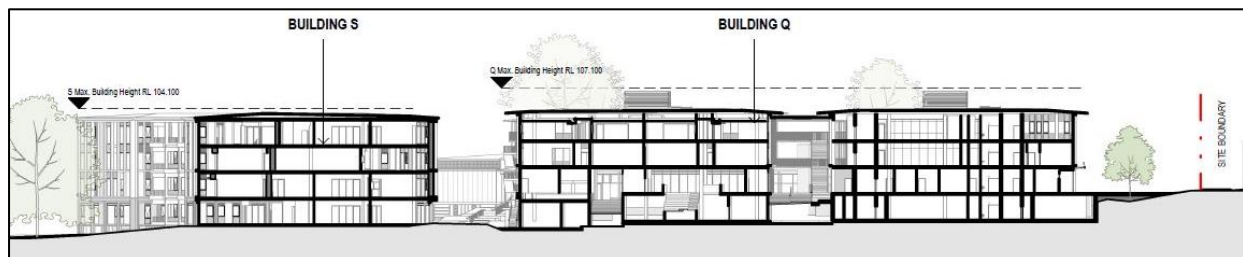


Figure 21 | CHS proposed south to north section, facing west (Source: EIS 2020)

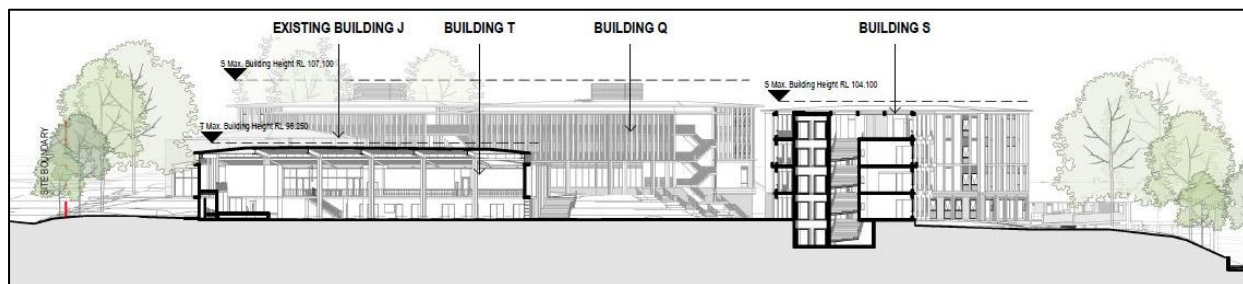


Figure 22 | CHS proposed north to south section, facing east (Source: EIS 2020)

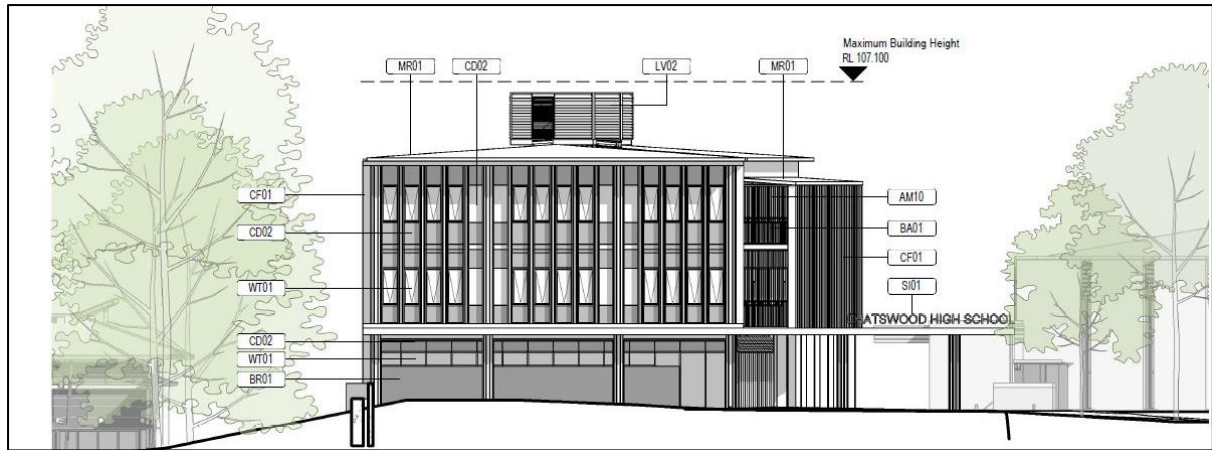


Figure 23 | CHS proposed Building Q north (Centennial Avenue) elevation (Source: EIS 2020)

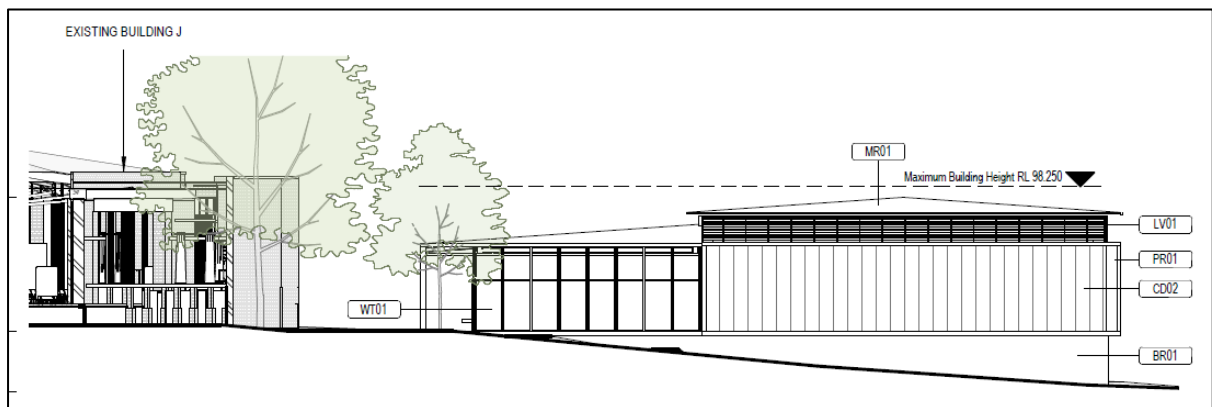


Figure 24 | CHS proposed Building T north (Centennial Avenue) elevation (Source: EIS 2020)

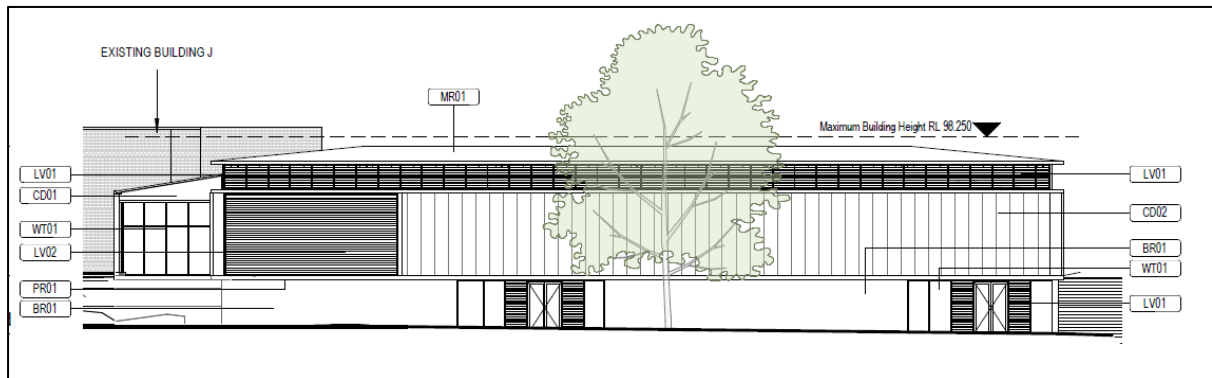


Figure 25 | CHS proposed Building T west elevation (Source: EIS 2020)

2.2 Uses and activities

The proposal would continue the use of the site as an educational establishment including OOSH at CPS. The hours of operation are set out in **Table 1**.

The proposal also includes community use of proposed school halls at both sites. However, exact details for community use of the halls are yet to be determined and would be subject to consultation with Council.

The proposal would not alter the existing use of the CHS site for Saturday School of Community Languages and community use of the sports facilities in accordance with an existing agreement with Council.

2.3 Timing

The proposed upgrades would be undertaken in one construction stage, and both schools would remain operational during construction works. There would be physical separation between operational parts of the sites and the construction works at all times. Construction works would occur over a period of approximately 36 months and would commence in 2021.

2.4 Related development

Works under separate planning approval pathways are being carried out across both sites as follows:

- Exempt Development – installation of temporary school buildings on both sites and associated landscaping and carpark works.
- Complying Development and Tree Removal Applications – construction of Building R, new substation and related tree removal works at the CHS site.
- Development Without Consent – refurbishment of Building A at the CPS site and refurbishment of Buildings M, H and K at the CHS site.

Immediately adjoining the CPS site to the north, at 688 - 692 Pacific Highway, are two separate commercial buildings two to three storeys in height. Development consent (DA No. 2017/300) was granted by Council for the demolition of these two buildings and construction of a five-storey shop-top housing development. As of October 2020, building works had not yet commenced under the development consent. However, the approved development, including amenity of these future residents, has been taken into consideration in the assessment of the subject SSD proposal. Selected elevations and plans of the approved development are provided at **Figure 26** to **Figure 29**.



Figure 26 | East (Pacific Highway) elevation (Base source: Council's website, DA-2018/300)



Figure 27 | South (Pacific Highway) elevation (Source: Council's website, DA-2018/300)

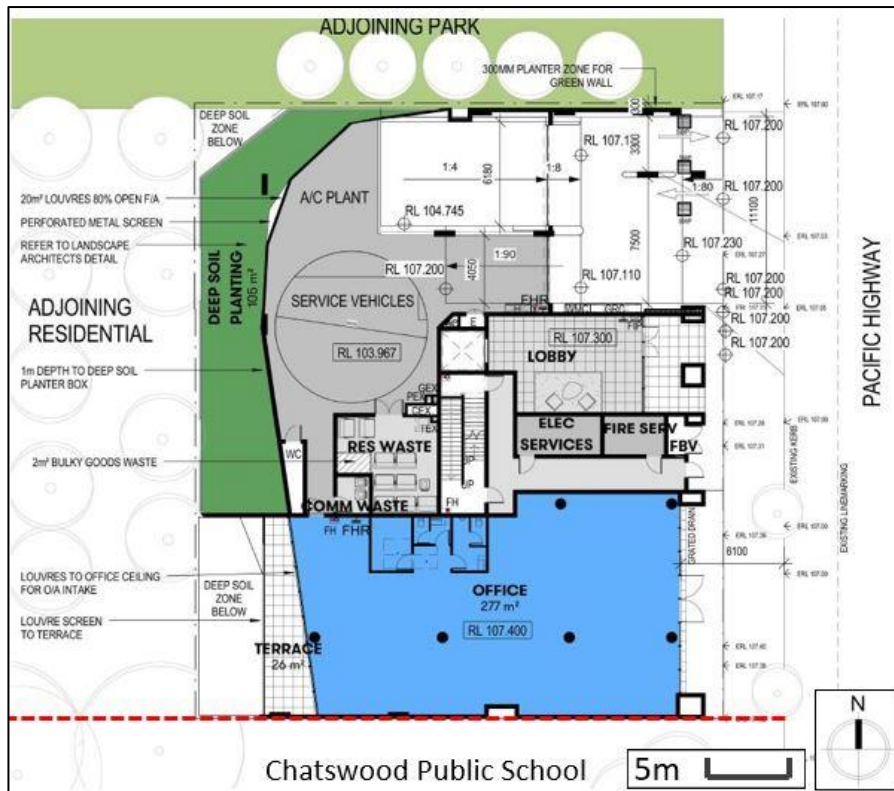


Figure 28 | Ground floor plan (Base source: Council's website, DA-2018/300)

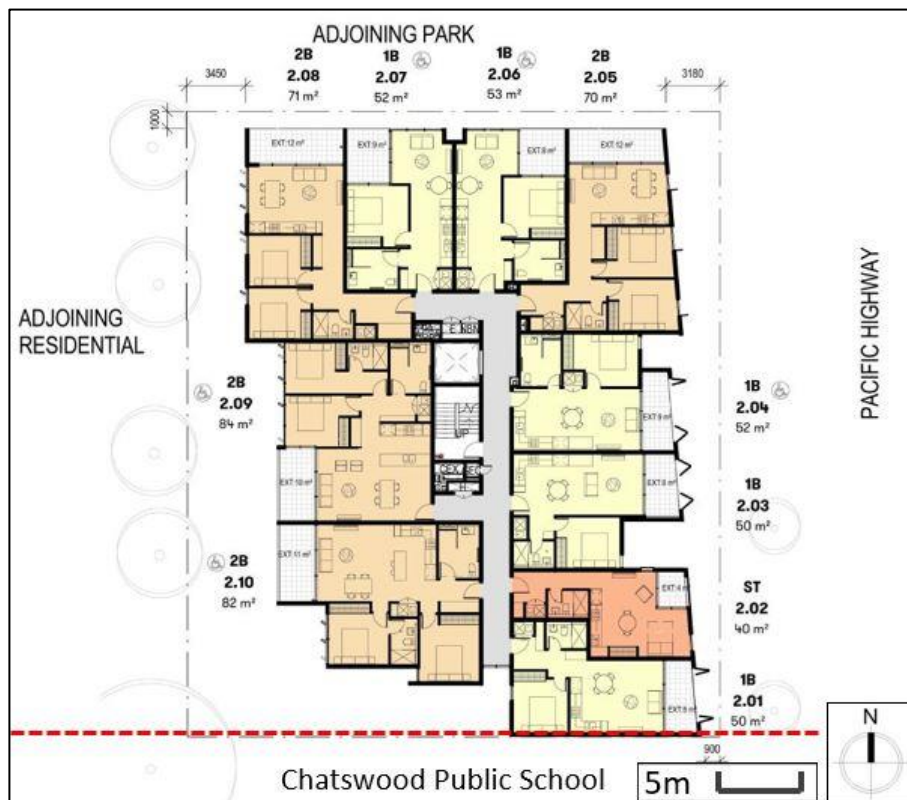


Figure 29 | Level 2 floor plan (Base source: Council's website, DA-2018/300)

3 Strategic context

It is anticipated that there will be a 21 per cent growth in student numbers in NSW by 2031 compared to 2017, and schools will need to accommodate an extra 269,000 students, with 164,000 of these students in the public system. In response to the need for additional public education infrastructure because of increased demand, the NSW Department of Education is investing \$6.7 billion to deliver new schools and upgrade existing schools over four years.

The Department considers the proposal is appropriate for the site, given it is consistent with the:

- NSW State Priorities, through the provision of new and improved teaching and education facilities.
- Greater Sydney Commission (GSC)'s *A Metropolis of Three Cities, The Greater Sydney Region Plan*, as it proposes upgraded school facilities to meet the growing needs of Sydney.
- Transport for NSW's *Future Transport Strategy 2056*, as it would provide improved educational facility in a highly accessible location and provide access to additional new employment opportunities close to public transport.
- vision outlined in the GSC's *North District Plan*, as it would provide much needed school infrastructure conveniently located near existing public transport services and opportunities to co-share facilities with the local community.
- Infrastructure NSW's *State Infrastructure Strategy 2018 – 2038 Building the Momentum*, as it proposes:
 - facilities to support the growth in demand for primary and secondary student enrolments for both schools.
 - a school design to accommodate infrastructure and facilities sharing with communities.
- Willoughby City Local Strategic Planning Statement 2020, as it would increase the number of school places provided in the LGA and enable future use of school halls by the community.

The proposal would also provide direct investment in the region of approximately \$152,615,795 and support approximately 266 construction jobs and 20 new operational jobs.

4 Statutory context

4.1 State significance

The proposal is SSD under section 4.36 (development declared SSD) *Environmental Planning and Assessment Act 1979* (EP&A Act) as the development has a CIV in excess of \$20 million and is for the purpose of alterations or additions to an existing school under clause 15 of Schedule 1 of the State Environmental Planning Policy (State and Regional Development) 2011.

The Minister for Planning and Public Spaces (the Minister) is the consent authority under section 4.5 of the EP&A Act. In accordance with the Minister's delegation to determine SSD applications, signed on 9 March 2020, Executive Director, Infrastructure Assessments may determine this application as:

- the relevant Council has not made an objection.
- there are less than 50 public submissions in the nature of objection.
- a political disclosure statement has not been made.

4.2 Permissibility

Under the WLEP, the CPS site is zoned R2 Low Density Residential (**Figure 30**). The CHS site is predominantly zoned SP2 Infrastructure (Educational Establishment) and partly zoned E2 Environmental Conservation in the south west corner of the site.

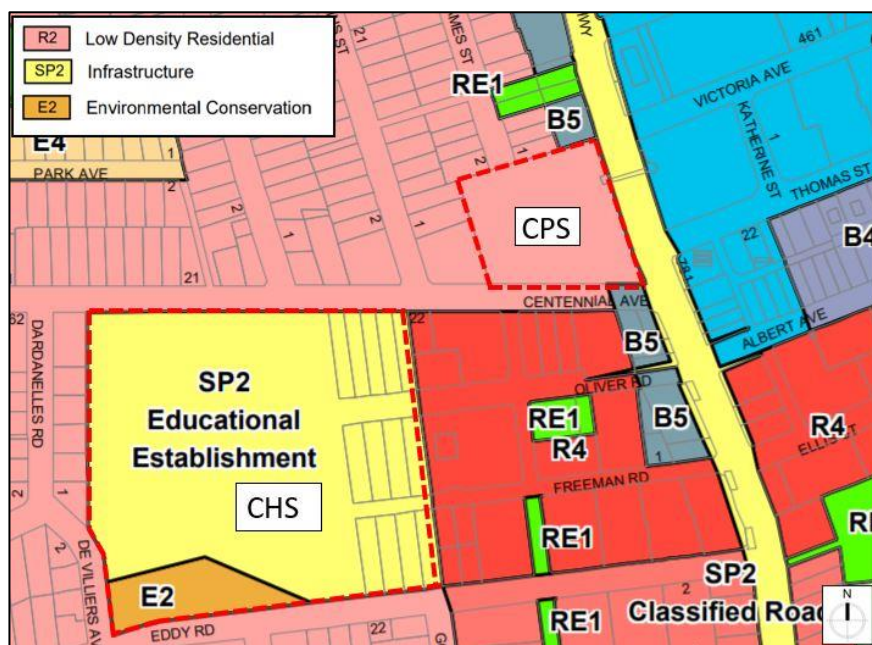


Figure 30 | WLEP land use zone map, sites outlined in red (Base source: NSW legislation website)

Under the WLEP, educational establishments are permissible with consent in the SP2 'Educational Establishment' zone but prohibited in the R2 and E2 zone. However, there are no works proposed in the E2 zone and the R2 zone is a prescribed zone under Part 4 of State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 (Education SEPP). Accordingly, the use is permissible with consent.

The proposal also includes shared use of the school halls for the community which would be ancillary to the use as an Educational Establishment and is also permissible with consent.

Given the use is permissible with the relevant land use zones, the Minister or a delegate may determine the carrying out of the development.

4.3 Other approvals

Under section 4.41 of the EP&A Act, a number of other approvals are integrated into the SSD approval process, and consequently are not required to be separately obtained for the proposal.

Under section 4.42 of the EP&A Act, a number of further approvals are required, but must be substantially consistent with any development consent for the proposal (e.g. approvals for any works under the *Roads Act 1993*).

The Department has consulted with the relevant public authorities responsible for integrated and other approvals, considered their advice in its assessment of the project, and included suitable conditions in the recommended conditions of consent (see **Appendix C**).

4.4 Mandatory matters for consideration

4.4.1 Environmental planning instruments

Under section 4.15 of the EP&A Act, the consent authority is required to take into consideration any environmental planning instrument (EPI) that is of relevance to the development the subject of the development application. Therefore, the assessment report must include a copy of, or reference to, the provisions of any EPIs that substantially govern the project and that have been considered in the assessment of the project.

The Department has undertaken a detailed assessment of these EPIs in **Appendix B** and is satisfied the application is consistent with the requirements of the EPIs.

4.4.2 Objects of the EP&A Act

The objects of the EP&A Act are the underpinning principles upon which the assessment is conducted. The statutory powers in the EP&A Act (such as the power to grant consent/ approval) are to be understood as powers to advance the objects of the legislation, and limits on those powers are set by reference to those objects. Therefore, in making an assessment, the objects should be considered to the extent they are relevant. A response to the objects of the EP&A Act is provided at **Table 2**.

Table 2 | Response to the objects of section 1.3 of the EP&A Act

Objects of the EP&A Act	Consideration
(a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,	The proposal upgrades an existing primary and high school to cater for demand in a rapidly developing area. The sites remain suitable for the use as educational establishments and their development would not unreasonably negatively impact the

	economic welfare of the community, or the natural environment.
(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,	The proposal includes measures to deliver ecologically sustainable development (Section 4.4.3).
(c) to promote the orderly and economic use and development of land,	The proposal is an orderly and economic development and use of the land as it is consistent with the sites' historic use as educational establishments and would improve educational facilities to support demand.
(d) to promote the delivery and maintenance of affordable housing,	Not applicable.
(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,	The proposal involves landscaping and planting to provide new habitat opportunities. Impacts of tree removal have been appropriately mitigated or are addressed through the recommended conditions of consent, as detailed in Section 6 .
(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),	<p>The CPS site is listed as a local heritage item under WLEP. In addition, there are three local heritage items in close proximity to both sites. The works proposed are contextually appropriate and suitable within the heritage setting (Section 6).</p> <p>An Aboriginal Cultural Heritage Assessment Report (ACHAR) was included in the EIS which identified the Aboriginal cultural heritage values of the sites in consultation with Aboriginal communities and sets out appropriate mitigation measures to protect these values (Section 6.4).</p>
(g) to promote good design and amenity of the built environment,	The proposed development has been designed to minimise amenity impacts within the limits of the sites' constraints, while also balancing the need for upgraded facilities for increasing enrolment numbers (Section 6.1).

(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,	The proposal would promote proper construction and maintenance of buildings subject to the recommended conditions of consent.
(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,	The Department publicly exhibited the proposal (Section 5.1), which included consultation with Council and other public authorities and consideration of their responses (Sections 5.1 and 6).
(j) to provide increased opportunity for community participation in environmental planning and assessment.	The Department publicly exhibited the proposal as outlined in Section 5.1 , which included notifying adjoining landowners, placing a notice in newspapers and displaying the proposal on the Department's website and at Council during the exhibition period.

4.4.3 Ecologically sustainable development

The EP&A Act adopts the definition of Ecologically Sustainable Development (ESD) found in the *Protection of the Environment Administration Act 1991*. Section 6(2) of that Act states that ESD requires the effective integration of economic and environmental considerations in decision-making processes and that ESD can be achieved through the implementation of:

- the precautionary principle.
- inter-generational equity.
- conservation of biological diversity and ecological integrity.
- improved valuation, pricing and incentive mechanisms.

The development proposes ESD initiatives and sustainability measures, including:

- passive design and maximum use of natural light and ventilation.
- energy efficient heating, air conditioning, lighting and hot water systems.
- water efficient fixtures and fittings.
- minimum use of water-cooled air conditioning systems.
- native and water efficient species for landscaping.
- installation of an 88 kilowatt photovoltaic system.
- two 3000 litre rainwater tanks.
- rainwater harvesting.

The Applicant is targeting an equivalent 4-Star Green Star (Australian Best Practice) rating which meets the suggested 4-Star Green Star rating in the Educational Facilities Standards and Guidelines (EFSG) design guide.

The Department has considered the proposed development in relation to the ESD principles. The precautionary and inter-generational equity principles have been applied in the decision-making process through a thorough assessment of the environmental impacts of the proposed development.

In order to ensure that ESD is incorporated into the proposed development, the Department has recommended a condition that requires the Applicant to register for a minimum 4-star Green Star rating with the Green Building Council Australia, or an alternative certificate process as agreed by the Planning Secretary, prior to the commencement of construction.

Subject to this condition, the proposed development is consistent with ESD principles as described in Section 3 and Appendix N of the Applicant's EIS, which has been prepared in accordance with the requirements of Schedule 2 of the Environmental Planning and Assessment Regulation 2000 (EP&A Regulation). Overall, the proposal is consistent with ESD principles and the Department is satisfied the proposed sustainability initiatives would encourage ESD, in accordance with the objects of the EP&A Act.

4.4.4 Environmental Planning and Assessment Regulation 2000

Subject to any other references to compliance with the EP&A Regulation cited in this report, the requirements for Notification (Part 6, Division 6) and Fees (Part 15, Division 1AA) have been complied with.

4.4.5 Planning Secretary's Environmental Assessment Requirements

The EIS is compliant with the Planning Secretary's Environmental Assessment Requirements (SEARs) and is sufficient to enable an adequate consideration and assessment of the proposal for determination purposes.

4.4.6 Section 4.15(1) matters for consideration

Table 3 identifies the matters for consideration under section 4.15 of the EP&A Act that apply to SSD in accordance with section 4.40 of the EP&A Act. The table represents a summary for which additional information and consideration is provided in **Section 6** (Assessment) and relevant appendices or other sections of this report and EIS, referenced in the table.

Table 3 | Section 4.15(1) matters for consideration

Section 4.15(1) Evaluation	Consideration
(a)(i) any environmental planning instrument	Satisfactorily complies. The Department's consideration of the relevant EPIs is provided in Appendix B .
(a)(ii) any proposed instrument	The Department's consideration of the relevant draft EPIs is provided in Appendix B .
(a)(iii) any development control plan (DCP)	Under clause 11 of the SRD SEPP, DCPs do not apply to SSD. Notwithstanding, consideration has been given to relevant DCPs.
(a)(iiia) any planning agreement	Not applicable.
(a)(iv) the regulations	The application satisfactorily meets the relevant requirements of the EP&A Regulation, including the

<i>Refer Division 8 of the EP&A Regulation</i>	procedures relating to applications (Part 6 of the EP&A Regulation), public participation procedures for SSD and Schedule 2 of the EP&A Regulation relating to EIS.
(b) the likely impacts of that development including environmental impacts on both the natural and built environments, and social and economic impacts in the locality	The impacts of the proposal have been appropriately mitigated or conditioned (Section 6).
(c) the suitability of the site for the development	The sites are suitable for the development as discussed in Sections 3, 4 and 6 .
(d) any submissions	Consideration has been given to the submissions received during the exhibition period. See Sections 5 and 6 .
(e) the public interest	Refer to Sections 6 and 7 .

4.5 Biodiversity Conservation Act 2016

Under section 7.9(2) of the *Biodiversity Conservation Act 2016* (BC Act), SSD applications are 'to be accompanied by a biodiversity development assessment report (BDAR) unless the Planning Agency Head and the Environment Agency Head determine that the proposed development is not likely to have any significant impact on biodiversity values'.

A BDAR was provided with the EIS. The impact of the proposal on biodiversity values has been assessed in the BDAR accompanying the EIS and considered in **Section 6**.

5 Engagement

5.1 Department's engagement

In accordance with Schedule 1 of the EP&A Act, the Department publicly exhibited the application from 3 April 2020 until 30 April 2020 (28 days). The application was exhibited on the Department's website, at NSW Service Centres and at Willoughby City Council's office.

The Department placed a public exhibition notice in the Sydney Morning Herald, Daily Telegraph and the North Shore Times on 2 April 2020, and notified adjoining landholders and relevant public agencies and Council in writing. The Department representatives visited the sites to provide an informed assessment of the development.

The Department has considered the comments raised in the public authority and public submissions during the assessment of the application (**Section 6**) and/or by way of recommended conditions in the instrument of consent at **Appendix C**.

5.2 Summary of submissions

The Department received a total of 28 submissions, comprising six submissions from public authorities and 24 submissions from the public. Of these 24 submissions from the public, 14 objected to the proposal. Copies of the submissions may be viewed at **Appendix A**.

5.3 Public authority submissions

A summary of the issues raised in the public authority submissions is provided at **Table 4** and copies of the submissions may be viewed at **Appendix A**.

Table 4 | Summary of public authority submissions to the EIS exhibition

Council

Council advised that it did not object to the proposal but had concerns in relation to some aspects of the proposal. Council made the following comments:

CPS:

- height, bulk and scale of buildings P1 and P2 and associated impact on the amenity of the adjoining low scale residential properties.
- visual and acoustic privacy impacts to adjoining properties.
- proposal considered satisfactory from a heritage impact perspective.
- proposed retention of trees of high retention value is supported and removal of several low to medium retention value trees is acceptable due to proposed tree replanting, landscaping and open space provision.
- the remediation strategy for contaminated material requires the ongoing management in the form of an Environmental Management Plan (EMP).

CHS:

- scale of proposed buildings considered to be consistent with the site and surrounding development.
- Building T is adequately separated from the heritage item located at 60 Centennial Avenue adjoining the site to the west.
- there is a requirement for offset credits to be secured for the removal of some non-core native vegetation.

Traffic and parking on both sites:

- impact on the road network from traffic generated by the development as a result of increased pedestrian traffic in morning and afternoon peaks, school staff parking demand and drop-off/pick-up traffic.
- pedestrian safety and intersection performance efficiency concerns from the increase in pedestrian movements crossing the Pacific Highway at the Victoria Avenue and Albert Avenue intersections.
- existing and proposed car parking are not compliant with Willoughby Development Control 2006 (WDCP), however both schools are located within good proximity to the Chatswood transport interchange and have well connected cycle paths.
- reduced on-site parking provision would reduce traffic generation and congestion in the surrounding area, consistent with the Willoughby Community Strategic Plan and Willoughby Street Parking Strategy.
- the submitted Transport Impact Assessment (TIA) suggests that on street parking is available for staff parking which is not supported as parking is for residents.
- the suggestion that Council apply time parking restrictions to adjacent local streets not supported.
- the following measures should be considered to cater for the increase in traffic from the proposal:
 - improve pedestrian crossing facilities on Pacific Highway including increased use of the footbridge by students.
 - provide Local Area Traffic Management for the schools' traffic movements and drop-off/pick-up activities such as installation of roundabout(s) on Centennial Avenue at Jenkins Street and/or Edgar Street to facilitate safe U-turn movements to access both sides of Centennial Avenue and Jenkins Street drop-off/pick-up zones.
- the construction traffic management plan is insufficient as it is unclear where school staff parking and loading would occur during construction.
- a temporary drop-off/pick-up zone on Centennial Avenue (south side, east of Whitton Road) is supported. However, pedestrian crossings at Whitton Road would need to be manned during school peak hours.

Stormwater management matters on both sites:

- the proposed on-site stormwater detention does not comply with Council's requirements for stormwater management.

- on-site stormwater detention is required to be provided for the areas of the sites where new works are proposed.

Council also provided recommended conditions should the application be supported.

Transport for NSW (TfNSW)

TfNSW made the following comments:

- CPS has alternative vehicular access via the local road network and as such the proposed construction, emergency and service vehicle access on the Pacific Highway is not supported on road safety and efficiency grounds.
- there are existing pedestrian safety concerns at the Victoria Street and Pacific Highway intersection with students not using the footbridge.
- the Applicant should consider measures to encourage students to use the footbridge instead of the signalised intersection crossing.
- the submitted swept paths for Jenkins Street should consider parked vehicles on both sides of the road.
- the TIA should not rely on a low 16 per cent survey response for the CHS travel mode and should use the TfNSW Traffic Generation study rates.
- the submitted sustainable transport measures should be amended to include and/or address a range of additional traffic mitigating measures.
- prior to the issue of an Occupation Certificate, the Applicant should prepare a comprehensive Travel Plan incorporating the sustainable transport initiatives.

Environment Protection Authority (EPA)

EPA made the following comments:

- Noise:
 - the submitted Noise Impact Assessment (NIA) is satisfactory.
 - the noise criteria determined by the loggers appear to be representative of the acoustic environment of residential receivers.
 - the operational noise considerations include a preliminary review of noise from service and mechanical plant and is satisfactory.
 - recommends that operational waste collection occurs during the day only, and construction works are limited to standard hours of construction work as per the Interim Construction Noise Guideline (INCG).
- Contamination:
 - the submitted Remediation Action Plan (RAP) must be certified by an EPA accredited Site Auditor who is required to be engaged throughout the duration of the works.
 - the Applicant must submit Interim Audit Advice from the Site Auditor as part of the RtS.

EPA also provided recommended conditions should the application be supported.

Environment, Energy and Science Group of the Department of Planning, Industry and Environment (EESG)

EESG raised the following concerns with the submitted Biodiversity Development Assessment Report (BDAR):

- BDAR and Biodiversity Assessment Method calculator is incomplete, is missing information and has not been finalised, certified and signed.
- spatial data is required to be submitted to ensure consistency with the Biodiversity Assessment Method calculator.
- it is not clear from the submitted architectural, landscape and civil plans as to the extent of the construction footprint for which the biodiversity assessment is based on.
- inconsistencies and further information is required for the site's native vegetation cover and connectivity features.
- inaccuracies in the description and assessment of Plant Community Types (PCTs).
- further information is required regarding the location of Magenta Lilly Pilly (*Syzygium paniculatum*).
- further assessment is required of Large-eared Pied Bat (*Chalinolobus dwyeri*).
- a Biodiversity Credit Report has not been submitted and is required.
- further justification is needed of effort to avoid and minimise impacts in the siting and layout of buildings.
- overall, further detail and assessment is required of indirect impacts, prescribed biodiversity values and measures to mitigate impacts.

Heritage NSW, Department of Premier and Cabinet (Heritage NSW)

Heritage NSW made the following comments:

- the statement of significance and evaluation of heritage impacts on the values of the site in the Heritage Impact Statement (HIS) follow the NSW Heritage Manual 2001 Guidelines.
- based on the historic and physical research demonstrated in the Archaeology Assessment, Heritage NSW agrees with the findings that there is no historical archaeology of significance at either site.
- it is recommended that an 'unexpected finds' condition is included as a condition of consent, but no actual archaeological investigations would be required as part of the proposal.

Sydney Water

Sydney Water advised that water supply and wastewater services are available to service the proposed development. The requisite approvals would be required prior to commencement of works.

5.4 Public submissions

A summary of the key issues raised in the public submissions is provided at **Table 5** and copies of the submissions may be viewed at **Appendix A**.

Table 5 | Summary of public submissions to the EIS exhibition

Built form – Chatswood Public School

- The proposal would be an overdevelopment of the site and has not considered adjoining residential properties.
- Excessive height, bulk and scale and insufficient northern side boundary setbacks of Building P1 would result in amenity impacts on surrounding low scale neighbouring dwellings including:
 - loss of visual outlook including south west vistas.
 - visual privacy impacts.
 - acoustic privacy impacts.
 - sense of 'enclosure' from the new buildings.
- Height, bulk, scale and materiality of buildings P1 and P2 resulting in the following impacts:
 - the buildings would be the highest buildings on the western side of the Pacific Highway and would be out of character with streetscape and surrounding low scale dwellings.
 - Building P1 would appear as a 10 storey building from adjoining residential properties.
 - not sympathetic to existing heritage buildings on-site.
 - does not comply with design principles of State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017.
- Building P1 should be moved to the Pacific Highway frontage or centre of site.
- Building G should be setback a minimum of 1m from the adjoining properties.
- The existing two storey high brick retaining wall located along the northern boundary has previously been subject to stormwater damage from the CPS. Construction of Building G must not compromise the structural integrity of the retaining wall.
- The carpark with sports court above is not compatible with the streetscape and impacts on the adjacent heritage building.
- Overshadowing of playgrounds from the new buildings.

Built form – Chatswood High School

- Visual impact of Building T (Hall) as it contains an extensive blank western elevation.
- Impacts on nearby heritage items.
- The poor design does not use the space efficiently.

Traffic, transport and parking

- The submitted TIA report is insufficient and contains inaccuracies.
- Insufficient on-site car parking.
- Increased traffic congestion, queuing and frequency of car accidents.
- The area is very hilly and not suitable for teachers carrying resources if required to park a significant distance from the schools.
- Parents dropping off and picking up students already illegally park their cars by blocking resident's driveways and the proposal would exacerbate this issue.

Noise

- Impact on residential amenity due to mechanical plant and equipment, waste collection vehicles and from Building T (Hall) on the CHS site.
- Insufficient assessment of noise from outdoor play areas.

Tree removal

- Removal of 62 trees has not been justified.
- Increased urban heat island effect and reduced amenity.
- Impact on leafy streetscape character of locality and on fauna from loss of habitat.

Construction impacts

- Impacts from construction noise, traffic and parking
- Construction timeframe is too long.

Other

- No detailed analysis on population growth and need for the development.
- Failure to explore alternative sites to cater for the increased number of students.
- No justification provided for relocating the Intensive Language Centre from CHS to St Ives.
- Implications on students due to overcrowding and adequate space per student, particularly due to Covid-19 social distancing requirements.
- Safety concerns with balls and other objects being thrown from rooftop sports courts in to adjoining properties.
- Existing issues from stormwater and sewerage pipes on CHS site would be exacerbated by proposal.
- Non-compliance with local planning controls.
- Impact on property values.
- Lack of community consultation and quality of consultation due to Covid-19 (no in person community information sessions carried out).
- Insufficient and inaccurate information included in the application.

5.5 Response to submissions and supplementary information

Following the exhibition of the EIS, the Department placed copies of all submissions received on its website and requested the Applicant provide a response to the issues raised. The Department also requested the Applicant to respond to several queries and issues raised following the Department's preliminary assessment of the proposal.

On 2 October 2020, the Applicant provided a Response to Submissions (RtS) (**Appendix A**) on the issues raised during the exhibition of the proposal. The RtS proposed the following design amendments:

- Buildings P1 and P2 (CPS) – minor design amendments to floor plans, modification to facade including enlargement of 'cut out' sections and additional landscaping screening.

- Building G (CPS) – provision of a 1m setback from the northern side boundary, associated adjustment to floorplan and provision of landscape screening.
- Building S (CHS) – minor adjustment to internal stair layout and facade treatment.

The RtS also included:

- Transport Impact Assessment (TIA) addendum.
- Noise Impact Assessment (NIA) addendum.
- letter of Interim Audit Advice by a NSW EPA accredited Site Auditor for both sites.
- revised BDAR to address matters raised by EESG.
- architectural RtS design statement.
- amended landscape plans.
- stormwater engineering advice.
- structural engineering advice for the existing retaining wall located along the northern boundary of the CPS site.
- CPS neighbour consultation template letter.

The RtS was made publicly available on the Department's website and was referred to the relevant public authorities. The Department received an additional five submissions from public authorities, including Council in response to the RtS.

Given that the submissions (both public authority) have been received outside the statutory community participation period, the Department has not placed these on the website. The Department has reviewed all submissions.

A summary of the issues raised in the public authority submissions is provided at **Table 6**.

Table 6 | Summary of public authority submissions to the RtS

Council

Council advised that the design changes and additional information submitted does not alter matters raised in Council's original submission.

Council stated that it is aware of the need to upgrade the school's facilities but reiterated its previous concerns regarding the bulk and scale of the CPS new buildings, traffic, parking, pedestrian safety and stormwater management.

Council referred the Department to conditions in the original submission should the proposal be approved.

TfNSW

TfNSW advised that it did not support the retention of the existing vehicle access on the Pacific Highway as it had not been demonstrated that the largest construction and operational service vehicles could enter and exit the site in a forward direction.

EPA

EPA noted that the RtS included an Interim Advice on contamination from an EPA-accredited auditor as requested. EPA provided revised recommended conditions on contamination.

EESG

EESG advised that the RtS had not addressed concerns in relation to the adequacy of information provided in support of the biodiversity offset calculations.

Heritage NSW

Heritage NSW advised that it had no further comments to make.

In response to submissions to the RtS and the Department's request, the Applicant provided a response to the comments made by TfNSW and EESG. This included the swept path analysis required by TfNSW and corrected biodiversity information requested by EESG. The information was referred to TfNSW and EESG.

EESG advised that the information was satisfactory.

TfNSW advised that the information provided indicates that construction vehicles could not enter and leave the site in a forward direction using the Pacific Highway access. TfNSW recommended conditions of consent, including those that would limit vehicles larger than an ambulance from using the Pacific Highway entrance.

6 Assessment

The Department has considered the EIS, the issues raised in submissions and the Applicant's RtS in its assessment of the proposal. The Department considers the key issues associated with the proposal are:

- built form and urban design.
- residential amenity.
- traffic, transport and accessibility.
- tree removal and biodiversity.

Each of these issues is discussed in the following sections of this report. Other issues were taken into consideration during the assessment of the application and are discussed at **Section 6.4**.

6.1 Built form and urban design

6.1.1 Height, bulk and scale – Chatswood Public School

The EIS explains that CPS has experienced substantial enrolment growth exceeding predicted current and future capacity. Consequently, there is significant pressure on available space and facilities including indoor learning spaces and outdoor play spaces. The proposal would generate significant benefit for the school community by providing new learning spaces, specialist teaching spaces, administration facilities, new halls and importantly an increase in the quantity and quality of outdoor learning and play spaces.

As described in **Section 1.1.1**, the CPS site is constrained due its topography, heritage buildings on-site and adjoining low scale residential dwellings. These constraints were recognised by the Applicant from the initial master planning stage of the proposed upgrades as the initial design approach was based on 'three schools' model. This model consisted of the primary school (kindergarten to year 6) and middle school (years 7-9) being located at the current CHS site and senior school (years 10-12) being located on the current CPS site. At that time, this approach was considered a good response to the site constraints by easing pressure on the limited space through reducing the number of students on the CPS site. However, after further investigation and following consultation with the school community, this option was not supported. Consequently, a revised masterplan was announced by the Applicant in September 2019 which adopted a change of approach to the design of the schools by retaining the primary and high schools on the existing sites and designing the upgrades to best respond to the site's constraints.

As outlined in **Section 2.1.1**, the new buildings would be positioned predominantly along the northern boundary of the site (**Figure 31**).

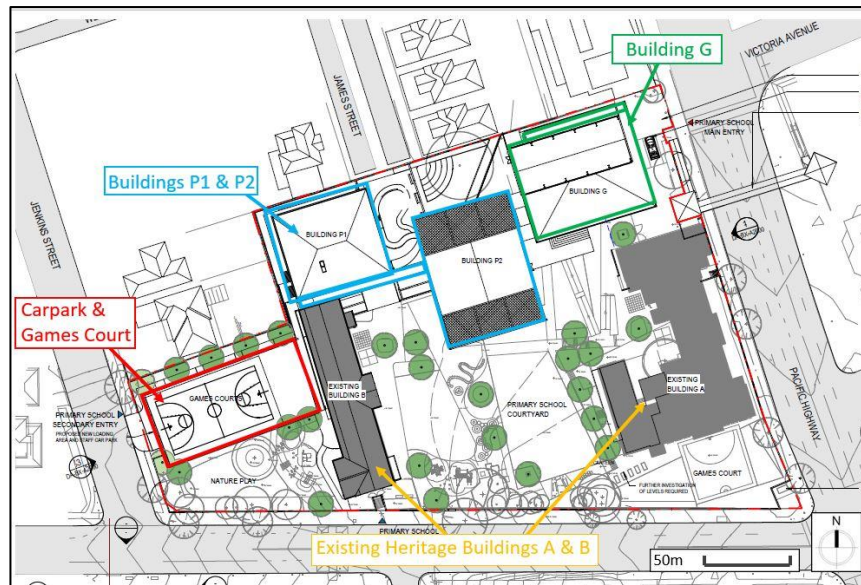


Figure 31 | CPS proposed site plan (Base source: RtS 2020)

The Applicant's rationale for the proposed design, siting and layout of the buildings is that it:

- maximises use of efficient and functional floor space while maximising outdoor play space at ground level, with good solar access.
- allows for views between the two heritage buildings to be retained.
- allows for easy access to Building G (Hall) by the community from the Pacific Highway and maintains the existing views of heritage Building A (looking south from the Pacific Highway).
- takes advantage of the existing levelled areas including the Lower, minimises excavation works and allows for direct level connections between the buildings.
- would improve traffic flow on Pacific Highway by relocating the staff carpark from the Pacific Highway to Jenkins Street.

Under the Willoughby Local Environmental Plan 2012 (WLEP), a height of building (HOB) control of 8.5m and floor space ratio (FSR) of 0.4:1 applies to the CPS site (**Figure 32** and **Figure 33**). As can be seen from the HOB and FSR maps, the site is located in between low-density land to the north and west and the higher density land of the Chatswood CBD to the east along the Pacific Highway. The site is described by the Applicant as being unique for its transitional location between development characteristics of the Chatswood CBD and the low-density residential development.

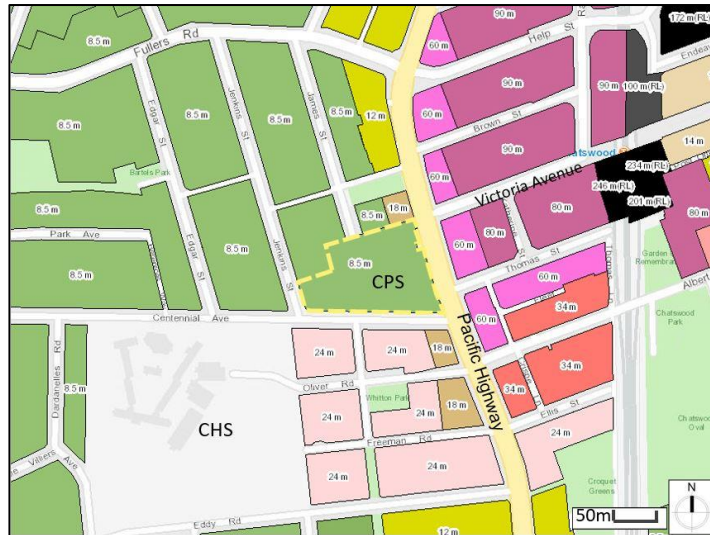


Figure 32 | WLEP HOB map (Base source: NSW Planning Portal, October 2020)

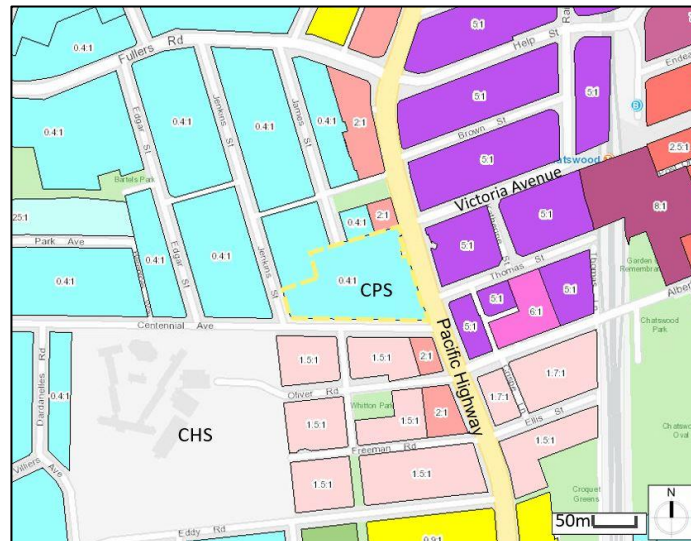


Figure 33 | WLEP FSR map (Base source: NSW Planning Portal, October 2020)

The proposal exceeds both the development standards with a proposed FSR of approximately 0.55:1 and maximum building heights as follows:

- Building P1 – 30.3m (RL 125.3).
- Building P2 – 27.4m (RL 124.8).
- Carpark with sports court above – 10.1m (RL 107.1).
- Building G – 8.9m (RL 116.0).

The proposed building heights relative to the 8.5m HOB development standard are illustrated in **Figure 34**, **Figure 35** and **Figure 36**.

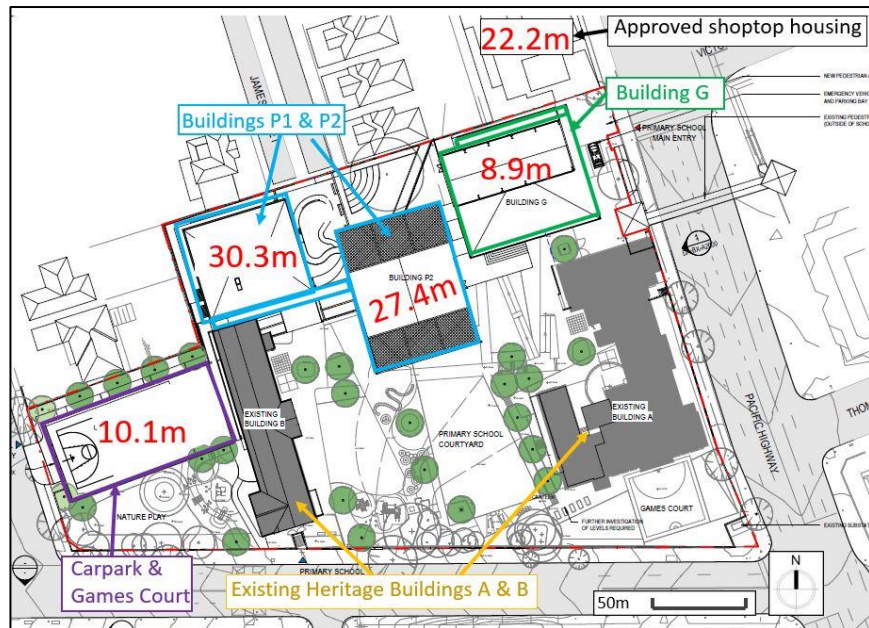


Figure 34 | Site plan showing proposed building heights (Base source: RtS 2020)

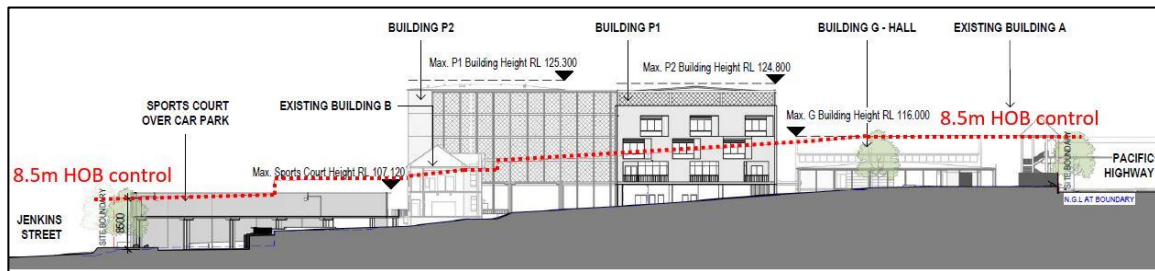


Figure 35 | West-east section (south facing) with 8.5m HOB control indicated in red (Base source: RtS 2020)

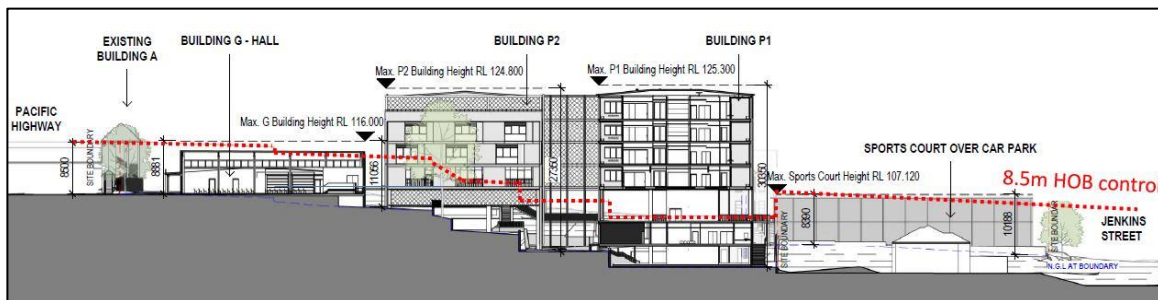


Figure 36 | East-west section (north facing) with 8.5m HOB control indicated in red (Base source: RtS 2020)

Clause 42 Education SEPP states “development consent may be granted for development for the purpose of a school that is State significant development even though the development would contravene a development standard under which the consent is granted”. As the provisions of the Education SEPP apply to this proposal, the proposed building height and FSR should be considered on merit.

The Department acknowledges that Council and surrounding residents raised key concerns with the built form, particularly height, bulk and scale of Buildings P1 and P2. Concerns were raised in the submissions that the proposal would be an overdevelopment of the site that would result in adverse impacts on the surrounding environment including impact on the amenity of adjoining neighbours, character of the streetscape and heritage. The Department acknowledges these views and considers

the site's unique location and constraints warrants the need to assess the bulk and scale on its merits and project need.

The Applicant's justification in the EIS for the proposed building height, bulk and scale is that:

- the built form would provide a visual transition between low density residential development and medium to high rise development along the Pacific Highway.
- the proposed built form is consistent with the objectives of the Chatswood CBD Strategy. Specifically, the objective which states:
With the growth of the centre, Chatswood will need to ensure it has the social infrastructure to support it, specifically:
Education Facilities – There is the opportunity to consider new models to cater for growth such as vertical schools and the ability for schools to share their facilities for community uses, such as open space.
- the desired future character of the Chatswood CBD (including the CPS site) is increased density based on a combination of Council's Chatswood CBD Strategy and statutory planning controls. Accordingly, the proposed built form would be consistent with that contemplated in a transitional area and the desired character of the CBD.
- the visual impact of the built form is consistent with the higher density buildings that characterise the outlook to the east as well as the potential future development based on the strategic objectives and existing statutory development controls (**Figure 37**).



Figure 37 | Perspectives of CPS provided as part of the Applicant's justification for height, bulk and scale (Source: RtS, October 2020)

- the built form would not 'dominate' the street frontage on Jenkins Street as it is located within the site away from the interface with the public domain.
- the proposal is consistent with the transitional character of the site having regard to its gateway position between the low density areas to the west and the high density development of the CBD to the east as well as development lining both sides of Pacific Highway.

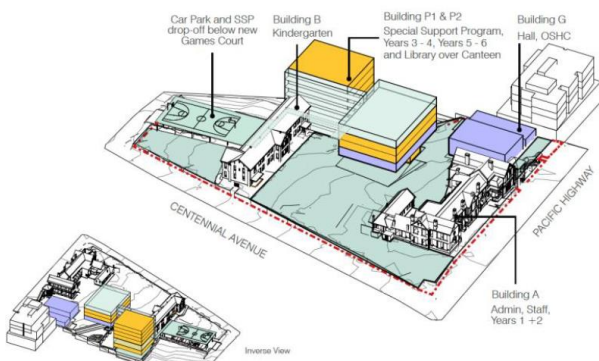
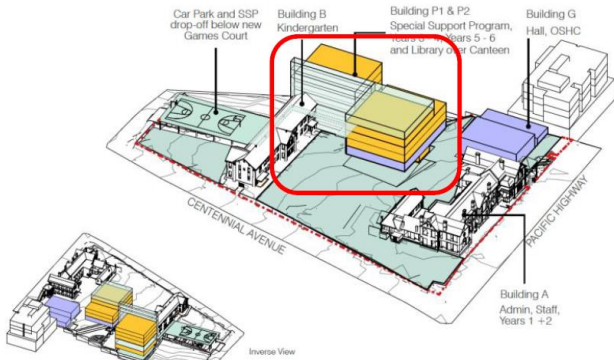
- while proposed Buildings P1 and P2 would have some bulk and scale impacts on neighbouring properties, these impacts could be appropriately mitigated.

Despite the Applicant's justification from the EIS summarised above, the Department still held concerns with the height, bulk and scale of the proposal. The Department raised particular concerns with the height, bulk, scale and lack of articulation of Building P1 due to its close proximity to the adjoining low scale residential properties and associated impacts on residential amenity. The Department also raised concerns with the Applicant about the proposed nil setback of Building G from the northern side boundary and the impact this would have on the adjoining residential property.

The Department advised the Applicant that while additional height above the 8.5m HOB control of WLEP could be considered by the consent authority under Clause 42 Education SEPP, any additional height would need to be carefully located on the site having regard to the immediately adjoining built form scale and retention of residential amenity. Given there is higher density development along the Pacific Highway, the Department considered that a logical site planning option would be to shift the additional height, bulk and scale towards the Pacific Highway portion of the site. The Department advised the Applicant that alternative design options should be explored where the bulk and scale could be moved to other locations on the site to reduce amenity impacts on adjoining residents.

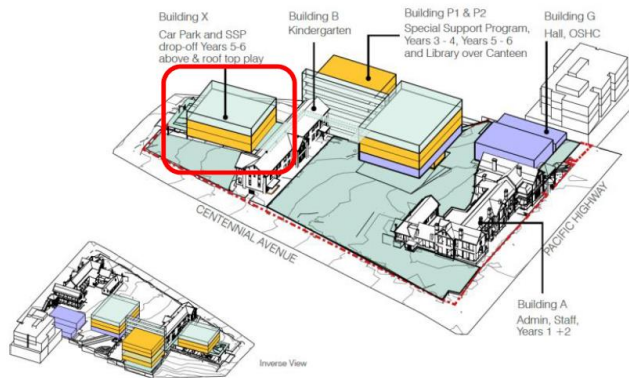
Prior to submission of the RtS, the Applicant presented a number of alternative design options to the Department which included an analysis of the 'positives' and 'negatives' of each of the design options (Table 7).

Table 7 | Alternative design options (Base source: RtS, October 2020)

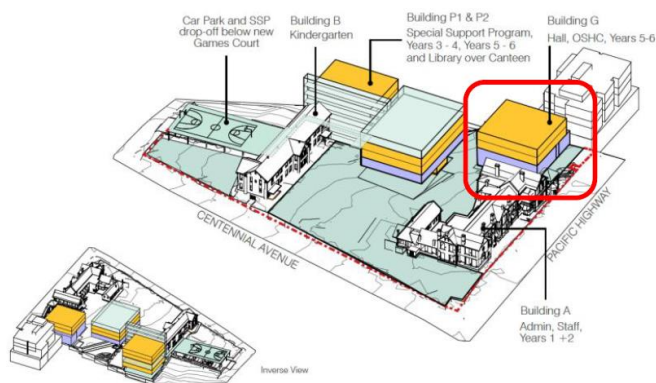
Design options	Applicant's comments
	<p>Preferred: Current scheme maximises play space, connects to outdoor spaces from learning neighbourhoods, retains visual connection between Building A and B, maintains streetscape character and is within project program, budget and staging requirements.</p> <p>The built form results in bulk and scale impacts on neighbouring properties at 1 and 3 Jenkins Street.</p>
	<p>Option 1 disconnects access to roof top play space on P2, reduces the overall play space by removing roof top play space. The relocation of building height to P2 will increase height, bulk and scale impacts on residents at 1 James Street. Moderate level heritage visual impacts on Building A by increasing height adjacent to Building A. Additional costs, significant additional delay, requirement for additional lift to P2 and additional bridge connection for equitable access to roof top.</p>

Design options

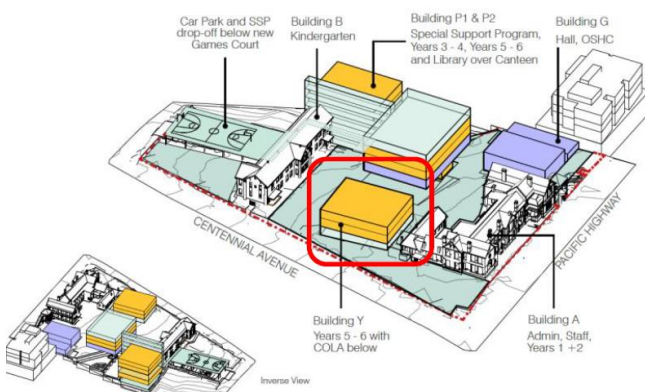
Applicant's comments



Option 2A disconnects half of a school stage group from their peers, reduces games courts resulting in less outdoor play space. Students and staff at the new building have to travel further to connect with other classrooms, play areas and staff facilities. The addition of height adjacent to Jenkins Street frontage is not in keeping with the streetscape. The additional built form will exacerbate the Department's issue about the 'boxed in' feeling for residents. Potential heritage impacts on heritage item across Jenkins Street. Additional costs, significant additional delay, significant impacts on staging of works and construction of car park requires additional core and lifts which affect floor plan efficiency.



Option 2B disconnects access of roof top play areas, disconnects half a stage group from their peers and teachers from colleagues. Additional storeys atop Building G will diminish the landmark qualities of Building A's streetscape presence. Additional levels will read as secondary to Building A. Potential additional privacy and amenity issues for approved residential building to the north would arise from the western portion of the new building. Cumulative impacts for residents at 1 James Street will be excessive. Additional costs, significant additional delay, and new building would require additional core and lifts that affect planning and efficiency.



Option 2C would disconnect students from their peers, reduce the availability of open outdoor play space, increase the building footprint creating a crowded site, increase supervision burden for all play areas, disconnect early stage and Stage 1 students, and reduce legibility of the site for students. The new building would result in a loss of visual connection between Building A and B, CPTED issues arising from reduced supervision. Potential additional heritage impacts of new built form. Additional costs, significant additional delays, location is highly challenging to build and would affect construction staging and major disruption to

Design options	Applicant's comments
	ongoing operation of school during build phase.

In the RtS, the Applicant explains that the extensive design process review, assessment and investigation carried out responds to the concerns raised in the public submissions and by the Department. The Applicant states that this review process confirms that there are no alternative options for reducing the building height, bulk and scale. The Applicant considers that the proposed design of Building P1 represents the most equitable balance of impacts and achieves a design outcome that is of a high quality, maintains most environmental amenity outcomes for neighbouring properties and resolves a wide number of access, play, teaching and safety issues across the CPS site. The Applicant advised the Department that if an alternative design was required to be undertaken, it would add significantly more time and costs to the project (approximately \$10 million). The Department considers that it would not be in the public interest to add significant time and costs to the project.

However, the Department still held significant concerns with the lack of articulation to the facade of Building P1 where it interfaces with the adjoining residential properties. The Department considered that the facade of Building P1 would result in a poor outlook from the private open space of the adjoining residential properties. The Department requested design amendments to the facade to break up the mass and provide some relief to the form.

In response to these concerns raised by the Department, the Applicant the provided the following amendments to the proposal as part of the RtS:

- increased setback at the north-west corner of Building G by 10.9m from the adjoining residential property (1 James Street). Provision of an overall 1m minimum setback from the northern side boundary (**Figure 38**).
- increase to the size of the 'cut-outs' within the external brick work of the western facade of Building P1 (**Figure 39**) to break up the bulk and scale and provide visual relief to the building mass.
- creation of shallow recesses to the brick facade of Building P1 and P2 to provide articulation (**Figure 40**).
- provision of a darker coloured brick to the lower two levels of Building P1 with the upper levels of the facade consisting of a lighter coloured brick (**Figure 41**) to provide visual interest. The original proposed brick facade was one colour.
- additional landscaping within the COLA and at ground level between Building P1 and the adjoining properties to soften the appearance of Building P1 and provide visual privacy. There would also be an option for landscaping to adjoining residential private open space (subject to the landowner's agreement) in order to provide additional screening (**Figure 42**).

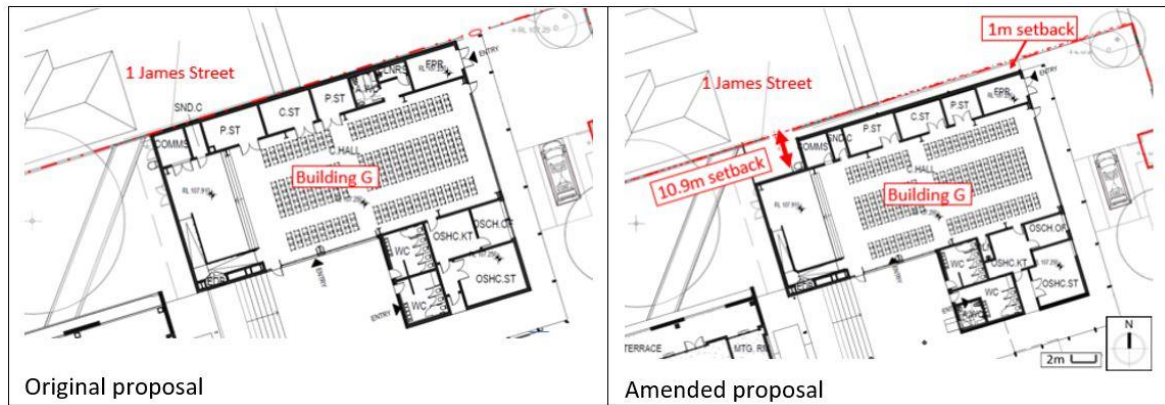


Figure 38 | Comparison of original and amended design of Building G (Base source: EIS and RtS 2020)



Figure 39 | Comparison of original and amended western facade of Building P1 (Base source: EIS and RtS 2020)

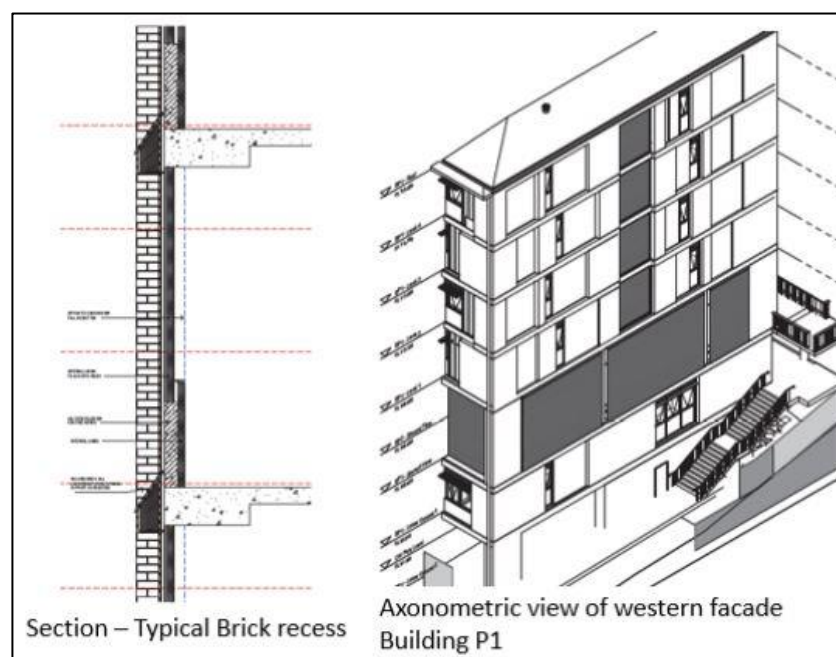


Figure 40 | Proposed brick recesses to Building P1 facade (Base source: RtS 2020)

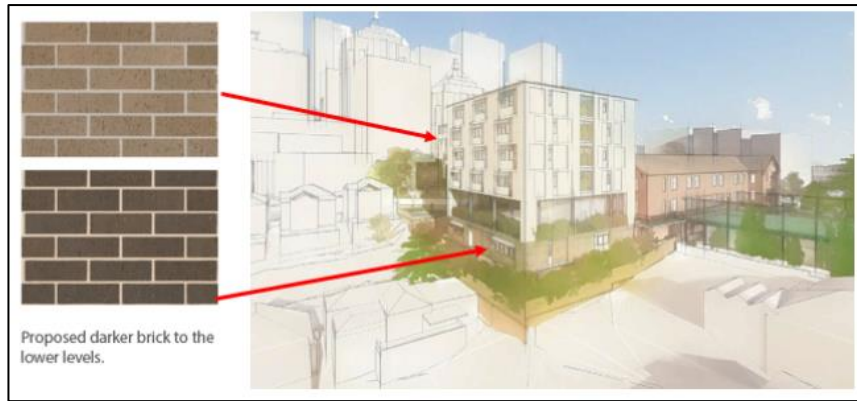


Figure 41 | Proposed darker and lighter coloured bricks for Building P1 facade (Base source: RtS 2020)

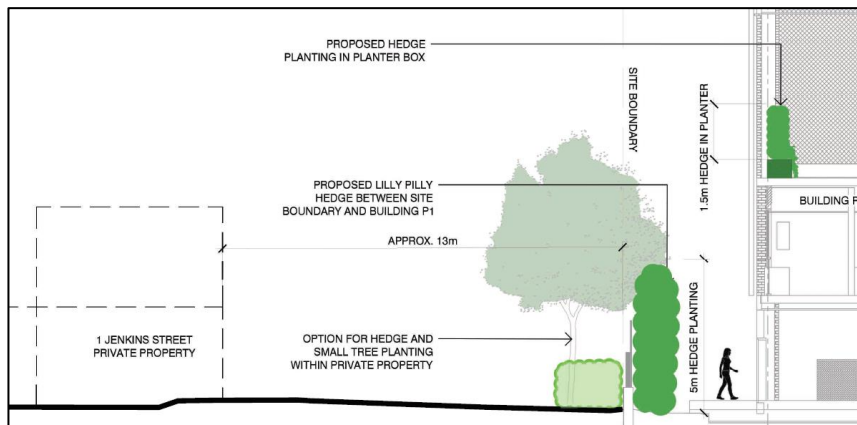


Figure 42 | Landscape section showing proposed landscaping within and surrounding perimeter of Building P1 (Source: RtS 2020)

The Department acknowledges that Buildings P1 and P2 would be substantially higher than the adjoining low scale residential dwellings and there would be associated amenity impacts including loss of outlook from the private open spaces. The impacts particularly arise from Building P1 as it is located closer to the northern side boundary. Mitigation measures would be incorporated into the design including facade articulation through the 'cut-out' sections and shallow brick recesses which would provide some articulation and relief in the bulk and scale of the buildings. The proposed landscaping screening would soften the appearance of the buildings.

Additionally, the Department has recommended a condition of consent requiring the Applicant to consult with the adjoining residential property owners (1 and 2 James Street and 1 and 3 Jenkins Street) about the Applicant undertaking landscaping works to their private open space. An option would include the planting of hedges and/or trees as shown in **Figure 43**. This would further assist in screening the visual impact from proposed Buildings P1 and P2. This would be subject to agreement by the landowners and all costs for the improvement works to the private open spaces would be borne by the Applicant. In the RtS, the Applicant advised that they have commenced initial consultation with the adjoining landowners about these works.

The Department concludes that due to the constrained nature of the site and need for the development to provide sufficient school facilities to meet the growing school population, the additional height, bulk and scale is unavoidable and justified in this particular case. The Department concludes that the proposal has been designed to respond appropriately to the site and its context,

while balancing the need to provide for the demand for additional improved educational facilities. For these reasons, the proposal would be in the public interest.

6.1.2 Built Form – Chatswood High School

The CHS site is not subject to a HOB and FSR control under WLEP. To the north, south and west of the CHS site a HOB of 8.5m applies and adjoining the site to the east, a HOB of 24m applies under WLEP (**Figure 32**). The proposed buildings have the following maximum building heights:

- Building Q – 15.4m to the top of the roof and 19.1m to the top of the roof plant.
- Building S – 19m.
- Building T – 10.8m.

Elevations of the existing and proposed buildings as viewed from Centennial Avenue are shown in **Figure 43** and **Figure 44**. While the new buildings reach a maximum of 5 storeys, due to the topography of the site and setbacks from Centennial Avenue, the new buildings would appear as a maximum of two to three storeys as viewed from Centennial Avenue (**Figure 45**).

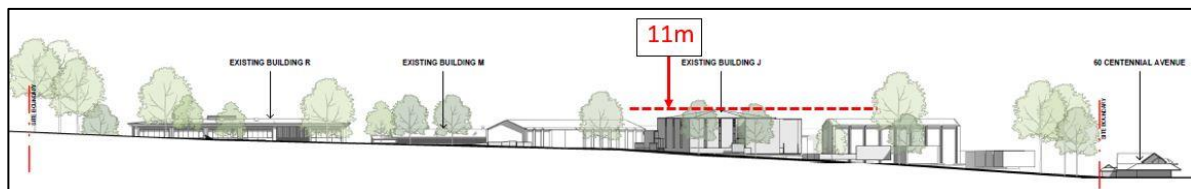


Figure 43 | Existing Centennial Avenue (north) elevation (Base source: EIS, 2020)

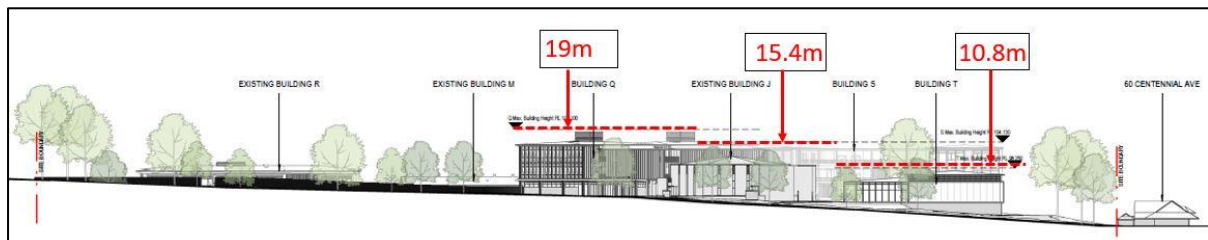


Figure 44 | Proposed Centennial Avenue (north) elevation (Base source: RtS, 2020)

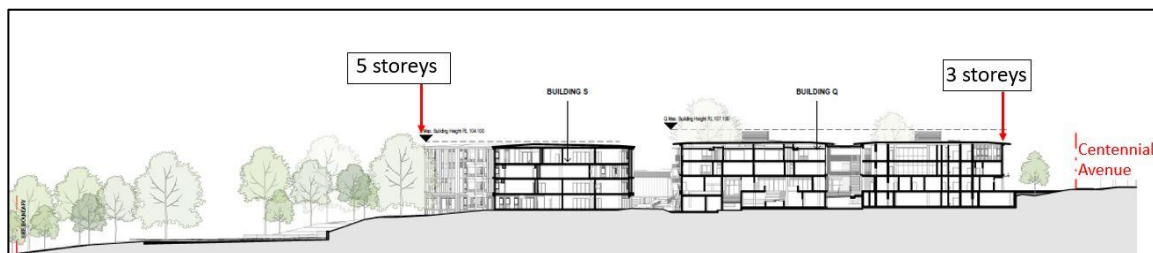


Figure 45 | Proposed section (south – north) west facing (Base source: RtS, 2020)

The Department considers that the proposed building heights are compatible with and would provide a positive contribution to the streetscape. The siting of the new buildings respects the existing front setback from Centennial Avenue and includes generous side setbacks. The proposed buildings would be compatible with the existing character of the school described in the architect's design statement as a 'bush campus'. The proposed external materials are of a high quality and include a natural colour palette consistent with the character of the school and streetscape.

The proposal is consistent with the relevant objectives of the HOB and FSR WLEP development standards in that the site planning, bulk and scale is appropriate for the upgrade of an existing school and facilities required to accommodate a growing school population on a large site in an urban context. The proposed building heights, bulk and scale would not result in unreasonable amenity impacts on surrounding properties such as disruption of views, visual intrusion, loss of privacy or overshadowing. The new buildings would have minimal impacts on nearby heritage items (see **Section 6.1.3**).

In consideration of the above, the Department concludes that the proposed height, bulk and scale and materiality of the buildings would be acceptable within the site and surrounding context.

6.1.3 Heritage and streetscape character

As discussed in **Section 1**, the entire CPS site is a local listed heritage item (I106) in Schedule 5 of WLEP. There are also three heritage items located near both sites at 9, 19 and 60 Centennial Avenue (**Figure 46**). All these properties are listed as ‘house (including original interiors)’ of local significance in WLEP. The CHS does not contain any buildings of heritage significance.



Figure 46 | WLEP heritage listing of CPS site and nearby properties (Base source: NSW Planning Portal, October 2020)

Public submissions raised concerns with the impact the proposal on the CPS site would have on the heritage significance of Buildings A and B and on nearby heritage items.

The Applicant’s EIS was supported by a Heritage Impact Statement (HIS) which indicates that the site is not subject to a Conservation Management Plan. The HIS found that the CPS site is socially significant for its use as a school since 1895 and that Buildings A and B are locally significant as grand school buildings in a setting which gives aesthetic significance to the streetscape and provides distinctive open space called ‘the Lovers’.

Buildings A and B and the Lowers would be retained under the proposal. Existing buildings surrounding the heritage buildings would be demolished with the new buildings contained to the northern portion of the site (**Figure 47** and **Figure 48**).



Figure 47 | CPS existing site plan with buildings to be demolished shaded red (Source: RtS 2020)

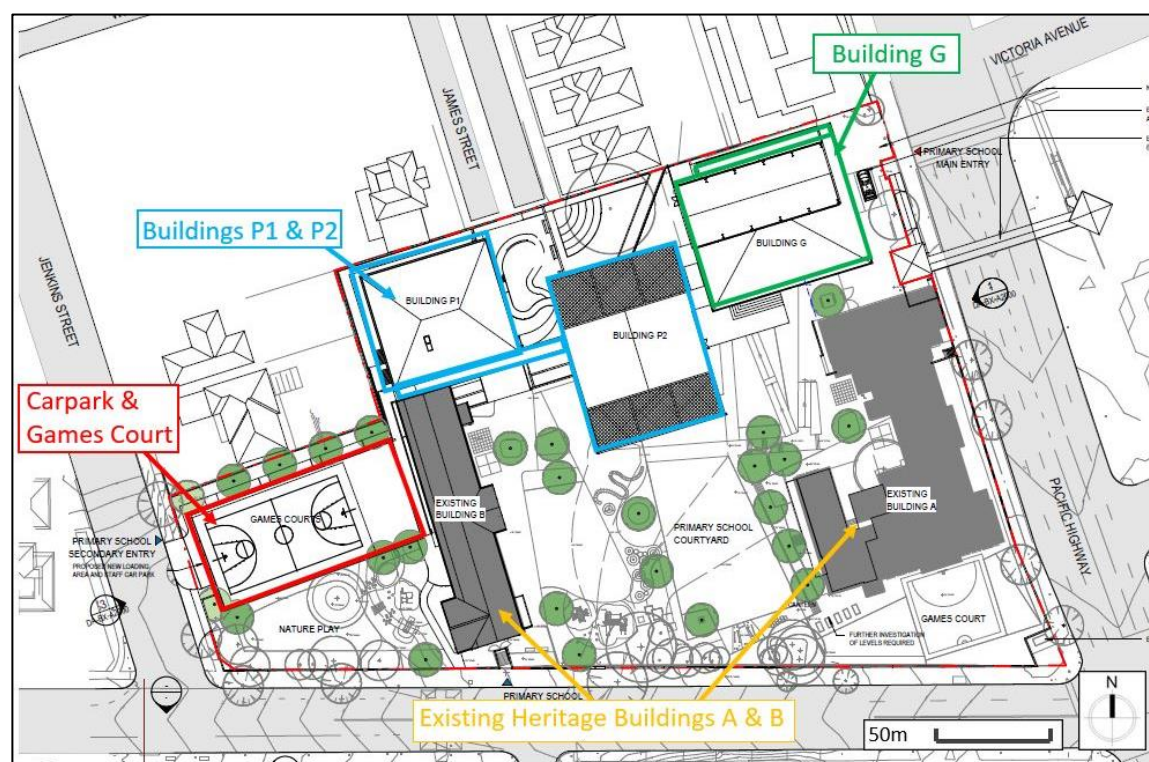


Figure 48 | CPS proposed site plan (Base source: RtS 2020)

The HIS reviewed the impacts of the proposal on the heritage significance of the CPS site and nearby heritage items and found that:

- the proposal improves the visibility of the heritage buildings from the streetscape and within the site. This would be achieved through the siting of the new buildings along the northern portion of the site and demolition of existing buildings which would provide increased visual curtilage and a reduction in visual clutter on the site.
- the location, height and scale of Buildings P1 and P1 would disrupt some district views from within the site. The proposed retention of mature trees between Buildings A and P2 would significantly reduce the negative visual impact of the bulk and scale of the new buildings on-site.
- currently, views of Building B from Jenkins Street are restricted by Building C, Building I and demountable buildings. These buildings would be demolished, and this would result in increased visibility of Building B from the streetscape. While the carpark with sports court above would be in front of Building B as viewed from Jenkins Street, a minor visual impact would occur as it would not present as a solid mass and allow visibility of Building B.
- no new structures would be built in front of the established building line on Pacific Highway which would allow views of Building A to be maintained.
- while the new hall (Building G) would be within the curtilage of Building A, due to its lower height and mass, it would be visually subservient to Building A particularly when viewed in the broader streetscape setting of the Chatswood CBD.
- the proposed predominant use of brick for the new buildings complements the existing language of the heritage items without competing with their heritage significance. In addition, the proposed buildings are designed with low pitched and flat roofs and the new buildings would not compete with the existing language of the heritage buildings which include gabled roof forms with decorative features.
- the proposal would have minimal impacts on the heritage items located at 9, 19 and 60 Centennial Avenue due to the distance of these items from the new buildings.

In relation to the new buildings on the CHS and impact on nearby heritage items at 9, 19 and 60 Centennial Avenue, the HIS found that the heritage items at 9 and 19 are located a considerable distance of 50m from the nearest proposed Building Q. Accordingly, it concluded that the proposal would have minimal impacts on the heritage items. The heritage item at 60 Centennial Avenue shares its western boundary with the CHS site. The HIS found that the proposed buildings would have a minor visual impact upon the setting and heritage significance. However, this visual impact would be mitigated through the dense planting of trees between the heritage item and the CHS site.

Heritage NSW advised that the HIS is satisfactory and raised no concerns with the proposal's heritage impact. Council's submission advised that the proposal is satisfactory from a heritage viewpoint. In relation to the proposal on the CPS site, Council noted:

- that the front setback of Building H (hall) would be behind the setback of Building A from Pacific Highway and would improve northern views of Building A from Pacific Highway. Views of Building A would be further facilitated through the removal of existing Building D. Adequate distance would be provided from proposed Building H and the Building and accordingly would not impact on the curtilage of Building A.
- no objections are raised to the erection of Buildings P1 and P2. Although these buildings would increase the building height on the site, they are located away from the curtilage of Buildings A and B. The proposed buildings would leave a greater space and reduce clutter

around the heritage buildings. Opening up the internal courtyard would enhance views between Buildings A and B.

- demolition of the demountable buildings on the southern side of the CPS site would improve views of Building B which is currently obscured by these buildings. No heritage objection is raised to the new car park with sports court above on Jenkins Street.
- the new buildings on the CPS site are located a sufficient distance from nearby heritage items and unlikely to impact on their heritage significance.

In relation to the proposal on the CHS site, Council advised that:

- proposed Building T is separated from the heritage item at 60 Centennial Avenue by a substantial landscaped area which would provide adequate separation. No concerns were raised with the location of proposed Building T in relation to the heritage item.
- there would be no impact on the existing heritage items at 9 and 19 Centennial from the proposal due to its distance and physical separation.

The Department has considered the issues raised in the submissions and the advice of Heritage NSW and Council. The proposed form and external appearance of each building uses appropriate materials which are sympathetic to the heritage buildings on-site, character of the streetscape and which serve the function of the school. Considering advice contained in the HIS, Heritage NSW and Council which do not raise concerns with proposal's impact on the heritage, the Department concludes the proposal would have minimal heritage impacts.

6.1.4 Residential amenity

The Department's assessment of impacts on neighbouring dwellings has considered the following key matters arising from the proposal:

- overshadowing.
- visual privacy.
- visual outlook and view loss.

6.1.4.1 Chatswood Public School

Public submissions raised concerns with the impact that the new CPS buildings would have on residential amenity by way of overshadowing, visual privacy, visual outlook and view loss.

In terms of overshadowing, the proposal would have minimal additional impacts on the adjoining residential properties' solar access due to the site orientation and the extent of existing overshadowing caused by the high-rise buildings within Chatswood CBD. Shadow diagrams included with the EIS (**Figure 49**) show that the residential properties to the north of CPS are predominantly overshadowed until 10am on 21 June (winter solstice).

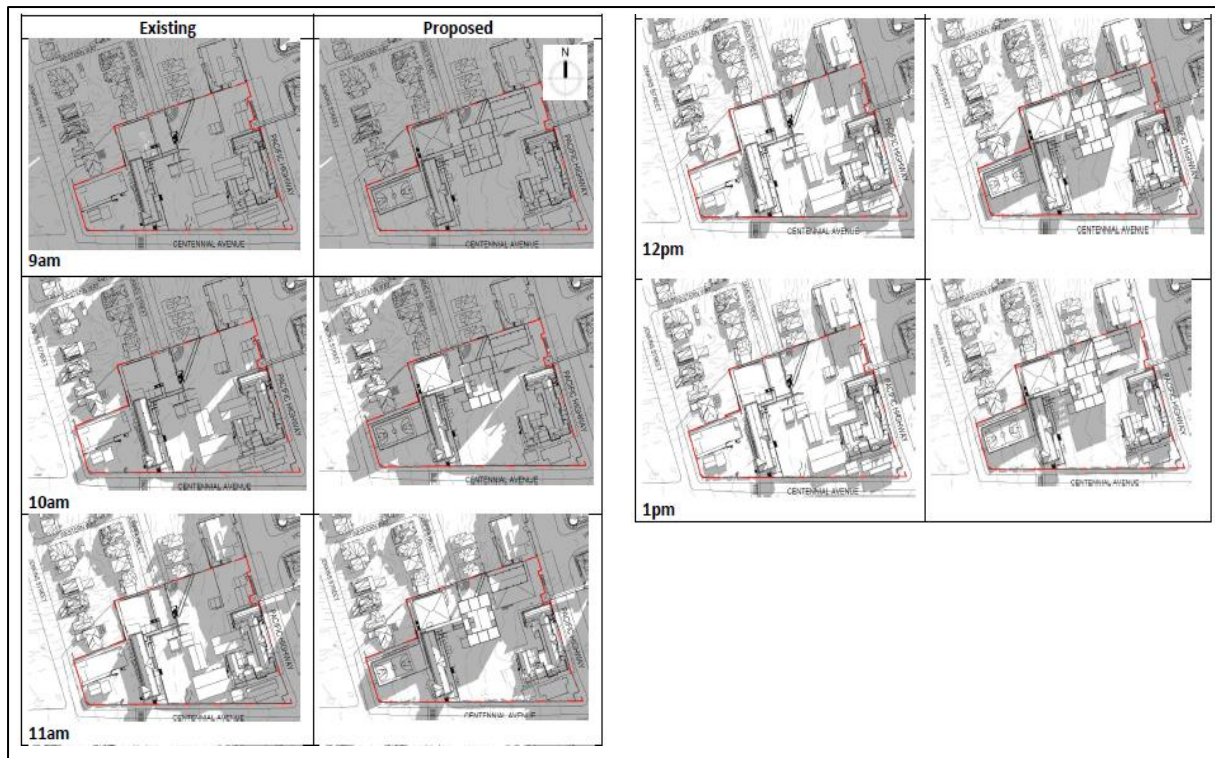


Figure 49 | CPS shadow diagrams (Base source: EIS 2020)

The residential properties that would be subject to additional overshadowing from the proposal are 1 and 3 Jenkins Street which are directly west of proposed Building P1 (**Figure 50**).

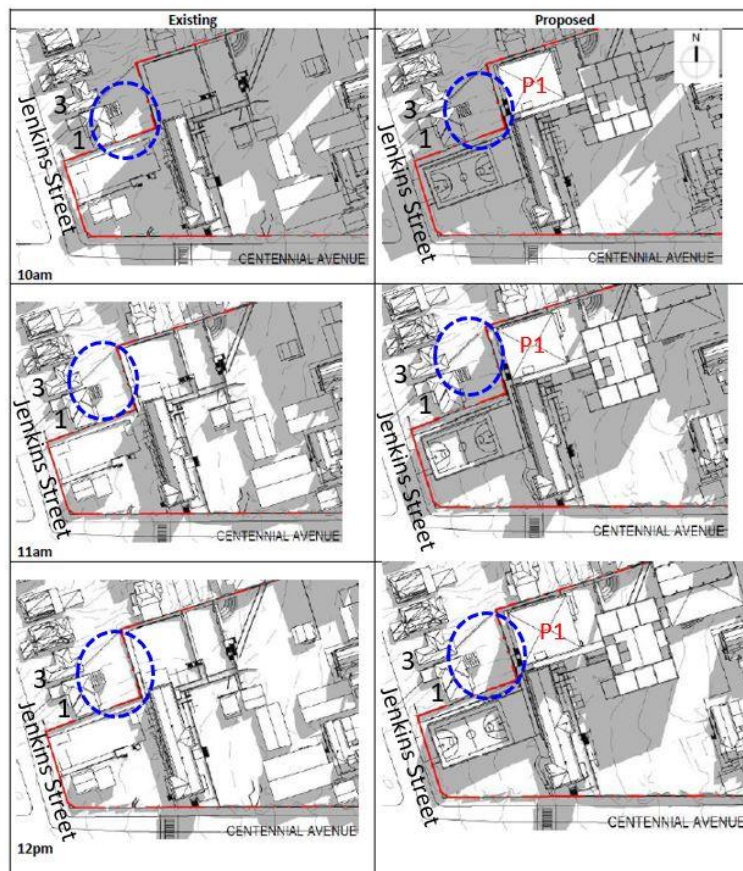


Figure 50 | Shadow diagrams showing additional overshadowing to private open space of 1 and 3 Jenkins Street (Base source: EIS October 2020)

Currently, approximately 50 per cent of the private open space of 1 Jenkins Street starts to receive solar access from 10am. The proposal would result in overshadowing of the entire private open space for an additional hour between 10am and 11am. However, from 11am onwards, the private open space at 1 Jenkins Street would start to receive solar access again. The proposal would result in minor additional overshadowing of the private open space of 3 Jenkins Street between 11am and 12pm. However, after 12pm, both 1 and 3 Jenkins Street would receive solar access to their dwelling and more than 50 per cent of their private open space. Overall, the proposal would not result in the adjoining dwellings and their private open receiving less than three hours of solar access on 21 June which is consistent with the solar access provisions of contained in WDCP.

In terms of visual privacy, the Department considers that adjoining residential properties which could potentially be impacted by overlooking from the proposal without mitigation measures include 1, 3 and 5 Jenkins Street and 2 James Street. Potential lines of sight into the private open space of these residential properties from proposed Building P1 and the rooftop sports court above the carpark are shown in **Figure 51**. The northern and western elevations of Building P1 and the rooftop sports court are provided at **Figure 52** to show the openings and facade treatment which interface the subject private open spaces.

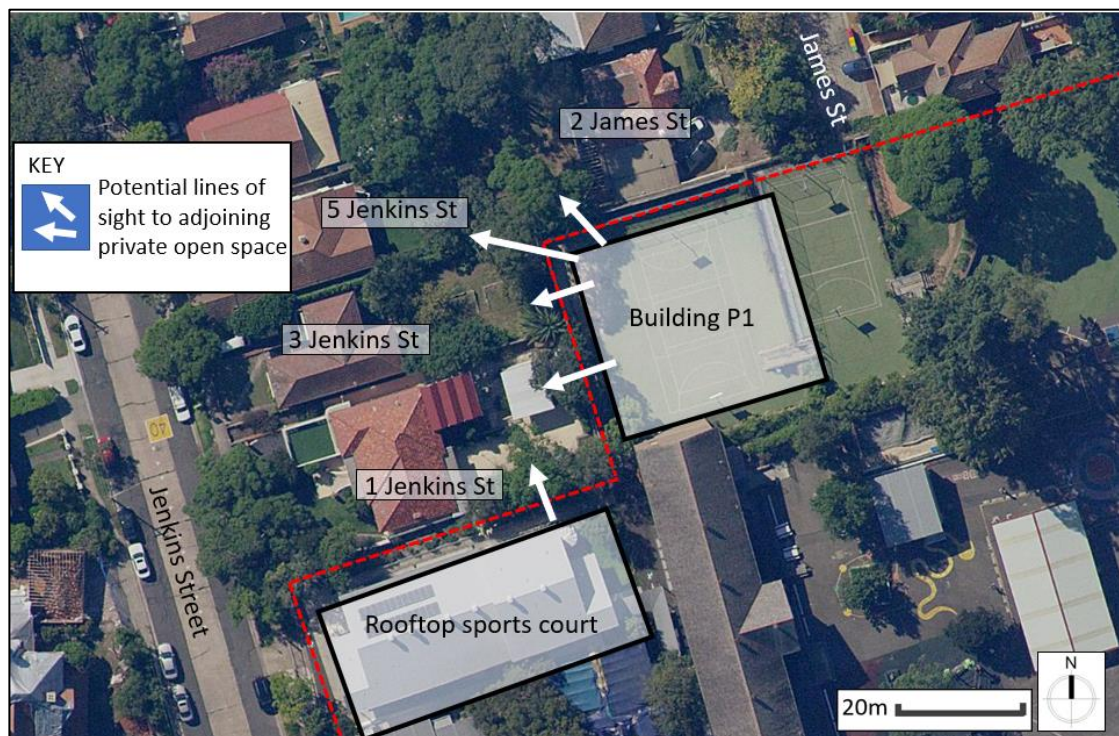


Figure 51 | Aerial view of adjoining dwellings showing potential lines of sight from proposal (Base source: SIX Maps, October 2020)

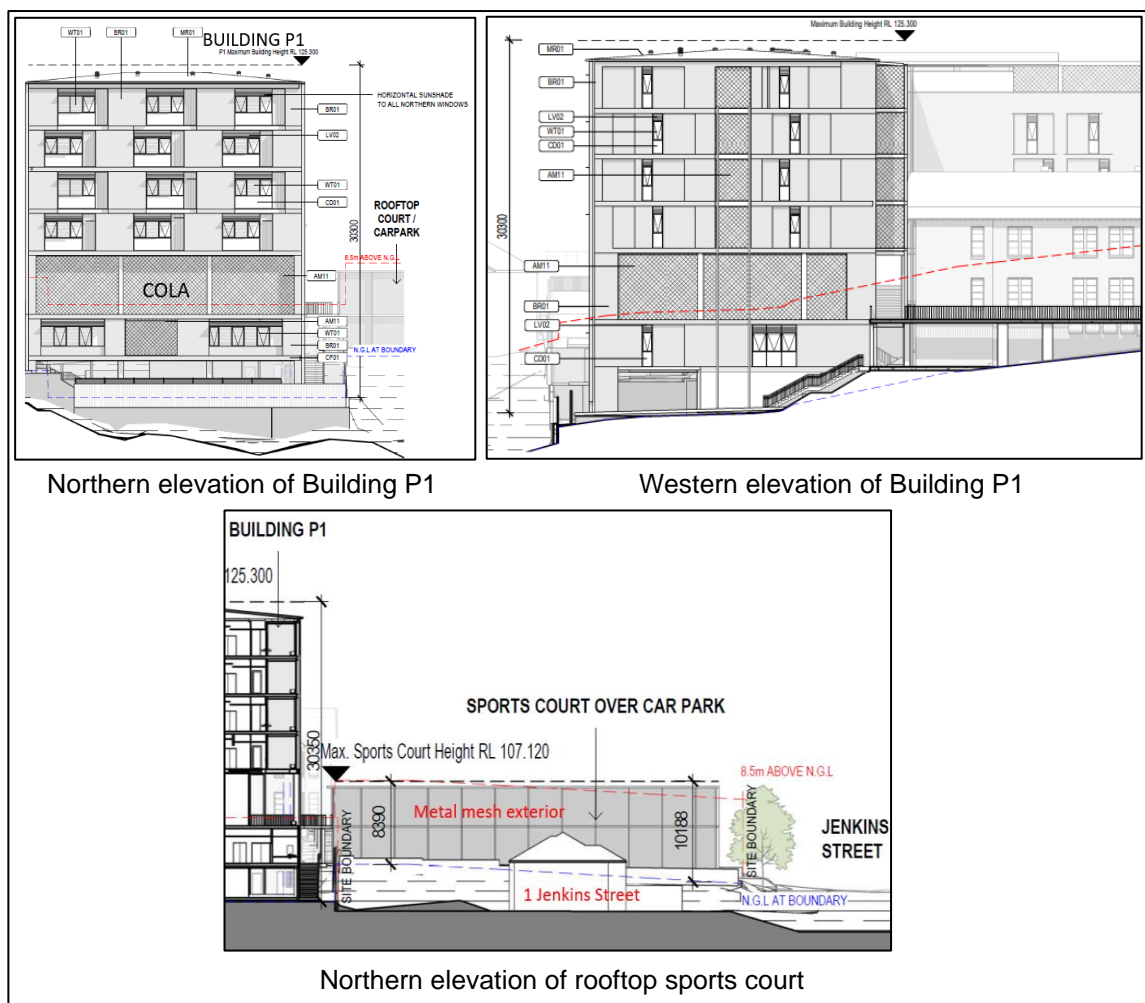


Figure 52 | Selected P1 and carpark elevations (Base Source: RtS 2020)

There is minimal glazing on the western elevation of Building P1 to reduce unwanted heat gain in summer. The northern elevation of Building P1 would contain more glazing to increase the opportunity for sunlight within the learning spaces. The sill heights of the windows would allow for oblique views out of the building rather than views directly down to the adjoining residential properties.

The facade of Building P1 also contains large openings for the COLAs as well as open circulation corridors which would be enclosed with a metal mesh. As discussed in **Section 6.1.1**, these 'cut out' elements are supported as they assist in breaking up the bulk and mass of the facade. However, the Department acknowledges that the openings in the facade would also potentially create opportunities for overlooking into the adjoining residential properties. In this regard, the Applicant advised that screen planting is proposed to the perimeter of the COLAs for privacy. The planting selected for the COLAs is 'Indian Hawthorn' which is an evergreen shrub that can grow up to two metres in height in a planter box. The Applicant advises that the Indian Hawthorn shrub is a good species for screen planting as it would grow to a suitable height for privacy while still ensuring adequate daylight into the COLA. In addition, hedge planting (Lilly Pilly) is proposed around the perimeter of Building P1 and between the side boundary to provide additional visual screening at the lower levels of the building (**Figure 53**).

While no screen planting is proposed for the open corridors, the Department considers that as students and teachers would be using these areas for circulation rather than areas to congregate, there would be limited opportunities for overlooking into the adjoining properties.



Figure 53 | Interface of Building P1 and adjoining residential property showing privacy landscaping treatment (Source: RtS 2020)

To manage the visual privacy impacts from the rooftop sports court, the Applicant advised that climbing plants would be planted to grow up vertical tension wires and to the metal mesh in order to create a green screen to the northern facade. In addition, trees (Feijoa) reaching a mature height of five metres would be planted along the perimeter of the carpark and between the northern side boundary for additional privacy screening (**Figure 54**).

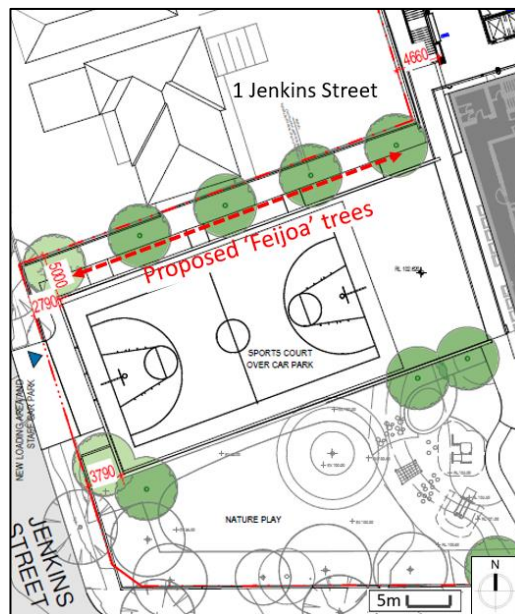


Figure 54 | Proposed tree planting along northern side boundary (Source: RtS, 2020)

The Department acknowledges that it is likely there may still be some views out from the windows, COLAs, external corridors of Building P1 and from the rooftop sports court. However, any views would predominantly be oblique views or partially obscured views. The Department considers this to be reasonable in an urban context. Overall, the Department concludes that the landscaping treatment is acceptable in order to maintain a reasonable level of privacy to the adjoining residents while

balancing the need to provide adequate natural light to learning spaces and the COLAs for student amenity.

Additionally (discussed in **Section 6.1.1**), the landscaping works to be undertaken by the Applicant on the adjoining residential properties in order to improve the visual outlook from the bulk and scale of the new buildings may also assist in providing additional privacy from perceived overlooking.

Concerns were raised in the submissions regarding view loss and loss of visual outlook due to the proposal, particularly Buildings P1 and P2. The Department acknowledges these concerns and understands that the proposal would impact on the visual outlook from the adjoining residential properties. However, as detailed in **Section 6.1.1**, the height, bulk and scale is justified in this particular case and the proposal includes measures to lessen the visual impact of the proposal on the outlook from the adjoining properties.

6.1.4.2 Chatswood High School

The closest adjoining residential properties to the new buildings on the CHS site would be the properties adjoining the site's western side boundary. Buildings S and T would be located approximately 25.8m and 25.8m respectively from the western side boundary (**Figure 55**). Public submissions raised concerns regarding the visual impact of the proposal, particularly from the western elevation of Building T (**Figure 56**).

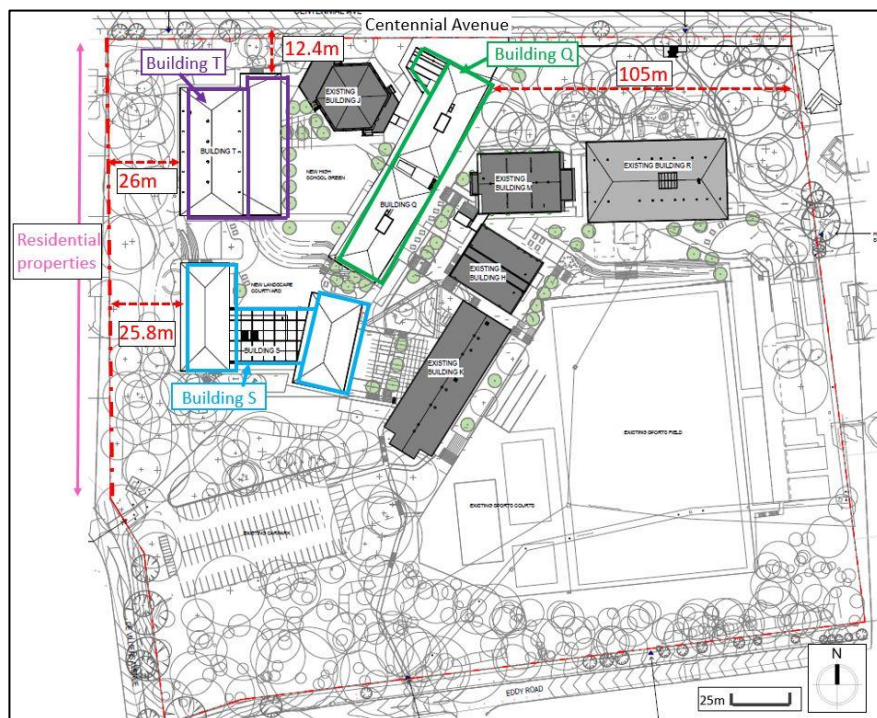


Figure 55 | Proposed CHS site plan with distances of new buildings from adjoining residential properties indicated (Base source: EIS 2020)

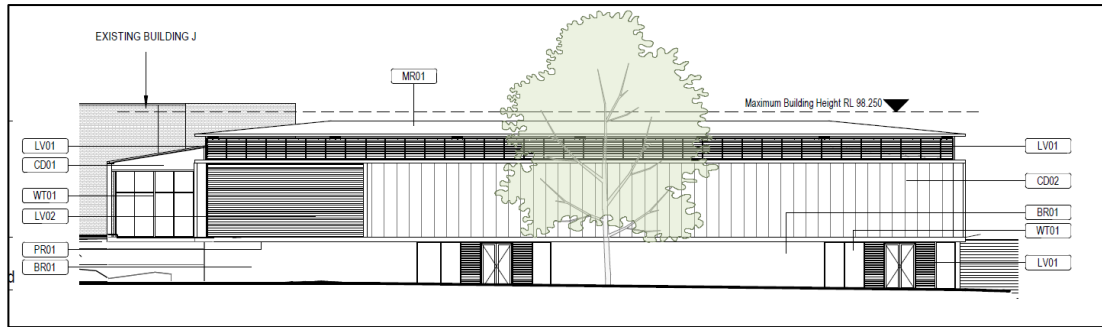


Figure 56 | Western elevation of Building T (Source: EIS 2020)

There is currently dense tree planting along full length of the western boundary which would be retained (**Figure 57**). The height of Building T is below the height of existing Building J and would predominantly sit below the tree line. The building heights coupled with the dense vegetation and generous side setbacks would result in a substantial visual buffer between the new buildings and adjoining residential properties. Accordingly, the Department considers there to be minimal residential amenity impacts in terms of visual privacy or visual impact from the proposed CHS buildings. Due to the height, setbacks and siting of the new buildings, there would be no perceptible overshadowing impacts to adjoining residential properties.

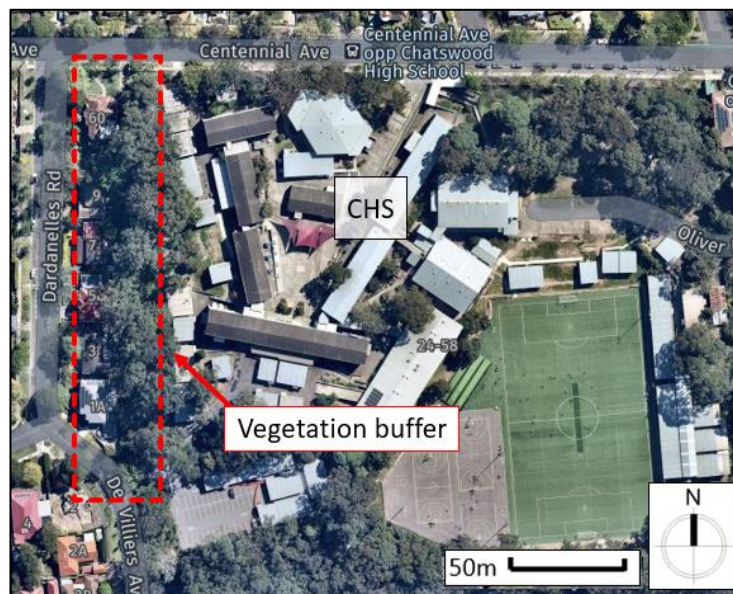


Figure 57 | Aerial view showing vegetation between CHS and adjoining residential properties to the west (Base source: Nearmap 2020)

6.2 Traffic, transport and accessibility

A Transport Impact Assessment (TIA) was submitted with the EIS and a TIA addendum included in the RtS. TfNSW, Council and the Department made comments and raised queries in relation to the TIA following exhibition of the EIS, as detailed in **Section 5**.

The TIA, as supplemented by the RtS, provides an assessment of existing conditions surrounding the sites and transport impacts associated with the proposal including:

- existing traffic and parking conditions.
- existing school travel patterns.
- traffic generation and distribution.

- forecast intersection and network performance.
- parking, pedestrian and bicycle requirements.
- assessment of proposed access arrangements.
- general transport impacts of the proposal.
- service vehicle requirements.
- construction access and traffic management.
- traffic generation mitigation measures.

As detailed in the EIS and RtS, the Department of Education is in the early phase of planning for the provision of a new primary school on another site within the Chatswood area. The construction of a new primary school would further reduce future demand for primary school places at CPS.

Accordingly, the TIA has been based on the following school population scenarios:

- moderate occupancy - 3,200 students including 1,200 primary school students and 2,000 high school students.
- high occupancy - 3,600 students including 1,600 primary school students and 2,000 high school students.

For assessment purposes, the TIA anticipates a 'high occupancy' scenario would represent a temporary worst-case scenario forecasted to occur in 2036. Once a new public school is operational in the area, the 'moderate occupancy' would represent the worst-case scenario.

6.2.1 Operational traffic

A description of the surrounding road network is provided at **Section 1.2**. The TIA analysed the existing traffic network performance using SIDRA intersection modelling to establish the Level of Service (LoS) of nearby intersections. Existing LoS conditions are provided in **Figure 58** and **Figure 59**. LoS A indicates that an intersection is in good operation while LoS E indicates that an intersection is operating at capacity and F indicates unsatisfactory performance.

Intersection		Signal Control	AM Peak		PM Peak	
			Ave. Delay (sec)	LoS	Ave. Delay (sec)	LoS
1	Pacific Highway – Victoria Avenue	Signal	26	B	22	B
2	Pacific Highway – Centennial Avenue	Signal	26	B	55	D
3	Pacific Highway – Albert Avenue/ Oliver Rd	Signal	28	B	28	B
4	Fullers Road – Edgar Street	Priority	51	D	68	E

Figure 58 | Existing peak hour traffic modelling results (Source: Applicant's EIS 2020)

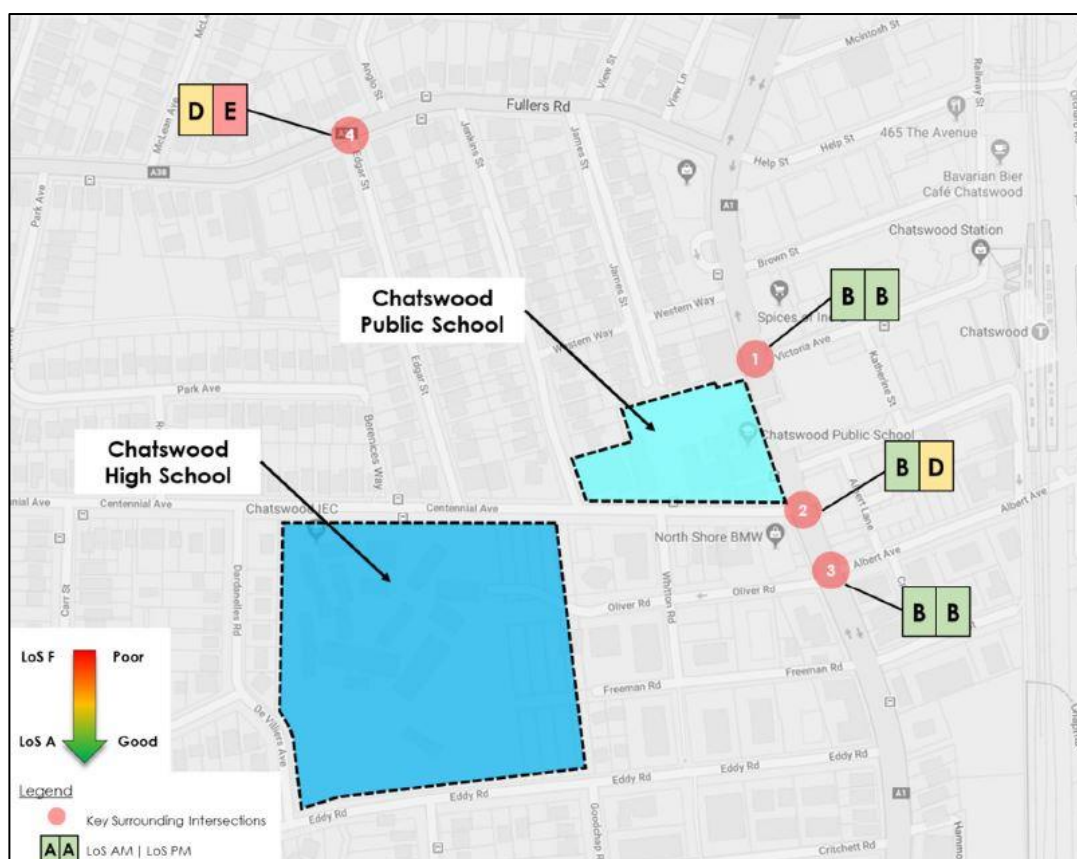


Figure 59 | Existing LoS summary map (Source: Applicant's EIS 2020)

Based on the above, the surrounding key intersections generally operate satisfactorily, except the Fullers Road / Edgar Street intersection during the weekday PM peak hour. This intersection currently operates at LoS E (at capacity) during the weekday PM peak. The TIA notes that this is primarily due to the right-turn movement out of Edgar Street into Fullers Road, as these movements are delayed by the high traffic volumes along Fullers Road.

In order to assess the impact of the proposal on these intersections, the TIA conducted surveys of existing staff and students to determine existing travel mode share and to inform future targets. The survey results are in **Table 8**.

Table 8 | Existing travel mode share (Base source: Applicant's EIS 2020)

Travel Mode	CPS students	CPS staff	CHS students	CPS staff
Car	30%	69%	17%	85%
Public transport	10%	21%	57%	15%
Walk	59%	10%	26%	0%
Cycle	1%	0%	0%	0%

The TIA assessed the impact of the proposal on the future performance of the same key intersections ten years from operation (in 2036). This included SIDRA modelling of the base case scenario with no increase in student numbers (i.e. without development) and the 'high occupancy' scenario (i.e. 'with development'). The results of this modelling is shown in **Table 9** and **Figure 60**.

Table 9 | 2036 LoS summary (Base source: Applicant's EIS 2020)

Intersection	Existing		2036 Base Scenario		2036 High Capacity Scenario	
	AM	PM	AM	PM	AM	PM
Pacific Highway / Victoria Avenue	B	B	D	B	F	B
Pacific Highway / Centennial Avenue	B	D	D	F	E	F
Pacific Highway / Albert Road / Oliver Road	B	B	B	B	C	B
Fullers Road / Edgars Street	D	E	F	F	F	F

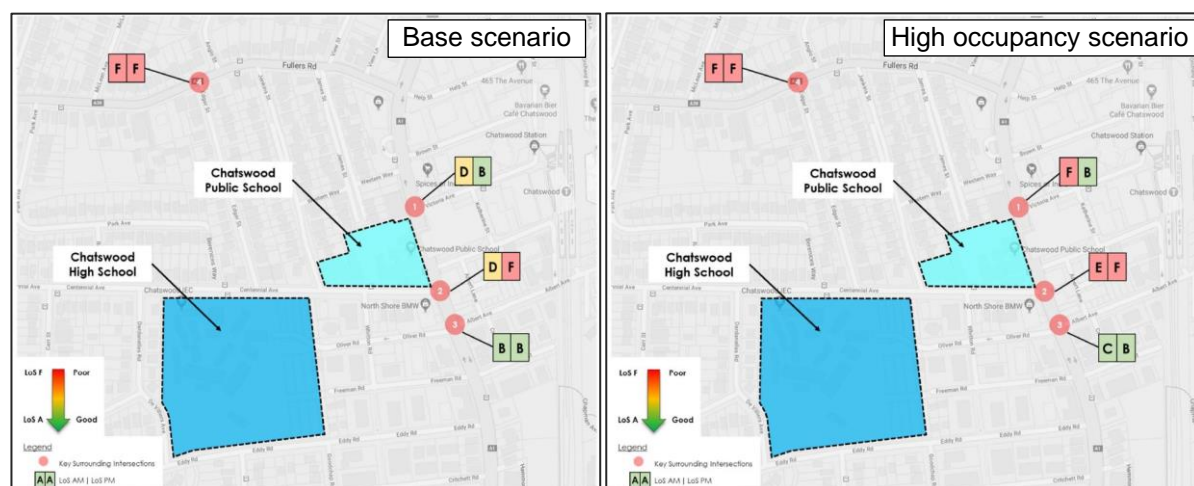


Figure 60 | 2036 LoS summary map (Source: Applicant's EIS 2020)

The modelling found that the performance of all intersections except for Pacific Highway / Albert Road / Oliver Road would decrease in the base scenario (without development). On this basis, the TIA noted that without a change in the behaviour of road users or capacity improvements, the performance of the surrounding road network would decrease over time as a result of growth associated with increases to development density and population growth.

Modelling also found that the performance of three Pacific Highway intersections would decrease further with the high capacity scenario (with development). On this basis, the TIA noted that if the current travel behaviour of the schools remains unchanged and traffic levels increase as modelled above, then it is reasonable to expect that the proposal, based on the worst-case scenario, would result in a substantial decrease in the road network performance.

To avoid the increase in traffic generated by the development and consequent impacts on the performance of nearby intersections, the TIA concluded that development traffic would need to be reduced by 16%. This would need to be done by reducing car travel in the mode share of staff and student trips and equate to a reduction of 107-120 car trips to and from the sites compared to that

considered in the high occupancy scenario. Doing so would achieve a future development traffic generation that would be comparable with the future base scenario.

To achieve this reduction and mitigate the impacts of the proposal, the TIA recommends a range of measures be implemented to achieve the required mode share target in order to improve, or at a minimum, maintain the existing performance of the local road network. Given the broad range of travel behaviour for public and secondary schools, the TIA noted that it is unlikely that one particular measure would achieve this. Therefore, the TIA recommended a combination of sustainable transport measures be developed and implemented in a coordinated manner to influence a change in travel behaviour. Public submissions raised concerns that the proposal would increase traffic congestion and queuing on local streets.

TfNSW and Council support the implementation of sustainable transport measures to reduce the number of car trips generated by the proposal. The TIA and TfNSW recommend the following be included in and/or addressed as part of these measures:

- clarify the responsible party (i.e. the school, Department of Education, or both) for the delivery of each action and advise when each action will be delivered.
- include the number of staff and hours of operation including school times, before and after school care, extra-curricular activities and staff hours.
- include promotion of the health and wellbeing benefits of active travel to the sites as an action.
- identify and promote arrangements for end of trip facilities including the location and quantum of bike parking and include this information in the Travel Access Guide.
- promote appropriate safety information relevant to teachers, students and parents/guardians in relation to travelling to school, such as the NSW Government's 'Safety Town' website and resources.
- measures to be reviewed and amended annually by a transport coordinator appointed by the school, to reflect increased enrolments and infrastructure, and information on how this would be managed.
- include information about the end of trip facilities that are proposed to support a high active travel mode share.
- consider earlier or staggered hours of operation to spread demand on the transport network.
- engage with the Travel Demand Management team at TfNSW to discuss proposed approach to implementation.
- provision of shuttle bus services to/from the school servicing key locations where staff and students reside and currently use private cars to travel to the schools.

The Department has considered the information provided by the Applicant, the comments made in the public submissions and advice of Council and TfNSW. The Department recognises that the TIA has identified that there would be significant decrease in performance of nearby intersections in 2036 with and without the proposed development. However, the Department acknowledges that achievement of the proposed travel mode share (16% reduction in car travel) would limit additional car trips generated by the development. This would avoid the further decrease in intersection performance under the high occupancy scenario (with development), mitigating the impacts of the development.

While the target travel mode share is acknowledged as ambitious, the Department considers it achievable due to the sites highly accessible location to the Chatswood transport interchange.

The Department concludes that the proposal would not generate unreasonable traffic impacts on the surrounding network subject to the implementation of robust sustainable transport measures that address TfNSW and Council requirements. The Department has recommended several conditions of consent that require the Applicant to prepare a School Transport Plan that includes comprehensive sustainable transport measures, including those set out in the TIA, and addresses TfNSW and Council requirements. Recommended conditions also require the School Transport Plan to include the ongoing monitoring of initiatives to establish their success or otherwise. Additional measures would need to set out where the target travel mode is not achieved.

In addition to the above, it is noted that the Department's assessment of traffic impacts on the local road network represents the worst-case scenario forecasted for 2036 which may not eventuate should a new school be constructed in the area before then.

6.2.2 Operational parking

Currently there are 36 on-site car parking spaces at CPS and 104 spaces at CHS, giving a total of 140 spaces across the two sites. The proposal would reduce the number of spaces to 122.

Under the WDCP, the minimum requirement for car parking would be 148 spaces which means that the proposal has a shortfall of 26 spaces. The TIA notes that based on TfNSW trip generation rates for schools and the high occupancy scenario, the estimated minimum car parking demand by staff would be 108 car parking spaces across the two sites.

The Department considers that reducing the number of on-site car parking spaces would encourage staff to use alternative travel modes, due to the site's highly accessible location within approximately 300m-600m of the transport interchange. This rationale is consistent with Council's position, which advised that reduced on-site car parking provision would reduce traffic congestion in the surrounding area and achieve the relevant objectives of the Willoughby Community Strategic Plan and Willoughby Street Parking Strategy.

Overall, the Department is satisfied that the proposed reduction in car parking would assist in reducing the number of car trips generated by the proposal and achieving the target mode share. Additionally, the Department concludes that strict compliance with the car parking requirements of the WDCP is undesirable in this instance as further expansion of the proposed car parking areas would result in a reduction of outdoor play space. In consideration of the above, the reduced car parking rate is supported by the Department.

The Department notes that the TIA suggested that Council apply additional time parking restrictions on local roads surrounding the schools, to ensure staff parking does not impact on the availability of on street parking in the area for residents and visitors. However, Council advised that it does not support this recommendation due to previous community resistance to further parking restrictions in the area.

6.2.3 Pacific Highway vehicle entry

The CPS site contains an existing carpark comprising 16 staff car parking spaces in the north west corner of the site. The carpark is accessed via an existing entry from the Pacific Highway, adjacent to the intersection of Victoria Avenue (**Figure 61** and **Figure 62**).

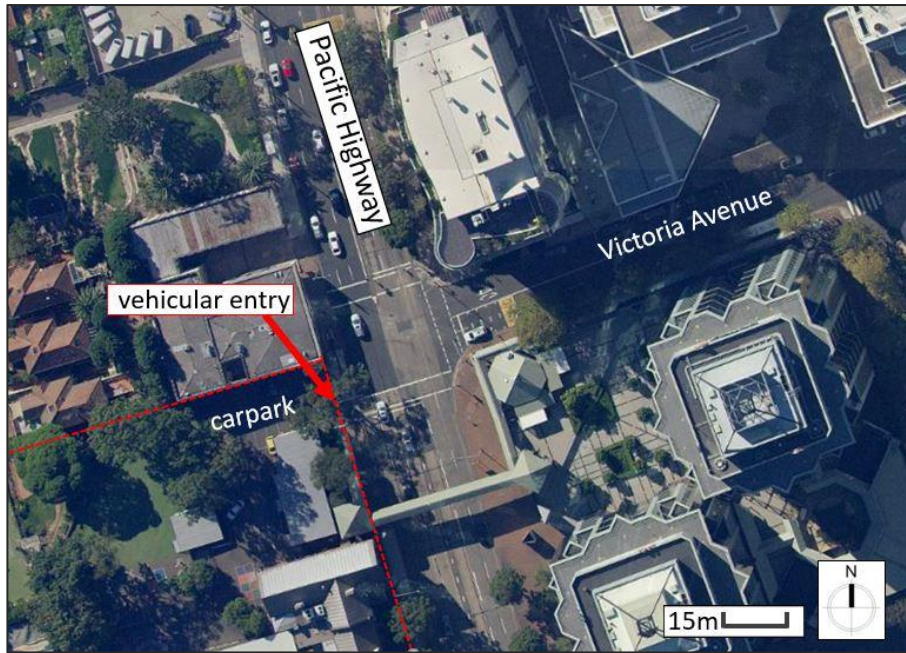


Figure 61 | Aerial view of CPS site showing location of existing vehicular entry (Source: SIX Maps, October 2020)



Figure 62 | Photograph taken from the intersection of Pacific Highway and Victoria Avenue (Source: Department site visit, July 2020)

The proposal includes the construction of a new hall (Building G) in the location of the existing carpark. One vehicular loading space is proposed to be retained directly in front of Building G which would be accessed using the existing Pacific Highway entry (**Figure 63**). It is also proposed to use the Pacific Highway entry during construction.

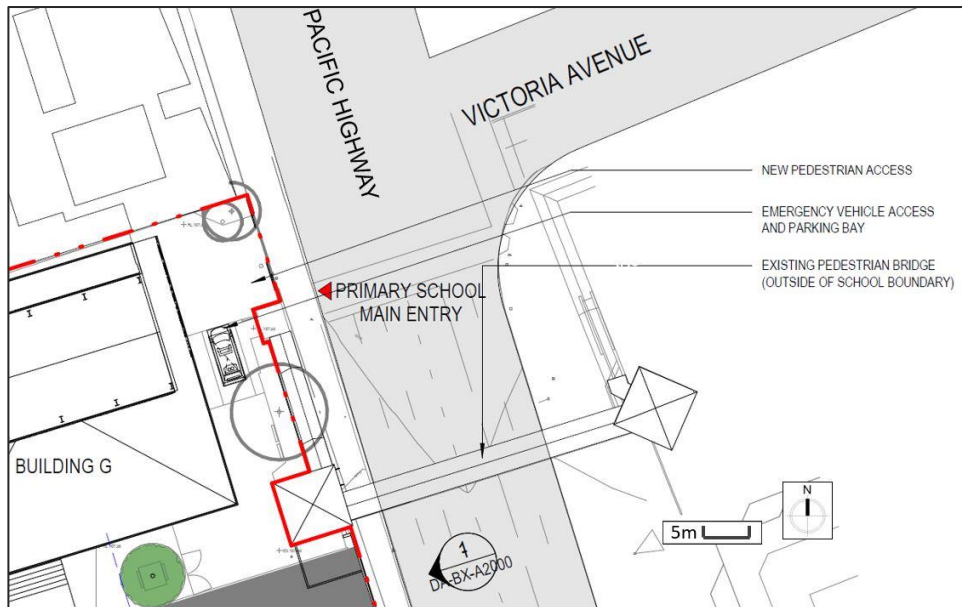


Figure 63 | CPS site plan showing location of loading spaces and (Source: RtS, October 2020)

As the Pacific Highway is a State classified road, under clause 101(2) of State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP), the consent authority must be satisfied that, where practicable and safe, vehicle access is provided by a road other than a classified road. The consent authority must also be satisfied that the development would not impact on the safety, efficiency and ongoing operation of the classified road.

The EIS was referred to TfNSW which advised that as CPS has alternative vehicular access via the local road network, the proposed construction vehicular access and proposed emergency and service vehicle access on Pacific Highway is not supported on road safety and efficiency grounds.

In the RtS, the Applicant provided the following justification for maintaining operational use of the existing Pacific Highway vehicle entry:

- the Pacific Highway entry would be maintained for emergency vehicle access and ad hoc deliveries to the school office. The main delivery and loading area would be relocated to the carpark accessed from Jenkins Street.
- the proposed upgrade works would significantly improve the operational aspects of the existing entry by reducing the volume of vehicles accessing the school via the Pacific Highway.
- it is important to maintain the existing emergency vehicle access at the Pacific Highway main entrance or the 'front door' to the facility. Emergency vehicles accessing the site would generally be undertaking the movement under sirens and alert both vehicles and pedestrians of the vehicle turning paths.
- occasional deliveries to the office could be arranged outside school hours so that there are no conflicts between service vehicles and students using the footpath to enter the school via the Pacific Highway pedestrian entry.
- overall, the proposed upgrades would provide significant improvements to road safety and efficiency to the Pacific Highway vehicle entry and intersection compared to the existing operations.

In terms of using the Pacific Highway entrance during construction, the Applicant advised:

- a swept path analysis indicates that small rigid vehicles (6.4m long) can adequately access the site turning in wholly from the kerbside lane.
- swept path analysis also indicates larger vehicles, including a heavy rigid vehicle (12.5m), can enter the site via the existing access while straddling the kerbside and adjacent lane.
- vehicles larger than a small rigid vehicle would not be permitted to access the site from the Pacific Highway during school hours.
- all vehicles would be required to access the site from the Pacific Highway with traffic controllers for pedestrian movements.

In response to the RtS, TfNSW advised that it did not support the retention of the existing vehicular access on the Pacific Highway as it had not been demonstrated that the largest construction and operational service vehicles could enter and exit the site in a forward direction.

The Applicant responded to the TfNSW comments with updated swept path analyses. TfNSW reviewed the information provided and advised that the information provided indicates that construction vehicles could not enter and leave the site in a forward direction using the Pacific Highway access. TfNSW recommended conditions of consent, including that the Pacific Highway entrance only be used:

- for construction vehicles if information is provided to TfNSW that first demonstrates that vehicles could enter and exit in a forward direction.
- by ambulances or smaller sized vehicles during operations.

The Department considers that access for construction vehicles could be acceptable if TfNSW is satisfied that vehicles could enter and exit in a forward direction. Accordingly, the Department has recommended a condition that construction access must not be from the Pacific Highway unless with the written approval of TfNSW.

The Department also considers that use of the existing Pacific Highway for emergency purposes and ad-hoc deliveries outside of school hours is acceptable provided all vehicles can enter and exit in a forward direction. However, any changes required to the existing vehicular entry would be subject to approval from TfNSW.

The Department considers that it is acceptable for emergency vehicles to continue to use the Pacific Highway vehicle entrance as this would allow efficient access by emergency service personnel to the school's main administrative building and the Hall should an incident occur during a school assembly or community event. Emergency vehicles accessing the site would not occur frequently and accordingly unlikely to significantly impact on the efficiency of the Pacific Highway and adjacent intersection.

6.2.4 Drop-off / Pick-up

The streets surrounding the sites are a mix of restricted and unrestricted on street car parking (**Figure 64**). Five-minute parking zones are provided adjacent to CPS along Centennial Avenue and Jenkins Street during school drop-off and pick-up times. No parking zones are also provided along Centennial Avenue to facilitate drop-off and pick-up activities for both schools.

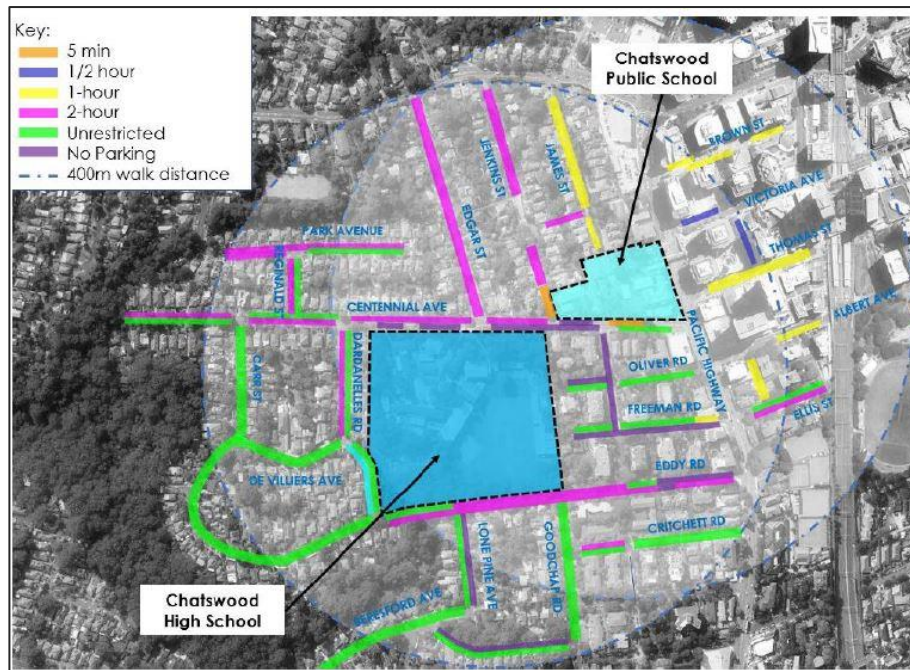


Figure 64 | on-street parking restrictions (Source: EIS 2020)

The TIA noted that the existing drop-off/pick-up area is operating poorly with the majority of drop-off and pick-up activities centralised near the Jenkins Street / Centennial Avenue intersection. The Applicant proposes to retain all existing drop-off/pick-up areas and implement the following measures to improve performance of the drop-off/pick-up areas:

- staff be assigned to Centennial Avenue drop-off/pick-up zone at CPS to ensure compliance with the five minute parking and ‘no parking’ restrictions.
- the five minute parking zone along Jenkins Street be extended further north to provide more drop-off/pick-up spaces for primary students.
- parents and caregivers of primary students be informed about alternative drop-off/pick-up activities.
- school start and finish times be staggered to reduce concentration of drop-off/pick-up activities.

Public submissions raised concerns regarding congestion from parents dropping off and picking up students and that they already illegally park their cars by blocking resident’s driveways.

In its submission to the EIS, Council recommended the installation of roundabout(s) on Centennial Avenue (at Jenkins Street and/or Edgar Street) in order to facilitate safe U-turn movements. This would enable better access to pick-up/drop-off zones on both sides of Centennial Avenue and Jenkins Street and for vehicles to return to the Pacific Highway. Council provided a recommended condition requiring the provision of roundabout(s).

The Applicant responded to Council’s comments in the RtS, arguing that the installation of roundabout(s) is not required due to the proposed implementation of sustainable transport measures to reduce vehicle trips generated by the proposal.

The Department has considered the comments made in the public submissions, advice of Council and information provided by the Applicant. The Department supports the Applicant’s measures to improve performance of the drop-off/pick-up area and measures to reduce vehicle generation from

the proposal. However, as drop-off/pick-up areas are already operating poorly, it is unlikely these measures would be sufficient to address the inadequacy of the existing operation as well as the exacerbation from an increase in student numbers. Consequently, the Department considers that the installation of the roundabout(s) recommended by Council is necessary.

The Department concludes that the installation of roundabout(s) on Centennial Avenue (at Jenkins Street and/or Edgar Street) would improve the safety and efficiency of drop-off/pick-up activities. Accordingly, Council's recommendation for the installation of roundabout(s) has been incorporated in the recommended conditions of consent. These conditions also require the Applicant to include measures to manage and monitor operation of the drop-off/pick-up areas in the School Transport Plan.

6.2.5 Construction traffic and parking

A Preliminary Construction Traffic Management Plan (PCTMP) was included in the EIS. This details measures to manage traffic and access during construction to provide a safe road environment, minimise impact on the surrounding road network and maintain access for all road users and the local community.

The PCTMP proposes construction vehicle access off existing access points along Pacific Highway, Centennial Avenue and De Villiers Avenue. While the number of traffic movements associated with the construction activities are not known at this stage, the PCTMP included an estimate of vehicle trip movements (**Figure 65**) which may be refined once the construction methodology progresses. It is proposed that heavy construction vehicles would only be permitted to enter/exit the sites outside of school pick-up/drop-off times.

Activity	Vehicle Type	Daily Movements	Hourly Movements
Bulk Excavation	Truck and Dog	20 trips per day	Up to 5
Structural Work	Articulated Vehicle	1 trip per day	Up to 1
	MRV, HRV	4 trips per day	Up to 2 (Up to 4 during concrete pours)
Fit-out and Finishes	HRV	4 trips per day	Up to 1

Figure 65 | Estimated construction vehicle types and frequencies (Source: Applicants EIS 2020)

The preliminary designated construction vehicle routes are identified in **Figure 66**. The construction vehicle routes have been developed to provide the shortest distances to/from the arterial road network, while minimising the impact of construction traffic on streets within the immediate vicinity of the sites. The PCTMP notes that all truck drivers would be required to use nominated truck routes, and it is proposed to predominantly use the Pacific Highway and Centennial Avenue to access the sites.



Figure 66 | Construction truck routes (Source: Applicant's EIS 2020)

As detailed in **Section 6.2.3**, TfNSW did not support the use of the Pacific Highway entrance for construction unless the Applicant can demonstrate that vehicles could enter and exit in a forward direction. Having regard to TfNSW advice on the Pacific Highway access, the Department has recommended a condition that this access may not be used unless with the written approval of TfNSW. If approval is not provided by TfNSW, revised access arrangements would need to be included in the Construction Traffic and Pedestrian Management Plan. However, the construction vehicle routes would not otherwise have to change.

The Department has reviewed the PCTMP and is satisfied that construction traffic would be adequately managed during construction subject to the preparation of a detailed Construction Traffic and Pedestrian Management Plan prior to commencement of work. This would detail more specific construction management measures to ensure that impacts on the surrounding street network are minimised.

Council and public submissions raised concerns regarding construction worker and school staff parking during construction. The PCTMP advises that no parking is proposed to be provided for construction workers and school staff on-site. This is because Building G is to be constructed on the existing car park on the CPS site and temporary demountables would be installed on the car park at the CHS site to provide temporary learning spaces. It is proposed for construction workers and school staff to use public transport to limit the impact on the availability of on-street parking on the surrounding streets for resident and visitor use. The Applicant also proposes to provide an on-site tool storage facility to make it easier for workers to travel to and from the site by public transport without carrying their tools. It is also proposed to regularly inform construction workers during inductions and meetings that no car parking will be available for construction workers and public transport should be used where possible.

The Department recognises that there is little opportunity to provide school staff and construction worker parking on-site given the constraints of the sites and the need to maintain operation of the schools during construction. The Department is satisfied that the Applicant could satisfactorily

manage construction worker parking to ensure that impacts on local streets are minimised, particularly given the high accessibility of the site and existing parking restrictions on the immediately surrounding streets.

A condition of consent is recommended requiring the Applicant to prepare a Construction Worker and Staff Transportation Strategy that identifies the provision of sufficient parking facilities or other travel arrangements to minimise demand for parking in nearby streets, residential accessways or parking facilities. Conditions of consent are also recommended requiring the implementation of a complaint management system for residents to raise concerns where parking issues arise and ongoing review of the performance of the Construction Worker and Staff Transportation Strategy. Pedestrian access and safety

The location of the existing pedestrian entries are identified in **Figure 67** and **Figure 68**. All existing pedestrian entries are proposed to be retained under the proposal with one additional CPS pedestrian entry proposed off Jenkins Street. The number of pedestrian entries to both sites maximises pedestrian permeability through the schools.

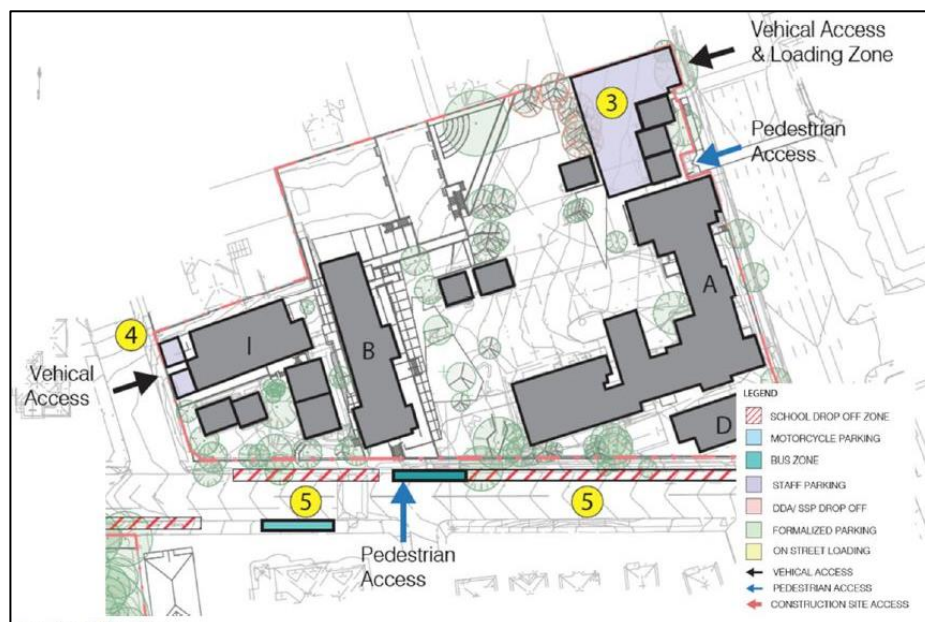


Figure 67 | CPS pedestrian access points (Source: TIA 2020)

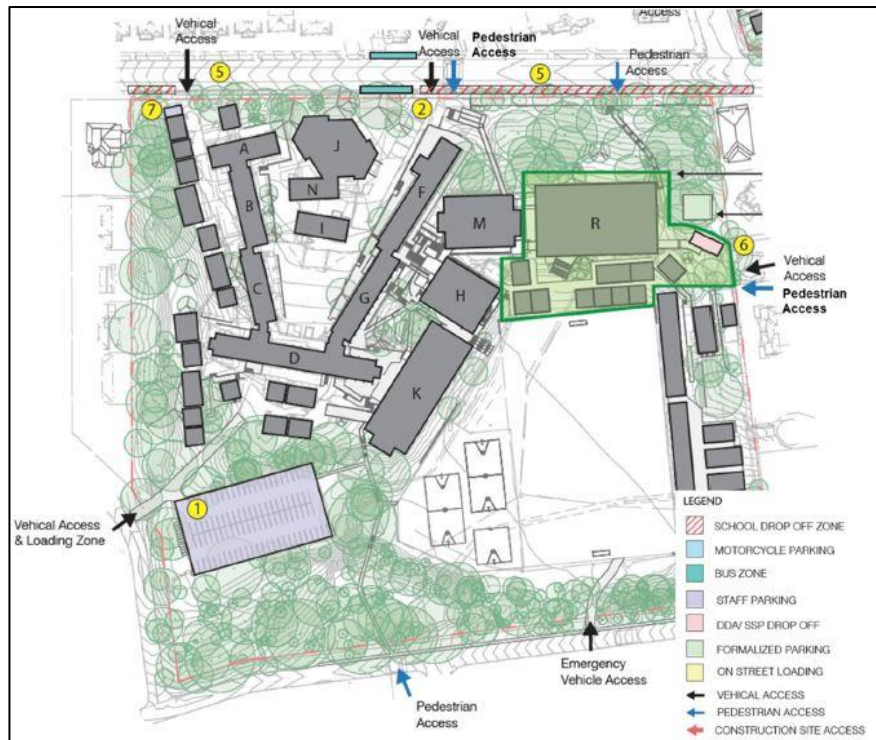


Figure 68 | CHS pedestrian access points (Source: TIA 2020)

Well established pedestrian facilities are available in the immediate vicinity of the sites with a network of paved footpaths on both sides of adjacent roads. Victoria Avenue, Pacific Highway and Centennial Avenue are the most utilised in terms of pedestrian activity as these roads provide direct connection to the transport interchange. The following pedestrian facilities are provided near the sites:

- signalised pedestrian crossings at the intersection of Pacific Highway and Victoria Avenue.
- Pacific Highway footbridge containing stairs and escalators at both ends and located directly in front of CPS at the intersection of Victoria Avenue.
- signalised pedestrian crossing at the intersection of Pacific Highway and Centennial Avenue.
- signalised pedestrian crossing on the east, west and south approaches at the intersection of Pacific Highway, Albert Avenue and Oliver Road.
- pedestrian (zebra) crossings along Centennial Avenue and Edgar Street.
- dedicated student crossing across Centennial Avenue and managed by a traffic controller during school hours.

High pedestrian activity currently occurs at the signalised pedestrian crossings at the intersection of Pacific Highway and Victoria Avenue, particularly during school peak hours. The existing footbridge at this intersection is currently underutilised. The TIA found that vehicle delays and queues from the existing left-turn movement from Victoria Avenue currently occur due to the high pedestrian activity at this intersection during school peak hours. TfNSW and Council both raised pedestrian safety concerns at this intersection and requested that the Applicant consider measures to encourage more students to use the footbridge instead of the signalised intersection crossing.

In the RtS, the Applicant states that the footbridge is owned and operated by the landowners of 799 Pacific Highway and that there are maintenance issues associated with escalators which result in extensive periods when they are not operational. The Applicant states that it is discussing with Council the installation of signage to encourage the school community to use to the footbridge.

Regardless of any maintenance issues with the escalators, the Department considers that students should be encouraged to use the footbridge where possible to improve safety and efficiency of the intersection. Observation of use of the footbridge at a site inspection by DPIE revealed that in some instances, use of the stairs was faster to cross Pacific Highway compared to waiting at the signalised crossing. It is noted that installation of signage, coupled with awareness of the time savings benefit of using the footbridge are proposed to be implemented as part of the Applicant's sustainable transport measures. The Department has recommended conditions that require these measures to be included in the School Transport Plan. Overall, the Department considers the proposal's pedestrian access and safety acceptable.

6.3 Tree removal and biodiversity

6.3.1 Tree removal and replanting

The EIS included an Arboricultural Impact Assessment (AIA) which surveyed the sites and inspected 61 trees on the CPS site and 219 trees on the CHS site. 38 trees on the CPS site and 24 trees on CHS site would need to be removed to facilitate the proposal. Of the total of 62 trees proposed for removal, 38 are identified as having 'low' retention value and 24 as having 'medium' retention value.

During exhibition of the EIS, concerns were raised in the public submissions regarding the proposed removal of trees and associated impact on leafy streetscape character of the area and reduced amenity. The AIA concludes that there is no feasible option to retain the trees given their position within the sites and extent of the proposed buildings.

The AIA identifies two trees of high retention value, potentially being impacted by the proposed works and recommends that tree protection measures are provided to ensure retention of the trees during construction. These trees are located on the CHS site and identified as trees 84 and 95 (**Figure 69**).

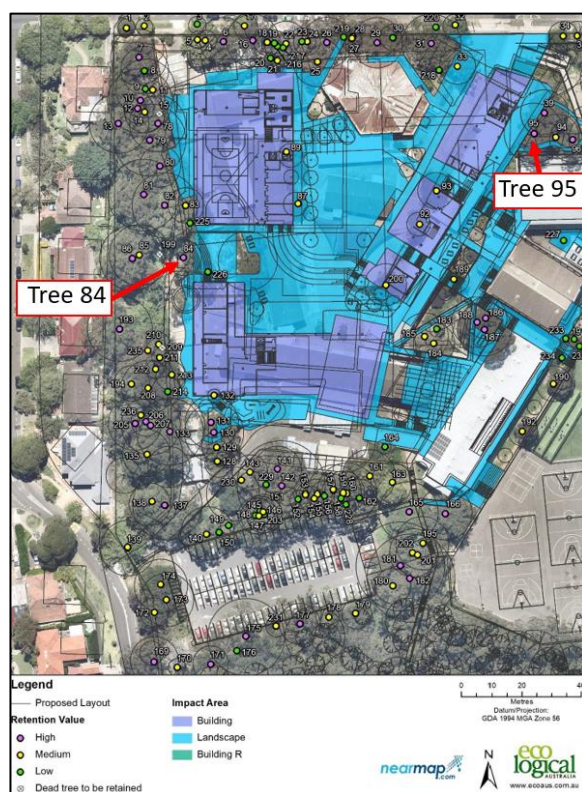


Figure 69 | CHS retention value of trees (Base source: EIS 2020)

The EIS states that while every effort would be made to preserve the two subject trees, there is a possibility that their retention may not be viable. Overall, 77 new replacement trees across the two sites would be planted in addition to mass planting of shrubs including native species.

During exhibition of the EIS, concerns were raised in the public submissions regarding the proposed removal of trees and resultant impacts on streetscape, amenity and the heat island effect.

The Department recognises that whilst the proposal involves the removal of trees, the constrained nature of the available development area within the sites, and the need to increase the overall student population, tree removal to facilitate the built form and outdoor play spaces is unavoidable. However, the Department does not support the removal of the two high value trees (84 and 95) given the AIA details tree protection measures which could be employed during construction works to retain them. Therefore, conditions of consent are recommended requiring compliance with the recommendations of the AIA to ensure the two identified high value trees are retained and protected during construction.

The Department considers that the replacement tree planting would provide adequate tree canopy across the sites and would maintain the leafy character and amenity of the area. Existing and new tree planting would also provide canopy cover to provide shade on outdoor play areas. The Department has recommended conditions that require tree planting and landscaping to be implemented and maintained.

6.3.2 Biodiversity

During exhibition of the EIS, concerns were raised in the public submissions regarding the proposed removal of trees and associated impact on fauna habitat.

A Biodiversity Development Assessment Report (BDAR) was submitted with the EIS and updated in the RtS. The BDAR provided an assessment of the likely impacts on biodiversity, including predictions of vegetation clearing, potential impacts on any threatened species or population, and a detailed description of the measures to avoid, minimise, mitigate and offset biodiversity impacts.

The combined area of the CPS and CHS sites is 7.54ha and the proposed development covers an area of approximately 0.94ha. The proposal would remove 0.35ha of native planted vegetation and 0.032ha of remnant native vegetation.

Vegetation in the two sites is predominantly disturbed and contains scattered planting of mature native species incorporated into horticultural landscaped gardens. Most of the native vegetation in varying condition is in the south west corner of the CHS site and zoned E2 Environmental Conservation under WLEP. No works are proposed within this area. This E2 zoned portion of the CHS site has been mapped as Plant Community Type (PCT) 1237 'Sydney Blue Gum – Smooth-barked Apple moist shrubby open forest on shale ridges of the Hornsby Plateau, Sydney Basin Bioregion' (**Figure 70**).

A second patch of PCT 1237, adjoining the south-west corner patch, is mapped along the western perimeter of the CHS site and would be impacted by the proposal. PCT 1237 conforms to Blue Gum High Forest and is listed as part of the critically endangered ecological community under the *Biodiversity Conservation Act 2016* (BC Act) and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).



Figure 70 | PCT and native vegetation extent (Base source: RtS 2020)

The remaining vegetation within the development site has been planted using native canopy species. Under the Biodiversity Assessment Method, all vegetation native to NSW must be assigned a PCT. Where native vegetation has been planted and does not wholly conform to any PCT, a 'best-fit' PCT must be assigned. The BDAR found that planted native vegetation best conforms to PCT 1237. Although components of this PCT corresponds to Blue Gum High Forest listed under the BC Act and EPBC Act, the subject planted patch of vegetation does not correspond to a threatened ecological community (TEC).

Two planted threatened Magenta Lilly Pilly (*Syzygium paniculatum*), which are listed as endangered under the BC Act and vulnerable under the EPBC Act, were recorded within the CHS site. The proposal seeks to remove one of these trees (**Figure 71**).

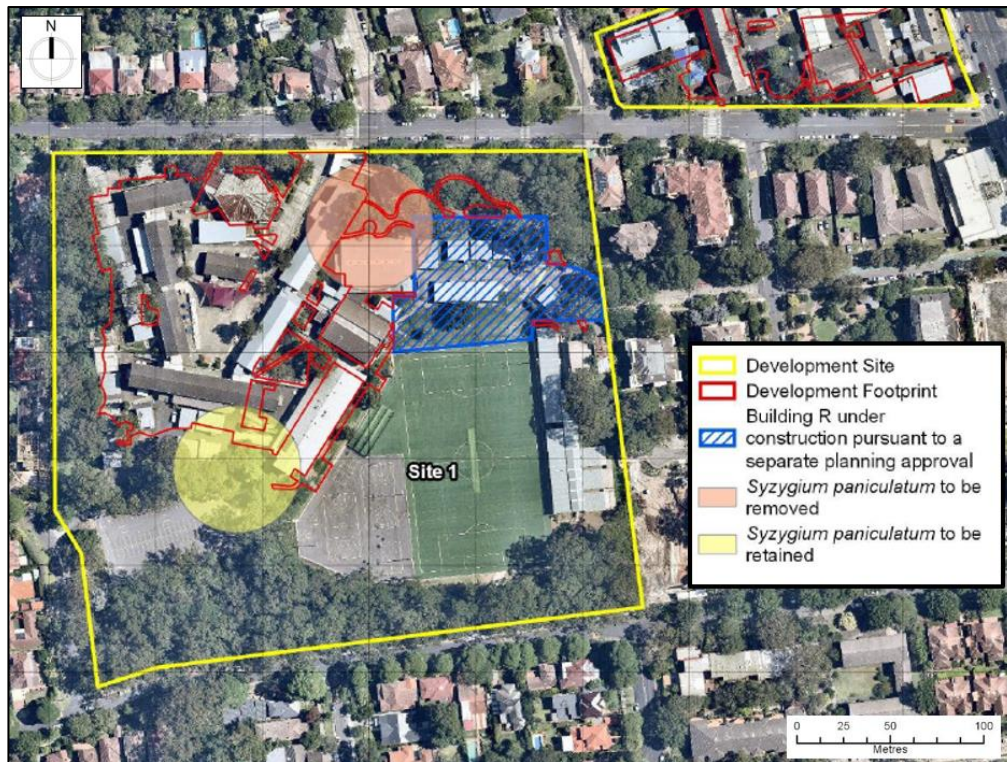


Figure 71 | Location of Magenta Lilly Pilly (Base source: RtS 2020)

The BDAR asserts that the proposal avoids and minimises biodiversity impacts by locating the buildings predominantly within cleared areas of the sites. The BDAR provides an assessment of the potential direct and indirect impacts. The direct impacts of the proposal include removal of native vegetation and the potential indirect impacts of the proposal, as identified in the BDAR, would include:

- sedimentation run-off, noise, light spill, vibration, damage to adjacent vegetation and potential importation of pathogens during construction.
- pollution, potential injury to fauna, wood collection, bush rock removal and disturbance, increase in pests and increase fire risk during construction and operation.

The BDAR outlines a range of mitigation measures to address the expected impacts during the construction and operational stages of the proposal including:

- revegetation works.
- implementation of a soil erosion control plan.
- protection and/or relocation of fauna.
- pre-clearing surveys, daily surveys and staged clearing supervised by trained ecological or licensed wildlife handler.
- installation of artificial habitats.
- timing construction activities in response to migratory species and breeding behaviours.
- clearing protocols and staff training to prevent inadvertent damage.
- dust monitoring.
- hygiene protocols to prevent spread of weeds and pathogens.
- use of indigenous species from locally occurring plant communities.
- measures to regulate activity in vegetation and habitat adjacent to the development.

Despite these measures, impacts on biodiversity would occur from construction and operational of the proposal, including loss of native vegetation. The revised BDAR identifies that a biodiversity offset requirement of six ecosystem credits for PCT ID 1237 and two species credits for Magenta Lilly Pilly would be required to offset the residual impacts of the development.

EESG raised concerns with the BDAR submitted with the EIS, including missing information and miscalculation of biodiversity offset credits. A revised BDAR was submitted with the RtS to address matters raised by EESG. EESG confirmed that the revised BDAR addressed the matters it raised regarding the BDAR submitted with the EIS.

The Department has considered the public submissions, EESG advice and the information contained with the Applicant's EIS and RtS including the revised BDAR.

The Department acknowledges the proposal would result in direct and indirect impacts to biodiversity. However, the Department is satisfied that the direct biodiversity impacts of the proposal would be appropriately offset and has recommended conditions requiring the offsets to be retired prior to the commencement of vegetation removal.

6.4 Other issues

The Department's consideration of other issues is provided at **Table 10**.

Table 10 | Department's assessment of other issues

Issue	Findings	Department's consideration and recommended conditions
Operational noise	<p>The main sources of noise from the proposal would be students playing outside, amplified music and speech in the halls, out of school hours events, internal noise and mechanical plant and equipment.</p> <p>A Noise Impact Assessment (NIA) was included with the EIS and provides an assessment of the operational noise impact on nearby residential receivers and provides recommendations for noise emission control where required. The predicted noise levels contained in the NIA are based on a high occupancy worst case scenario.</p> <p>The NIA identifies the location of acoustic loggers which were used within the sites and at nearby sensitive receivers to determine the acoustic environment.</p> <p>Based on the existing background noise conditions, the NIA found that acceptable</p>	<p>The Department acknowledges that the increase in student numbers and new/altered buildings and play areas would result in changes to overall noise levels including minor noise criteria exceedances for the outdoor play areas.</p> <p>The Department acknowledges the concerns raised in the public submissions regarding the increase in noise that would be generated by the proposal.</p> <p>However, the Department considers that operational noise levels would not be excessive or sustained over prolonged periods throughout the day. Operational noise levels would be lessened through acoustic attenuation and management measures. The</p>

Issue	Findings	Department's consideration and recommended conditions
	<p>outdoor play noise levels for the proposal would typically be achieved, except the following residential properties where the predicted noise level exceed the noise criteria:</p> <ul style="list-style-type: none"> • 809-811 Pacific Highway and 1A James Street (exceeds noise criteria by 6dBA). • 24 Eddy Road (exceeds noise criteria by 9dBA). • 1-3 Oliver Road (exceeds noise criteria by 10dBA). • 1 Jenkins Street (exceeds noise criteria by 11dBA). <p>These residential properties are already exposed to existing noise from the outdoor play areas and sports fields. The NIA asserts that the slight increase in noise from outdoor play would be acceptable given the:</p> <ul style="list-style-type: none"> • properties are already subject to noise emission from outdoor play areas. • outdoor play areas would be used during limited times of the day. • soffit of new under-croft play areas would be acoustically treated to reduce the level of reverberant noise and would result in a noise reduction of approximately 3dBA at the nearby residential premises. <p>In relation to other operational noise sources that would be generated from the proposal, the NIA finds:</p> <ul style="list-style-type: none"> • the predicted noise levels for use of both halls between 7am and 10pm would comply with the required noise criteria for daytime and evening periods. • the location of speakers for the public address system and school are yet to 	<p>Department concludes that the proposal would not unreasonably impact on the acoustic amenity of surrounding occupants.</p> <p>The Department considers that the Applicant's NIA includes satisfactory measures to manage operational noise to nearby sensitive receivers.</p> <p>The Department has recommended the following conditions which incorporate EPA's requirements:</p> <ul style="list-style-type: none"> • NIA and EPA noise management and mitigation measures must be adhered to. • prior to the installation of mechanical plant and equipment, a detailed assessment must be undertaken by a suitably qualified person demonstrating compliance with the noise criteria identified in the NIA. • noise from mechanical plant must be designed to achieve no greater than background +5dB at the nearest sensitive receiver. • the public address system must be designed to achieve noise levels of no greater than background noise +10dB at the nearest sensitive receiver. • an Out of Hours Event Management Plan must be prepared for events involving over 100 patrons.

Issue	Findings	Department's consideration and recommended conditions
	<p>be determined. However, the speakers would be capable of complying with the required noise criteria provided the speakers face inwards towards the school and the maximum sound level is controlled to 80dBA.</p> <ul style="list-style-type: none"> • waste collection and grounds maintenance activities such as use of leaf blowers would be restricted to the daytime hours of between 7.30am and 6pm. • while the exact details of mechanical plant and equipment has not yet been determined, it is assumed that there would be up to 10 condenser units located on the rooftop of the buildings and enclosed with ventilation louvres. • Based on this assumption and the predicted noise levels, the mechanical plant and equipment would be capable of complying with the required noise criteria. <p>EPA advised that the NIA was generally satisfactory and that the noise criteria determined by the loggers would be representative of the acoustic environment of residential receivers.</p>	
Construction noise and vibration	<p>The NIA provided an assessment of the predicted acoustic and vibration impacts from the proposal during construction on nearby sensitive receivers in accordance with the Interim Construction Noise Guideline 2009 (ICNG).</p> <p>The NIA finds that the predicted noise emission from the construction of the new buildings would at times exceed the permitted noise management levels by between 4dB and 22dB. Mitigation measures are proposed to manage the excess noise including operational management, respite periods, enclosure of</p>	<p>The Department is satisfied that appropriate noise and vibration mitigation measures would be implemented to minimise impacts on nearby residents during construction works.</p> <p>The Department has recommended conditions to require that:</p> <ul style="list-style-type: none"> • construction hours are in accordance with the standard ICNG hours.

Issue	Findings	Department's consideration and recommended conditions
	<p>mobile plant, screening with sound barriers and silencing through low noise options for plant and machinery. In addition, as the school buildings are erected, they would act as a noise barrier to adjoining residential receivers.</p> <p>In relation to vibration, the NIA recommended that compliance monitoring of ground borne vibration is carried out at the nearest residence during use of vibratory machinery to ensure compliance with ICNG.</p> <p>The NIA also recommended noise monitoring measures be included in a Construction Noise and Vibration Management Plan.</p> <p>EPA recommended that construction hours are in accordance with the standard hours of ICNG.</p>	<ul style="list-style-type: none"> a Construction Noise and Vibration Management Plan is prepared that incorporates recommendations of the NIA.
Site contamination	<p>A Detailed Site Investigation, Remediation Action Plan (RAP) and Interim Advice from an EPA accredited Site Auditor were provided with the EIS and RtS.</p> <p>The Detailed Site Investigation found that the CHS site does not present any unacceptable risks to human and ecological health and is considered suitable for use as an educational establishment without remediation work.</p> <p>For the CPS site, the Detailed Site Investigation identified potentially unacceptable risks to human and ecological health due to petroleum hydrocarbons and polycyclic aromatic hydrocarbons at several locations. These findings relate to materials below the hard surface areas and are not exposed to site users. However, the materials would be encountered during earthworks for the new</p>	<p>The Department is satisfied that the Applicant has adequately demonstrated that the sites are suitable. The CPS site is subject to remediation for the ongoing use as an educational establishment, as required by State Environmental Planning Policy No 55 – Remediation of Land.</p> <p>The Department has recommended conditions, consistent with the EPA's advice, which require that:</p> <ul style="list-style-type: none"> the Applicant must engage an EPA accredited Site Auditor throughout the duration of works to ensure that work in relation to soil contamination is appropriately managed.

Issue	Findings	Department's consideration and recommended conditions
	<p>buildings. The RAP proposes capping of the contaminated soil and the implementation of a long-term Environmental Management Plan. The long-term Environmental Management Plan would be required to maintain the integrity of the cap and manage risks associated with any potential future disturbance of contaminated fill material across the sites.</p> <p>The EPA reviewed the Detailed Site Investigation, RAP and Interim Advice and raised no concerns subject to recommended conditions.</p>	<ul style="list-style-type: none"> the Applicant must adhere to the management measures in the RAP as approved by the Site Auditor. any variation to the approved RAP must be approved in writing by the Site Auditor. if work is to be completed in stages, the Site Auditor must confirm satisfactory completion of each stage by issuing Interim Audit Advice/s. the Applicant must obtain a Section A1 or Section A2 Site Audit Statement accompanied by an Environment Management Plan from the Site Auditor prior to commencement of use of new buildings. an unexpected finds procedure must be implemented throughout construction works.
Stormwater and drainage	<p>A Stormwater Management Report was provided with the EIS. Stormwater management works are proposed to manage downstream flood impacts, stormwater runoff volumes and detention, stormwater quality treatment measures and erosion and sediment control.</p> <p>Council raised concerns with the proposed on-site stormwater detention as it does not comply with Council's requirements for stormwater management. On-site detention is required to be provided for the areas of the sites where new works are proposed.</p> <p>In the RtS, the Applicant states that the on-site detention would be provided in</p>	<p>The Department has recommended conditions requiring a stormwater management system designed to comply with Council's on-site detention requirements, applicable Australian Standards and industry best practice guidelines.</p> <p>The Department is satisfied that the required on-site detention can be accommodated on the sites without associated design and/or landscaping implications.</p>

Issue	Findings	Department's consideration and recommended conditions
	accordance with Council's recommendation.	
Archaeology and Aboriginal cultural heritage	<p>An Archaeology Assessment, and Aboriginal Cultural Heritage Assessment Report (ACHAR) report was submitted with the EIS. These reports consider the sites' potential to impact Aboriginal cultural heritage and contain archaeological deposits.</p> <p>The reports conclude that there is low potential for archaeological deposits at either of the sites and that the proposal would not impact Aboriginal cultural heritage. An unexpected finds procedure is recommended to manage any unexpected finds and provide a framework for monitoring activities.</p> <p>Heritage NSW advised that based on the historic and physical research demonstrated in the Archaeology Assessment, the findings that there is unlikely to be historical archaeology of significance at either of the sites are accepted. Heritage NSW recommends that an 'unexpected finds' condition is included in the condition of consent, but no actual archaeological investigations would be required as part of the proposal.</p>	<p>The Department considered the information provided by the Applicant and considers that potential impacts on Aboriginal cultural heritage have been appropriately considered and addressed.</p> <p>Although both reports indicate the potential for archaeological finds would be unlikely, the Department has recommended conditions requiring an archaeological unexpected finds protocol for Aboriginal and non-Aboriginal heritage.</p>
Bicycle parking	<p>The sites are located within a well-established cycling network with a number of dedicated shared cycling paths and routes in the vicinity.</p> <p>On road cycling signage and pavement markings are provided within the vicinity of the sites including Eddy Road, De Villiers Avenue and Dardanelles Road.</p> <p>Currently there are no dedicated bicycle parking spaces on either of the sites. The proposal includes the provision of 60</p>	<p>The Department considers that the proposal would encourage an increase in cycling to and from the sites through the provision of bicycle spaces coupled with end of trip facilities.</p> <p>The Department has recommended conditions to ensure the provision of bicycle parking and end of trip facilities.</p>

Issue	Findings	Department's consideration and recommended conditions
	bicycle parking spaces at CPS and 84 spaces at CHS.	
Sediment, erosion and dust control	<p>A preliminary Construction Management Plan and Sediment and Erosion Control Plan were included with the EIS.</p> <p>Proposed measures would contain sediment within the sites and prevent erosion into neighbouring properties and the public domain during construction works.</p> <p>Measures are also proposed to control dust, including the watering down of roads and stockpiles and vehicles exiting the sites.</p>	<p>The Department considers that appropriate measures have been proposed to prevent erosion and control dust.</p> <p>The Department has recommended conditions requiring the preparation of a final detailed Construction Environmental Management Plan prior to the commencement of construction works on the sites.</p>
Waste and recycling	<p>The EIS included a Preliminary Waste Management Plan which details the:</p> <ul style="list-style-type: none"> proposed methods for identification and disposal of hazardous demolition waste and the identification and retention of recyclable materials that may be reused on-site. expected operational waste volumes and waste management measures to be adopted. 	<p>The Department is satisfied that appropriate arrangements would be put in place to manage waste so that the proposal would not result in adverse impacts on the local environment and would maximise opportunities to re-use and recycle materials.</p> <p>The Department has recommended conditions to ensure that appropriate waste handling and management arrangements are implemented during construction and operation.</p>
Retaining wall	<p>Concerns were raised in public submissions regarding the structural impacts the proposal would have on an existing retaining wall located along the northern side boundary of CPS. The submission notes that the retaining wall has been damaged from stormwater from CPS in the past and contains cracking.</p> <p>As part of the RtS, the Applicant submitted a letter from a structural engineer</p>	<p>The Department acknowledges that the letter from the structural engineer confirms that the proposal would not transfer any new building loads onto the retaining wall.</p> <p>Should the retaining wall be damaged during construction or require rectification works, the Department has recommended a</p>

Issue	Findings	Department's consideration and recommended conditions
	<p>confirming that the new buildings loads would transfer below the existing retaining wall base and would not exert additional pressure onto the existing retaining wall.</p>	<p>condition of consent requiring the Applicant to:</p> <ul style="list-style-type: none"> • consult with the adjoining landowner/s. • submit the structural drawings detailing the required works to the retaining wall to the Certifier. • pay for all associated costs with repairing any damage or undertaking rectification works to the retaining wall.
Community use	<p>The EIS states that the new halls at both schools may be used by the community outside of standard school hours and on the weekends. However, the exact details of the use of the halls by the community is not known.</p>	<p>To ensure out of hours use of the proposal is adequately managed, the Department has recommended conditions that:</p> <ul style="list-style-type: none"> • require the preparation of an Out of Hours Event Management Plan for school and community events; and • limit the hours of operation of use of the school halls to between 8am and 10pm.
Social impact and site selection	<p>Concerns were raised in the public submissions about the appropriateness of the CPS for redevelopment to support an increased school population and that a new site should be acquired for a school in the area to accommodate the growing population.</p> <p>The EIS included a Social Impact Assessment that considered the social impacts of the proposed development. The Social Impact Assessment found that potential impacts would include temporary impacts from construction activities and minor traffic and parking impacts as a result of increased enrolments. It noted that these impacts would be mitigated by</p>	<p>The Department has considered the merits of the proposal and concludes the sites are appropriate for their intended use.</p> <p>The Department is satisfied that the proposal would have positive social impacts as it would meet the educational needs of the area.</p> <p>The proposal includes community use of school facilities after hours on weekdays and on the weekends. The Department has recommended conditions that operation of the site be undertaken in accordance with the noise limits set out in the NIA</p>

Issue	Findings	Department's consideration and recommended conditions
	<p>management of construction activities and encouragement of sustainable transport modes.</p> <p>Overall, the Social Impact Assessment concludes that the proposal would have substantial positive social benefits as it would provide much needed improvements to cater for the education needs of the area. It also noted that the proposal would maintain social benefits from the retention of existing open space and recreation facilities on the site.</p> <p>The Applicant has confirmed that the CPS site is appropriate for the redevelopment as the:</p> <ul style="list-style-type: none"> • proposal has been designed in accordance with the Department of Education's Education Facilities Standards Guideline. • site can support the proposed increased in students under the redevelopment. 	<p>and an Out of Hours Event Management Plan be prepared to manage community use of the sites.</p>
Public consultation	<p>Concern was raised in the public submissions about the extent and form of community consultation undertaken, particularly during COVID-19, and exhibition of the EIS during Easter.</p> <p>The Department appropriately exhibited the EIS for a period of 28 days in accordance with the requirements of the EP&A Act (Section 5).</p> <p>In response to community consultation concerns, the Applicant advised that:</p> <ul style="list-style-type: none"> • prior to lodging the application, the Department of Education consulted with stakeholders including school communities, NSW Government agencies and Council. 	<p>The Department is satisfied that the Applicant undertook consultation as part of preparation of the EIS and that the application was correctly exhibited in accordance with the EP&A Act.</p>

Issue	Findings	Department's consideration and recommended conditions
	<ul style="list-style-type: none"> the lodgement date of the application was determined in consultation with the School Executive and Parents and Carers Presidents from each school. COVID-19 social distancing requirements changed the usual way in which the Department of Education shared the proposal to the local community during the exhibition of the EIS. While in person community information sessions were not permitted, information that would normally be displaying at these sessions was placed on their website. Community members were invited to view the materials on the project website and discussion the proposal over the phone, via video conference and email. while COVID-19 changed the methods of consultation, the quantity and quality of information shared with the community and consultation duration remained unchanged. 	
Development contributions	<p>The Applicant does not propose to pay development contributions stating that contributions are not applicable to works undertaken on behalf of the Crown.</p> <p>The Willoughby Local Infrastructure Contributions Plan 2019 (Contributions Plan) applies to development within the City of Willoughby. The purpose of the Contributions Plan is to raise funds for public facilities and infrastructure.</p> <p>Section 2.6 of the Contributions Plan specifies that the contributions are not applicable to public infrastructure which would be carried out by or on behalf of any public authority and development.</p>	<p>As the proposal is for significant upgrades to two public schools carried out by NSW Department of Education, the Department considers that the proposal is exempt from payment of developer contributions in accordance with the Section 2.6 of the Contributions Plan and under section 7.12 EP&A Act.</p>

Issue	Findings	Department's consideration and recommended conditions
	Council raised no objection to the proposed exemption from payment of development contributions.	
Adequacy of information	Concerns were raised in the public submissions regarding the adequacy of the EIS.	The Department considers the EIS sufficiently addressed the SEARs. The Department's assessment is also informed by advice by public authorities and from inspections of the sites undertaken by the Department (Section 5). In addition, the Department requested additional information from the Applicant in order to undertake a comprehensive assessment of the proposal.

7 Evaluation

The Department has reviewed the EIS, RtS and assessed the merits of the proposal, taking into consideration advice from the public authorities, including Council. Issues raised in public submissions have been considered and all environmental issues associated with the proposal have been addressed. The Department concludes the impacts of the development are acceptable and can be mitigated through the recommended conditions of consent. Consequently, the Department considers the development is in the public interest and should be approved, subject to conditions.

The proposal is consistent with the objects of the EP&A Act, and the State's strategic planning objectives for the site set out in the *Greater Sydney Region Plan – A Metropolis of Three Cities* and the Greater Sydney Commission's North District Plan, as it would provide much needed improved and expanded school infrastructure located near existing public transport and includes opportunities to co-share facilities with the community.

The Department concludes that the height, bulk and scale of the proposal is acceptable in its context, given the site constraints and public benefits of the development. Impacts on heritage, streetscape and residential amenity would be acceptable. Functional access, car parking and drop-off / pick-up arrangements are proposed, and implementation of sustainable transport measures would reduce car-based travel that would limit the impacts of the development on the local road network. Mitigation measures and recommended conditions are proposed that would manage construction impacts.

The proposal is considered to be in the public interest as it would provide public benefits including:

- provision of updated educational facilities to meet the needs of the existing school population as well future increases in student enrolments.
- investment of \$152.6 million to deliver approximately 266 new construction jobs and 20 operational jobs.

8 Recommendation

It is recommended that the Executive Director, Infrastructure Assessments, as delegate of the Minister for Planning and Public Spaces:

- **considers** the findings and recommendations of this report.
- **accepts** and adopts the findings and recommendations in this report as the reasons for making the decision to grant approval to the application.
- **agrees** with the key reasons for approval listed in the notice of decision.
- **grants consent** for the application in respect of the Upgrades to Chatswood Public School and Chatswood High School (SSD-9483), subject to the conditions.
- **signs** the attached development consent and recommended conditions of consent (**Attachment C**).

Prepared by:



Tahlia Alexander

Senior Planning Officer

Social and Infrastructure Assessments

Recommended by:



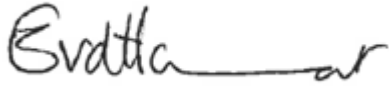
Jason Maslen

Team Leader

School Infrastructure Assessments

9 Determination

The recommendation is **Adopted** by:

A handwritten signature in black ink, appearing to read 'Erica van den Honert', with a long horizontal flourish extending to the right.

30 November 2020

Erica van den Honert

A/Executive Director

Infrastructure Assessments

Appendices

Appendix A – List of referenced documents

The following supporting documents and supporting information to this assessment report can be found on the Department of Planning, Industry and Environment's website as follows.

1. Environmental Impact Statement

<https://www.planningportal.nsw.gov.au/major-projects/project/10561>

2. Submissions

<https://www.planningportal.nsw.gov.au/major-projects/project/10561>

3. Applicant's Response to Submissions and supplementary information

<https://www.planningportal.nsw.gov.au/major-projects/project/10561>

Appendix B – Statutory Considerations

ENVIRONMENTAL PLANNING INSTRUMENTS (EPIs)

To satisfy the requirements of section 4.15(a)(i) of the *Environmental Planning and Assessment Act 1979* (EP&A Act), this report includes references to the provisions of the EPIs that govern the carrying out of the project and have been taken into consideration in the Department's environmental assessment.

Controls considered as part of the assessment of the proposal are:

- State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP).
- State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP).
- State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 (Education SEPP).
- State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55).
- Draft State Environmental Planning Policy (Remediation of Land) (Draft Remediation SEPP).
- Draft State Environmental Planning Policy (Environment) (Draft Environment SEPP).
- Draft State Environmental Planning Policy (Educational Establishments and Child Care Facilities) (Draft Education SEPP)
- Willoughby Local Environmental Plan (WLEP) 2012.

COMPLIANCE WITH CONTROLS

State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP)

The aims of this SEPP are to identify state significant development (SSD) and state significant infrastructure and confer the necessary functions to joint regional planning panels to determine development applications.

An assessment of the development against the relevant considerations of the SRD SEPP is provided in **Table B1**.

Table B1 | SRD SEPP compliance table

Relevant Sections	Consideration and Comments	Complies
3 Aims of Policy The aims of this Policy are as follows: (a) to identify development that is State significant development	The proposed development is identified as SSD.	Yes
8 Declaration of State significant development: section 4.36 (1) Development is declared to be State significant development for the purposes of the Act if:	The proposed development is permissible with development consent. The proposal is for alterations and additions to an existing school with a capital investment value (CIV) in	Yes

- (a) the development on the land concerned is, by the operation of an environmental planning instrument, not permissible without development consent under Part 4 of the Act, and
- (b) the development is specified in Schedule 1 or 2.
- excess of \$20 million, under clause 15(2) of Schedule 1 of the SRD SEPP.

State Environmental Planning Policy (Infrastructure) 2007

The Infrastructure SEPP aims to facilitate the effective delivery of infrastructure across the state by improving regulatory certainty and efficiency, identifying matters to be considered in the assessment of development adjacent to particular types of infrastructure development, and providing for consultation with relevant public authorities about certain development during the assessment process.

An assessment of the development against the relevant considerations of the Infrastructure SEPP is provided in **Table B2**.

Table B2 | Consideration of the relevant provisions of Infrastructure SEPP

Clause(s)	Consideration and comment
45 Development likely to affect an electricity transmission or distribution network	The development is located immediately adjacent to an electricity substation. In accordance with the Infrastructure SEPP, the development was referred to the relevant electricity supply authority for comment. No comments were received, and it can be assumed that no objections are raised.
101 – 104 Development in or adjacent to road corridors and road reservations	<p>The Chatswood Public School (CPS) has frontage to the Pacific Highway which is a state classified road. In accordance with clause 101(2) the consent authority must be satisfied that, where practicable and safe, vehicular access is to be provided by a road other than the classified road and that the development would not impact on the safety, efficiency and ongoing operation of the classified road.</p> <p>The Department has consulted with TfNSW being the relevant roads authority for the classified road network. TfNSW provided recommended conditions in relation to the use of the Pacific Highway access.</p> <p>The Department has considered potential traffic impacts at Section 6.2 and is satisfied the development would not have a significant impact on the surrounding road network. The proposal provides for appropriate vehicle access arrangements and it is considered that there would be no adverse impact on</p>

the ongoing safety and efficient operation of the adjoining classified roads, subject to recommended conditions.

The CPS site is on the Pacific Highway which has an annual average daily traffic volume of more than 20,000 vehicles. In accordance with clause 102(2), the consent authority must take into consideration any guidelines to assess the effects of road noise and vibration on the development.

The Department notes the Development Near Rail Corridors and Busy Roads – Interim Guideline, which addresses airborne and ground borne noise and vibration mitigation measures and prescribes maximum noise levels, is applicable to the proposal.

The submitted Noise Impact Assessment (NIA) considered impacts of noise and vibration intrusion in accordance with the guideline and set out measures that would ameliorate potential traffic noise and vibration from the Pacific Highway including:

- external wall construction material and thickness specifications.
- glazing requirements including specified thickness and acoustic seals.
- insulation requirements.
- acoustically treated air conditioning systems.

The Department has recommended conditions of consent that require the mitigation measures to be incorporated into the development.

Educational establishments are no longer covered under the traffic generating development provisions of the Infrastructure SEPP as they are considered under the Education SEPP. Nonetheless, the application was referred to TfNSW (**Sections 5 and 6.2**).

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

The Education SEPP aims to simplify and standardise the approval process for child care centres, schools, TAFEs and universities while minimising impacts on surrounding areas and improving the quality of the facilities. The Education SEPP includes planning rules for where these developments can be built, which development standards can apply and constructions requirements. The application has been assessed against the relevant provisions of the Education SEPP.

Clause 42 of the Education SEPP states that Development consent may be granted for development for the purpose of a school that is SSD even though the development would contravene a development standard imposed by this or any other EPI under which the consent is granted. The

proposed development at the CPS site does not comply with the Floor Space Ratio (FSR) and Height of Building (HOB) development standards under WLEP. The Applicant has provided justification for contravening the development standards. The Department's consideration of the variations to the development standard is addressed in **Section 6.1**. The Chatswood High School (CHS) site is not subject to FSR or HOB development standards under WLEP.

Clause 57 of the Education SEPP requires traffic generating development that involve addition of 50 or more students to be referred to the Road and Maritime Services. The Application was referred to TfNSW (incorporating Road and Maritime Services) in accordance with this clause.

Clause 35(6)(a) requires that the design quality of the development should be evaluated in accordance with the design quality principles set out in Schedule 4. An assessment of the development against the design principles is provided in **Table B3**.

Table B3 | Consideration of the Design Quality Principles

Design Principles	Response
Principle 1 - Context, built form and landscape	<p>The site planning provides good aspect for the learning areas and for maximising the amount of outdoor level play areas and natural light. Landscaping has been integrated into architecture and responds well to the difficult topography and conditions at both sites.</p> <p>As detailed in Section 6.1, buildings P1 and P2 would be substantially higher than the adjoining low scale residential dwellings. However, due to the constrained nature of the site and need for the development to provide sufficient school facilities to meet the growing school population, the additional height is unavoidable and justified in this particular case.</p> <p>Mitigation measures have been incorporated into the design including facade articulation, cut out sections providing relief in the buildings and landscaping to provide screening to soften the appearance of the buildings. This is discussed in detail in Section 6.1</p> <p>The proposed buildings on the CHS site are compatible with the existing character of school described in the architect's design statement as a 'bush campus'. The proposed external materials are of a high quality and include a natural colour palate consistent with the character of the school and streetscape. The siting of the new buildings respects the existing front setback from Centennial Avenue and includes generous side setbacks. The new buildings on the CHS site would have minimal impacts on the streetscape, nearby heritage items or on adjoining residents.</p>

Principle 2 - Sustainable, efficient and durable	<p>The proposal includes ecologically sustainable development measures (Section 4.4.3). The materials chosen are durable and require low maintenance.</p> <p>Bicycle parking is provided within the sites and measures are proposed to encourage sustainable travel modes.</p>
Principle 3 - Accessible and inclusive	<p>The proposal has been designed to be accessible and inclusive through the provision of lifts and accessible paths of travel from particular locations at site boundaries up to and around the school buildings. Accessible entries to the schools are provided at the Pacific Highway frontage for the CPS site and from Centennial Avenue frontage for the CHS site</p> <p>The proposal would incorporate wayfinding signage identifying key areas within the school assisting visitors to navigate the site.</p> <p>The accessible location of the school halls from the public domain would allow the schools halls to be easily accessed by the community after school hours and on weekends.</p>
Principle 4 - Health and Safety	<p>The design of the school buildings provides a safe and secure school environment. The proposal has considered Crime Prevention Through Environmental Design principles. The proposal would clearly delineate the pedestrian entrances into the school to allow the management of visitors to the sites.</p>
Principle 5 - Amenity	<p>The proposal provides a variety of internal and external learning places for both formal and informal educational opportunities.</p> <p>The design of the proposed buildings seeks to maximise natural light and ventilation to the indoor areas of the school, while the landscaping and covered outdoor areas would provide ample shaded areas for students and staff use.</p> <p>Pacific Highway traffic noise mitigation measures would be implemented into the design and construction of the buildings to ensure a high level of amenity for occupants.</p>
Principle 6 - Whole of life, flexible, adaptable	<p>The buildings would allow for long term flexibility through the provision of flexible formal and informal learning areas to adapt to future learning requirements.</p>
Principle 7 - Aesthetics	<p>The CPS site described in the EIS as the 'urban' site due to its frontage to Pacific Highway and interface with the Chatswood CBD, while the CHS site is described as a 'bush campus' due to the extent of vegetation and large site area. The proposed</p>

design and materiality of the buildings on the two sites have been selected based on each of their unique settings. The proposal would achieve a high standard of architectural design and appearance.

Overall, the proposal would not detract from the character of the area.

State Environmental Planning Policy No. 55 - Remediation of Land

SEPP 55 aims to ensure that potential contamination issues are considered in the determination of a development application.

As detailed at **Section 6.4**, the Department is satisfied that the Applicant has adequately demonstrated that the sites are suitable, subject to remediation, for the ongoing use as an educational establishment as required by SEPP 55.

The Department recommends conditions relating to developing an unexpected find protocol to ensure measures are in place should any unanticipated contamination be found during works.

Draft State Environmental Planning Policy (Remediation of Land)

The Draft Remediation SEPP will retain the overarching objective of SEPP 55 promoting the remediation of contaminated land to reduce the risk of potential harm to human health or the environment.

Additionally, the provisions of the Draft Remediation SEPP require all remediation work carried out without development consent to be reviewed and certified by a certified contaminated land consultant. Remediation work is to be categorised based on the scale, risk and complexity of the work. Environmental management plans relating to post-remediation management of sites including the ongoing operation, maintenance and management of on-site remediation measures (such as a containment cell) are to be provided to Council.

The Department is satisfied that the proposal will be consistent with the objectives of the Draft Remediation SEPP.

Draft State Environmental Planning Policy (Environment)

The Draft Environment SEPP is a consolidated SEPP which proposes to simplify the planning rules for a number of water catchments, waterways, urban bushland, and Willandra Lakes World Heritage Property. Once adopted, the Draft Environment SEPP will replace seven existing SEPPs. The proposed SEPP will provide a consistent level of environmental protection to that which is currently delivered under the existing SEPPs. Where existing provisions are outdated, no longer relevant or duplicated by other parts of the planning system, they will be repealed.

Given that the proposal is consistent with the provisions of the existing SEPPs that are applicable, the Department concludes that the proposed development will generally be consistent with the provisions of the Draft Environment SEPP.

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

The Draft Education SEPP will retain the overarching objectives of the Education SEPP to facilitate the effective delivery of educational establishments and child care facilities across the State.

The provisions of the Draft Education SEPP aim to improve the operation, efficiency and usability of the Education SEPP and to streamline the planning pathway for schools, TAFEs and universities that seek to build new facilities and improve existing ones. The exhibited Explanation of Intended Effects (EIE) also proposes changes to the requirements that need to be met for an application to be SSD.

The Department is satisfied that the proposal will be consistent with the objectives of the Draft Education SEPP and continues to meet the requirements for SSD in accordance with the EIE.

Willoughby Local Environmental Plan 2012

The Willoughby Locally Environmental 2012 (WLEP) aims to encourage the development of housing, employment, infrastructure and community services to meet the needs of the existing and future residents of the Willoughby Local Government Area. The WLEP also aims to conserve and protect natural resources and foster economic, environmental and social well-being.

The Department has consulted with Council throughout the assessment process and has considered all relevant provisions of the WLEP and those matters raised by Council in its assessment of the development (**Section 5**). Consideration of the relevant clauses of the WLEP is provided in **Table B4**.

Table B4 | Consideration of the WLEP 2012

WLEP 2012	Department Comment/Assessment
Land Use Table	<p>Under WLEP, the CPS site is zoned R2 Low Density Residential and the CHS site is predominantly zoned SP2 Infrastructure (Educational Establishment) and partly zoned E2 Environmental Conservation in the south west corner of the site.</p> <p>Educational establishments are permissible with consent in the SP2 'Educational Establishment' zone but are prohibited in the R2 and E2 zone under the WLEP. However, there are no works proposed in the E2 zone and the R2 zone is a prescribed zone under Part 4 of State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 (ESEPP) and the use is permissible with consent.</p>
Clause 4.3 Height of Buildings	<p>The CPS is subject to a HOB control of 8.5m. The proposal exceeds the HOB control with a maximum height of 30.3m proposed. The Department considered this clause in its assessment (Section 6).</p> <p>The CHS site is not subject to a HOB control under WLEP. The height of the buildings is considered to be appropriate in the context of the existing buildings on-site and within the streetscape.</p>

Clause 4.4 Floor Space Ratio	<p>The CPS is subject to an FSR control of 0.4:1 and the proposed FSR is 0.55:1. The proposed amount of floor space is required in order to provide upgrade facilities and learning areas for the existing and proposed school population. This is discussed at Section 6.1.</p> <p>The CHS site is not subject to an FSR control under WLEP. The proposed development is consistent with the objectives of FSR development standard in that the site planning, bulk and scale is commensurate with the development of an existing school and facilities required to accommodate a growing school population on a large site in an urban context. The proposed bulk and scale of the building would not detract from the character of the streetscape or result in unreasonable amenity impacts on surrounding properties.</p>
Clause 5.10 Heritage conservation	<p>The CPS site is identified within Schedule 5 of WLEP as being a local heritage item (I106). In addition, there are three other local heritage items, all listed as 'house (including original interiors)' of local significance, in close proximity of the sites as follows:</p> <ul style="list-style-type: none"> • 9 Centennial Avenue – (I245). • 19 Centennial Avenue (I66). • 60 Centennial Avenue (I67). <p>The Department considers that the proposal would be sympathetic to the heritage significance of the buildings on CPS and site and the heritage items listed above. This is addressed further in Section 6.1.3.</p>
Clause 6.3 Flood planning	<p>The CPS site is not flood affected.</p> <p>A portion of the CHS site is subject to minor flood impacts. However, the new buildings would not be located on the flood affected portion of the site. Council provided conditions regarding stormwater management including on-site detention requirements to ensure the proposal would not adversely impact downstream properties during flooding events. The Department has incorporated Council's stormwater management requirements into the recommended conditions of consent.</p>

Other policies

In accordance with clause 11 of the SRD SEPP, Development Control Plans do not apply to SSD. However, the objectives of relevant controls under the Willoughby Development Control Plan 2006, where relevant, have been considered in **Section 6**.

Appendix C – Recommended Instrument of Consent

<https://www.planningportal.nsw.gov.au/major-projects/project/10561>