



planning consultants

2 October 2020
Our Ref: 20618A.25PS_RTS letter

Tahlia Alexander
Senior Planning Officer
Department of Planning, Industry and Environment
4 Parramatta Square, 12 Darcy Street
PARRAMATTA NSW 2150

Dear Ms Alexander

RE: SSD-9483 UPGRADES TO CHATSWOOD PUBLIC SCHOOL AND CHATSWOOD HIGH SCHOOL

1.0 Introduction

DFP Planning has been commissioned by School Infrastructure New South Wales (SINSW) to prepare a planning response to the issues raised in the public and authority submissions following the notification of SSD 9483 for the proposed upgrades to Chatswood Public School at 5 Centennial Avenue, Chatswood and Chatswood High School at 24 Centennial Avenue, Chatswood.

On 3 June 2020, further consultation meetings were held with the following authorities, the outcomes of which are reflected in this submission:

- Transport for New South Wales (TfNSW); and
- Willoughby City Council (Council).

On 30 July 2020, additional comments were issued by the Department of Planning, Industry and Environment (DPIE) in regard to height bulk and scale.

A detailed response to each item raised in the authority submissions and the key issues raised in the public submissions is provided at **Attachment 1** of this letter and in the remaining Attachments, as follows:

- **Attachment 1** – Detailed response to submissions prepared by DFP Planning
- **Attachment 2** – Architectural Response prepared by Architectus
- **Attachment 3** – Traffic and Parking Response prepared by TTPP
- **Attachment 4** – Biodiversity Response prepared by Eco Logical
- **Attachment 5** – Acoustic Response prepared by Day Design
- **Attachment 6** – Consultation Minutes with TfNSW and Willoughby City Council
- **Attachment 7** – Site Auditor Reports
- **Attachment 8** – Amended Architectural Plans prepared by Architectus
- **Attachment 9** – Amended Landscape Plans prepared by Oculus
- **Attachment 10** – Stormwater Engineering Statement prepared by SCP

- **Attachment 11** – Structural Engineering Statement prepared by SCP
- **Attachment 12** – Landscape Elevation
- **Attachment 13** – Neighbour Consultation

1.1 Summary of Issues Covered

This letter provides further discussion in relation to the main issues that have been raised in the submissions in order to provide DPIE with further assessment of the proposal.

The issues discussed in this letter include:

- Section 2: Strategic context and character;
- Section 3: Height, bulk and scale impacts;
- Section 4: Traffic, transport and parking impacts; and
- Section 5: Biodiversity.

1.2 Summary of Amendments

As outlined above this submission is supported by a number of documents, some of which respond to the issues raised in the submissions, while others reflect amendments to the proposal. A brief summary of amendments accommodated by the amended plans is provided below:

- Building P1 and P2 adjustments to floor plans, elevations, external treatments and landscaping;
- Building G adjusted to increase setback from northern boundary, adjust layout of floorplan and landscaping; and
- Building S minor adjustments to internal stair layout and façade treatment.

2.0 Strategic Context and Character

In recent years, Willoughby City Council as commissioned a number of strategic planning and urban design studies of the Chatswood CBD. The following publications have been considered in this letter:

- September 2013 – *Willoughby City Strategy 2013-2029* – This is a high-level guiding document for the wide ranging objectives of the Council as a whole. Under the goal of “Health and Wellbeing” the Strategy looks to support and maintain schools and education facilities;
- December 2016 – *Chatswood Planning and Urban Design Strategy* – This is the most relevant strategic planning document to consider as it considers a framework for all private and public development in Chatswood over 20 years, including most of the Chatswood Public School site and surrounds (refer **Section 2.1**);
- January 2020 – *Chatswood Precinct Study* – This Study was prepared in response to feedback from DPIE following commencement of the above Strategy. The School site is located within the Precinct Study but is identified as a ‘constrained site’. The opportunities explored in the Precinct Study relate to residential and commercial floor space, rather than considering the specific requirements of school built form and densities. In this regard, the objectives and recommendations of the above Strategy are considered more relevant to the specific context of the current proposal.
- May 2020 – *Chatswood CBD Strategy Density Study* – Building upon the findings of the Precinct Study, the Density Study further examined 9 out of the 79 sites tested which needed mitigation measures to address visual impact, transition and overshadowing. The School site is not identified in any of the subject precincts and so the Density Study does

Accordingly, the site is unique for its transitional location between development characteristic of the Chatswood CBD to the east and low-density residential development to the west. The proposed built form has considered the transitional nature of the site's location and the future objectives of the *Chatswood CBD Strategy*:

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 through 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 is consistent with that contemplated in a transitional area and the desired future character of the CBD.

Figures 2 and 3 (taken from **Attachment 2**) present a perspective of the desired future character of development in the Chatswood CBD and areas adjacent to the site based on strategic and statutory objectives for development in the area both with and without the proposed built form on the CPS site.



Figure 2 *Elevated perspective of CPS and proposal from Jenkins Street within the context of the desired future character of Chatswood CBD based on strategic and statutory planning controls and approved developments*

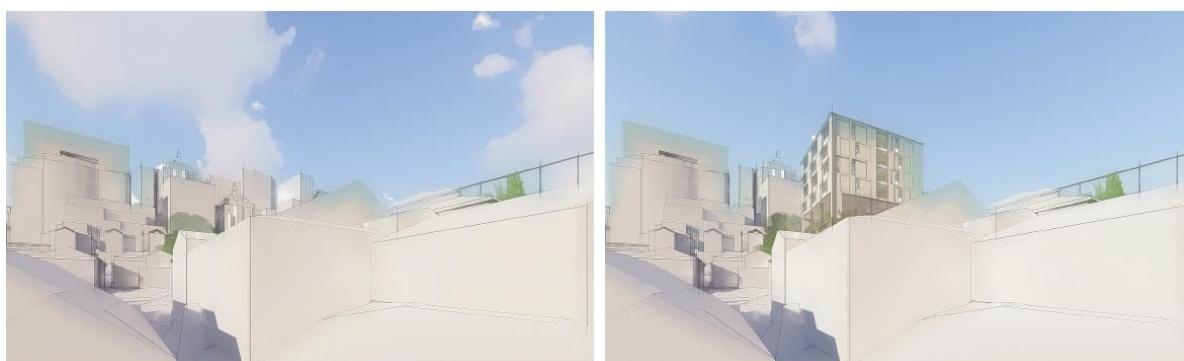


Figure 3 *Perspective of CPS and proposal from Jenkins Street within the context of the desired future character of Chatswood CBD based on strategic and statutory planning controls and approved developments*

These figures indicate that the visual impact of the built form is consistent with the higher density buildings that already characterise the outlook to the east as well as the potential future development based on strategic objectives and existing statutory development controls. The built form does not 'dominate' the street frontage on Jenkins Street as it is located within the site, away from 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.

3.0 Height, Bulk and Scale Impacts

3.1 Issues Raised

A number of public submissions raised concerns about the height, bulk and scale of Building P1, which is located in the north-western portion of the Chatswood Public School site over the Lowers playground area, and within the vicinity of residential dwellings on Jenkins Street and James Street. On 30 July 2020, DPIE raised further concerns in regard to Building P1 and Building G.

The design team has carried out additional assessment and has further investigated into the height, bulk and scale impacts of these buildings in order to address and accommodate as far as possible the matters raised in the public submissions and raised by DPIE. The additional assessment and investigation work has resulted in some changes being made to the built form, finishes and landscaping.

Responses to matters raised relating to Building G are discussed in **Section 3.2** while a responses to matters relating to Building P1 are discussed in **Section 3.3**.

3.2 Response to Building G

Concern was raised by DPIE in regard to the proposed 0m side setback to the northern boundary, where it adjoins the residential property at 1 James Street particularly in relation to overbearing built form with poor outlook from within the private open space of that property.

In response to DPIE's comments, the design of Building G has been amended as follows:

- Increase setback at the north-west corner of Building G to James Street neighbour;
- Provide overall boundary setback of 1m to the northern boundary;
- Relocated and consolidated bathrooms in the southern part of the plan; and
- Fence and gate added for maintenance.

These changes are shown in yellow in **Figure 4** below and are reflected in the updated Architectural Plans at **Attachment 8** and supported by a Stormwater Engineering Statement at **Attachment 10**.

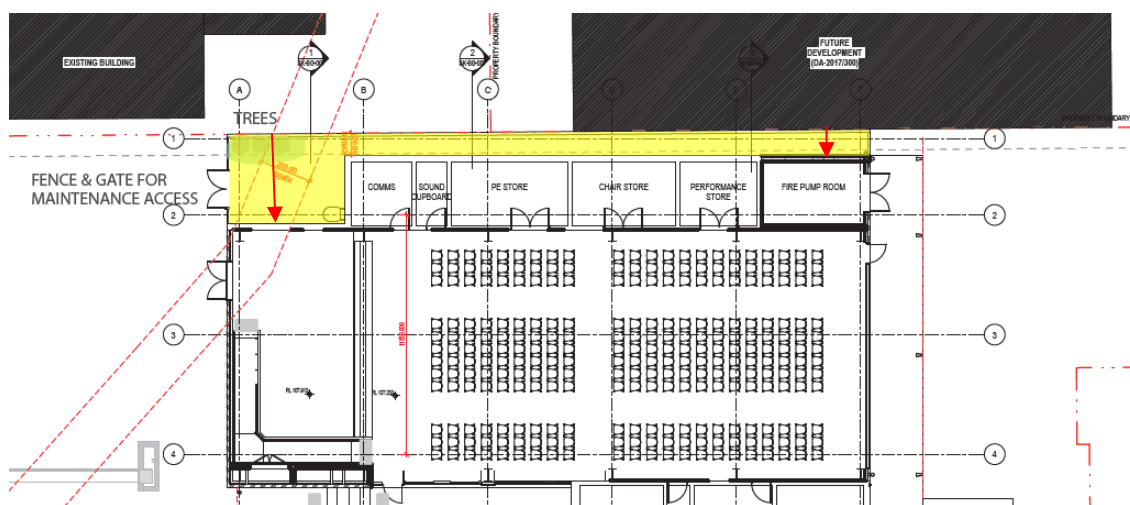


Figure 4 Amendments to Building G floor plan

3.3 Response to Building P1

Public submissions raised concern about the height, bulk and scale of building P1, and DPIE raised a range of specific concerns including:

- Amenity impacts of the building on the low scale dwellings at No. 1 and No. 3 Jenkins Street and 2 James Street; and
- Excessive height for this part of the site given wall height, setbacks, shared boundaries, topography of the site and topography of adjoining sites.

SINSW has undertaken an extensive process of review, assessment and investigation in response to these concerns, including carrying out a detailed options analysis exploring the relocation of floor space from Building P1 to other locations on the site (discussed in **Section 3.3.1**); providing a detailed response to the architectural merits of the northern and western elevations of Building P1 (set out in **Attachment 2**); and accommodating amendments to the Architectural Plans to address these concerns as an outcome of this process (discussed in **Section 3.3.2**).

3.3.1 Design Review Options for Building P1

The project team has reviewed the scheme proposed under the SSDA and explored options to adjust the design to distribute height to the centre of the site (i.e. on top of Building P2), or what options are available to relocate the two (2) floors of the building elsewhere on the site.

The primary driver for this was feedback received indicating that the top two floors may be contributing to an appearance of excessive bulk and scale that could be avoided if relocated elsewhere.

These design review options were summarised as follows:

- Option 1: Relocate one (1) floor from Building P1 to P2;
- Option 2A: Relocation of two (2) floors from Building P1 to above the Jenkins Street car park;
- Option 2B: Relocation of two (2) floors from Building P1 to above Building G;
- Option 2C: Relocation of two (2) floors from Building P1 to a new area of the site as a new building.

Given the requirements of the project brief, objectives of the school, design requirements under the EFSG as well as other impacts, the following were the key reviewing factors for each of the options considered by SINSW:

- Education design and planning;
- Town planning impacts/outcomes;
- Heritage impacts/outcomes;
- Buildability (i.e. staging of work);
- Program (i.e. delays); and
- Budget.

The following table summarises each of the options and notes the key matters raised with each option relevant to this design review process:

Table 1 – Summary of Design Review Options

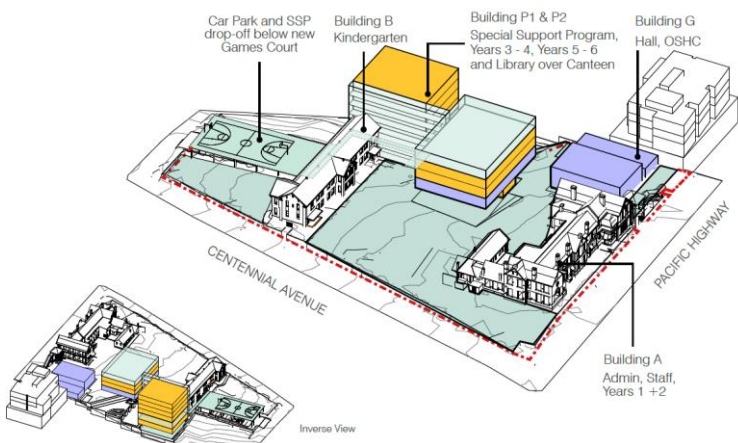
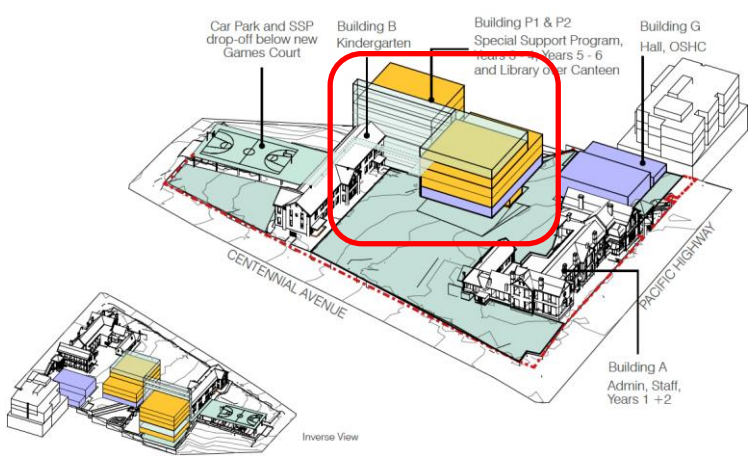
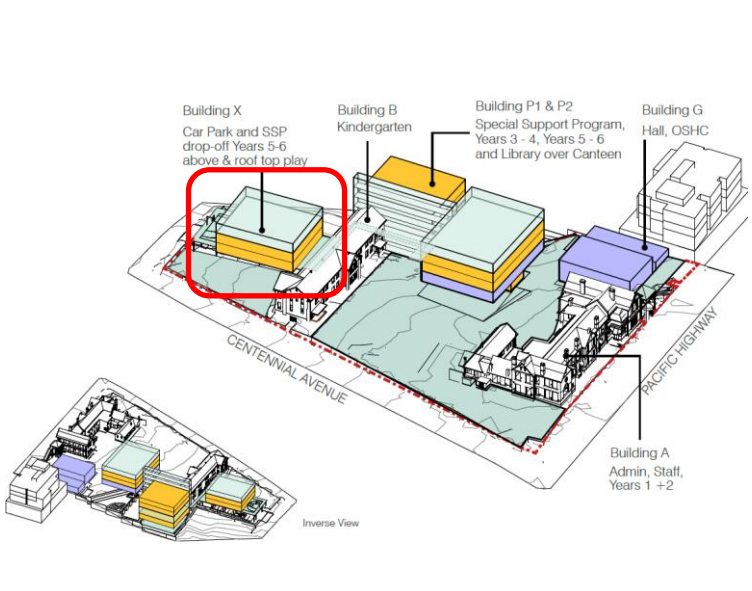
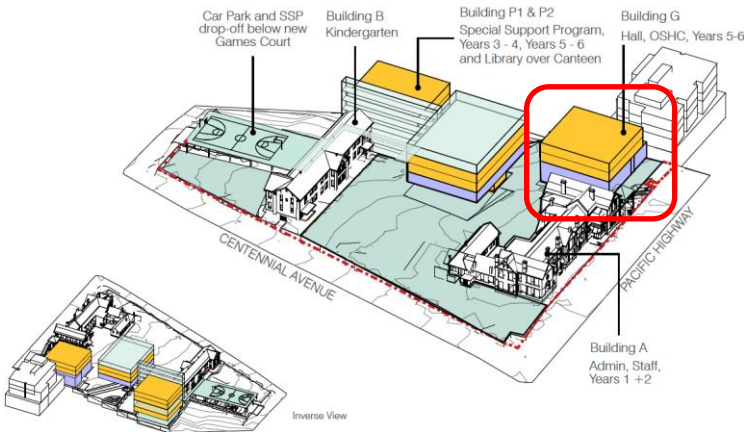
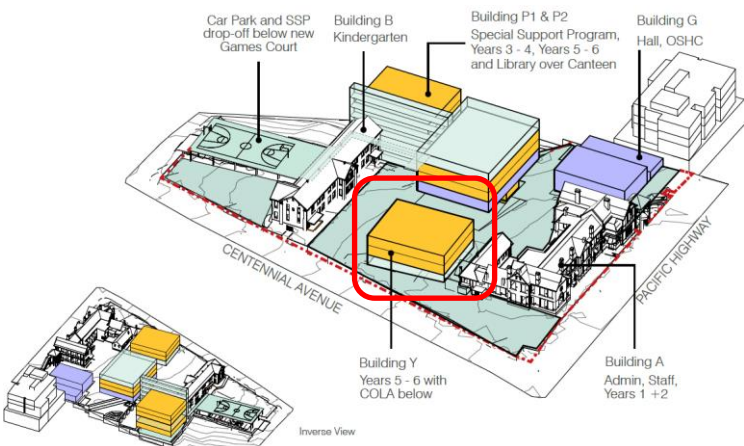
Option	Design Review Concept (Change in Red)	Comments
Current		<p>Preferred: Current scheme maximises play space, connects to outdoor spaces from learning neighbourhoods, retains visual connection between Building A and B, maintains streetscape character and is within project program, budget and staging requirements.</p> <p>The built form results in bulk and scale impacts on neighbouring properties at 1 and 3 Jenkins Street.</p>
1		<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>
2A		<p>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 DPIE'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.</p>

Table 1 – Summary of Design Review Options

Option	Design Review Concept (Change in Red)	Comments
2B		<p>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.</p>
2C		<p>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 ongoing operation of school during build phase.</p>

The outcome of the design options review process was that all options which reduced the height of Building P1 introduced additional negative interface, heritage, educational and program impacts.

On balance across all options and in consideration of the strategic planning context of the site, the current scheme is considered the most appropriate option which achieves the best amenity for internal and external stakeholders, noting that the bulk and scale of Building P1 does not

give rise to impacts that have already been assessed as acceptable (including privacy, acoustic or overshadowing impacts) on neighbouring properties.

Therefore an alternative option is not considered a suitable outcome, further investigation was warranted to implement further design changes to improve the building exterior and associated landscaping in order to minimise the perception of height, bulk and scale, as discussed in the following section.

3.3.2 Response to Height, Bulk and Scale

Architectus has prepared a detailed response to the height, bulk and scale concerns raised in regard to Building P1 (**Attachment 2**) which examines in greater detail at the materiality, relief, articulation and landscaping of Building P1. Additional landscaping detail is provided by Oculus at **Attachment 12**.

In summary, Architectus outlines that:

- Materiality has been selected having careful consideration of the City and Heritage contexts of the site;
- Materiality will create a design link between the PS and HS sites;
- Glazing is maximised on the northern and southern facades, and is minimised on the western façade;
- A review of horizontal and vertical options for articulation of the northern and western elevations has been carried out and amendments have been made without reducing play space;
- Cut-outs within the external brick work have been used to provide additional relief; and
- Landscaping has been introduced to the outdoor area for screening to assist with outlook and privacy.

Additional design details of the western and northern facades of the building have been prepared to illustrate the light/shadow effects achieved through at various times of the day that will be viewed across the brick-work relief (refer **Figure 5**). This detail includes low-scale detailed sections of the typical brick recess and increased detail of the façade treatments.



Figure 5 Western façade of Building P1 showing light-relief from 2pm (left) to 3pm (right)

Landscaping provided within the COLA and at ground floor will provide additional buffering of view lines and reduce perceived bulk and scale from the built form (**Attachment 12**), including hedge planters at the COLA and additional hedge planting proposed on the lower ground floor level (**Figure 6**).

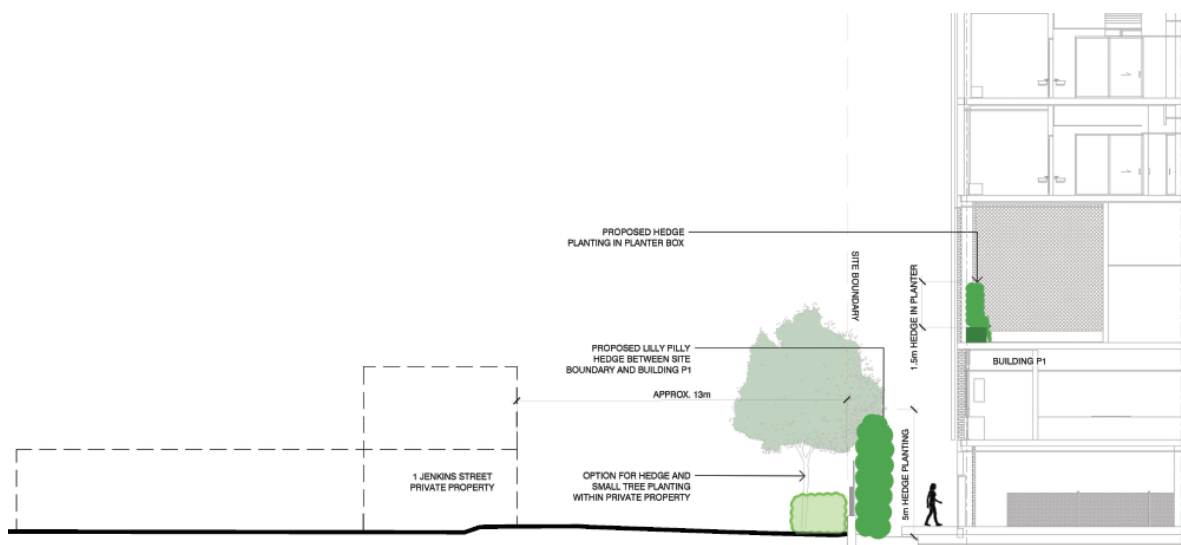


Figure 6 Interface section of Building P1 and neighbouring property at 1 Jenkins Street

In addition to the above, SINSW is also in the process of liaising with the neighbours at Nos. 1, 3 and 5 Jenkins Street to provide a further update on the project and discuss measures to minimise disruption and the impact of the new buildings (refer **Attachment 13**). These consultations will continue to be carried out by SINSW and any outcomes agreed with neighbours will be conveyed to DPIE.

The design adjustments discussed above are contained in the updated Architectural Plans (**Attachment 8**) and Landscape Plans (**Attachment 9**).

As an additional note in regard to Building P1, a Structural advice letter (**Attachment 11**) confirms the building foundations will transfer building loads to rock below the surrounding retaining walls and will not result in any additional surcharge pressure onto the rear face of the existing retaining walls.

The extensive process of review, assessment and investigation carried out by SINSW responds to the concerns raised in the public submissions and by DPIE to confirm that there are no alternative options for reducing the building height, bulk or scale, and that all measures have been explored to provide further architectural design treatments in order to improve the perception of bulk and scale to the western and northern building facades. The amendments have considered view points of neighbouring properties, as well as educational delivery within the site inclusive of student amenity.

The proposed design for Building P1 is considered to represent the most equitable balance of impacts (both internal and external) 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 Chatswood Public School site.

4.0 Access, Traffic and Parking

A detailed response to submissions in relation to traffic, transport and parking has been prepared by TTPP (**Attachment 3**). During the preparation of the 'Response to Submissions package, the project team has carried out additional consultation with TfNSW and Willoughby City Council (**Attachment 6**), particularly with regard to access, traffic and parking issues.

4.1 Pacific Highway Vehicle Access

We understand from the Transport for New South Wales (TfNSW) submission and further consultation with them, that TfNSW has safety concerns about allowing vehicle access via the existing driveway on Pacific Highway.

4.1.1 Construction Access

As a result of this consultation, a thorough review of all possible construction vehicle access options for the proposed built form has been undertaken and has confirmed the following constraints:

- The only option for construction vehicle access to the P1 building site via Jenkins Street is to demolish Building 'I' early in the construction phase (see **Figure 7**). Building I contains six (6) learning spaces that are proposed for continued use through the early phases of construction until students can be relocated into the new classrooms. The demolition of Building I is not proposed until new classroom spaces for these students is constructed therefore its early demolition is not an option.
- There is no vehicle access route possible through the school grounds from the Jenkins Street driveway to the upper part of P2 or the Hall construction sites due to significant level changes, high retaining walls and existing built form (heritage Building B).



Figure 7 Image of site indicating location of Building I and physical barriers preventing vehicle access to the upper portion of the site from Jenkins Street

As per the Heritage Impact Assessment submitted with the EIS, Chatswood Public School originally only had access from Pacific Highway (**Figure 8**). Accordingly, the built form was constructed on that site with only Pacific Highway access in mind. The addition of the rear lot that has vehicle access from Jenkins Street has provided additional learning and outdoor play spaces but does not provide vehicle access to the main (original) part of the site due to the existing topography and built form (see **Figure 7** above).



Figure 8 Chatswood Public School site 1943 (Source: HIA, March 2020)

The three (3) Building Contractors who have now provided their tender submissions for construction of the proposed development have also confirmed that it is not possible to construct the Hall or P2 without vehicle access from Pacific Highway and the only way P1 could be constructed without access from Pacific Highway is to demolish Building I immediately, which is required for the current student population and therefore cannot be removed until alternative classrooms are constructed.

The Traffic letter at **Attachment 3** supports construction vehicles access to the site via Pacific Highway and presents swept path diagrams.

4.2 Travel Mode Share – High School Survey Results

Transport for New South Wales (TfNSW) raised concerns about the reliability of travel mode survey results from Chatswood High School students (16% response rate) and requested that travel mode data prepared by Roads and Maritime Services (RMS) be used instead. The discussion prepared by the traffic engineer (**Attachment 3**) provides the following rationale.

The distribution of schools included in the RMS travel mode share survey, unlike Chatswood High School, are not located proximate to a major public transport hub. **Figure 9** indicates the distribution of schools included in the RMS survey (red dots) and their proximity to train lines and also plots the Chatswood Schools (blue dot). Accordingly, it is reasonable to consider that students at the Chatswood schools would have a higher level of utilisation of public transport, given the proximity of the school to the Chatswood railway station.



Figure 9 Location of RMS Surveyed Schools compared to CPS & CHS

Notwithstanding, the RMS school trip rates indicate that:

- During the AM peak, high school vehicle trips (0.47) are half that of primary school vehicle trips (0.88); and
- During the PM peak, high school vehicle trips (0.27) are approximately 40% of primary school trips (0.71).

The mode share survey data returned by Chatswood Public School students had a response rate of 86% and is considered to be reliable data. This data indicates that 30% of primary school students travel by car. By comparison, the data returned by Chatswood High School Students indicates that 16% of high school students travel by car (just over half the percentage of primary school vehicle trips). When compared with the RMS ratio of high school to primary school vehicle trips, the Chatswood ratio represents slightly higher high school vehicle usage than the RMS rates, which indicates that the travel data can be relied upon. In addition, discussions with the Principals of both schools confirmed that the survey data is representative of the existing travel demands.

Accordingly, it is considered that the traffic generation rates utilised in the Traffic Impact Assessment submitted with the SSDA accurately reflect the existing travel demands for the schools and are appropriate given the school's proximity to the Chatswood public transport hub.

4.3 Traffic Management

The proposed works at the Public School and High School sites will not generate additional demands for school drop off/pick up facilities, nor additional traffic or pedestrian movements. Such demands would only be generated if both growth in population and the current rate and travel behaviour of students remained unchanged.

The implementation of a comprehensive School Travel Plan will have the effect of maintaining the existing level of demand/impact associated with the operation of both schools. Therefore, it

is considered that the need for a LATM investigation and potential improvement measures are not required to address the implications of the proposed school upgrade project.

4.4 Parking

During the construction phase of the project, there will be reduced on-site parking available to staff. In order to mitigate potential impacts caused by the potential increased demand for on-street parking, a comprehensive School Travel Plan, including Green Travel Plan will be prepared prior to issue of the Construction Certificate.

Once construction is complete, the School Travel Plan will continue to encourage greater adoption of active transport options, including public transport and car sharing, to reduce use of private vehicles and the consequent demand for car parking. In addition, the implementation of additional parking restrictions in the streets surrounding the school to further deter on-street car parking and improve amenity for residents.

5.0 Biodiversity

Eco Logical Australia has updated the Biodiversity Development Assessment Report (BDAR) (Version 5) (**Attachment 4 – Part 2**) to respond to the comments issued by Environment, Energy and Science Group (EES) within the Department of Planning, Industry and Environment. Eco Logical Australia has also prepared a detailed response to the items raised in EES's submission (**Attachment 4 – Part 1**).

In addition to the assessment already provided in the EIS with the original SSDA, the revised BDAR indicates that the proposed works will require an additional three (3) ecosystem credits and two (2) species credits as identified in **Figure 10**.

Ecosystem credits required

Veg zone	PCT # and name	Ancillary code	Vegetation integrity score	Trading group	Direct impact (ha)	Credits required
2	1237 Sydney Blue Gum - Blackbutt - Smooth-barked Apple moist shrubby open forest on shale ridges of the Hornsby Plateau, Sydney Basin Bioregion	Weedy	33.4	North Coast Wet Sclerophyll Forests >90% cleared group (Tier2 or higher)	0.032	1
3	1237 Sydney Blue Gum - Blackbutt - Smooth-barked Apple moist shrubby open forest on shale ridges of the Hornsby Plateau, Sydney Basin Bioregion	Planted native	25	North Coast Wet Sclerophyll Forests >90% cleared group (Tier2 or higher)	0.35	5
TOTAL					0.38	6

Species credits required

Species	Common name	Direct (count)	impacts	Trading group	Credits required
<i>Syzygium paniculatum</i>	Magenta Lilly Pilly	1		Any in NSW	2

Figure 10 Extract from BDAR detailing Ecosystem Credit and Species Credit requirements.

In this regard, payment will be made to the Biodiversity Conservation Trust (BCT) to purchase the equivalent of six (6) Sydney Blue Gum PCT biodiversity credits and two (2) *Syzygium paniculatum* credits.

6.0 Conclusion

The proposed upgrades to Chatswood Public School and Chatswood High School are consistent with the objects of the EP&A Act, including ecologically sustainable development, and is consistent with the State's strategic planning objectives for the site as set out in the:

- Greater Sydney Regional Plan – North District Plan as the development will create jobs and provide additional permanent, modern educational facilities to meet the future needs of the community which facilitates the removal of demountable classrooms.
- The draft Willoughby Local Strategic Planning Statement (LSPS) which indicates that concentrated population growth along public transport corridors is placing pressure on social infrastructure and in most cases, increases in capacity will need to come through upgrades to, and increased utilisation of, existing infrastructure.
- The Chatswood CBD Strategy, the objectives of which include a compact, walkable and healthy CBD, with exceptional urban design to accommodate future growth.

The proposed works have been assessed on balance as providing significant public benefit to the immediate local and surrounding district through the provision of increased enrolment capacities for both primary and secondary aged students within new educational facilities. The proposed built form on Chatswood Public School is considered appropriate given the location of the site as a gateway between low density residential development and the high density CBD.

In addition to the wide ranging consultation that was carried out during the preparation of the SSDA, the project team has carried out additional consultation with TfNSW and Willoughby City Council during the preparation of the 'Response to Submissions' package. The advice received has informed the consideration of built form impacts and traffic management and has been incorporated into the current proposal where possible, reflecting a commitment to provide a quality and objective-driven outcome.

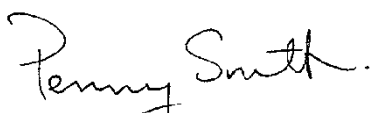
The public interest is served by the proposed development through the provision of:

- Increased supply of classrooms and facilities at both Chatswood Public School and Chatswood High School within new permanent and improved education facilities to cater for increased enrolment pressures and projected student growth within the Chatswood locality, facilitating the removal of demountable classrooms;
- Consolidated and further investment in public infrastructure in an established centre, with excellent connectivity to existing and developing public transport facilities;
- Works with a significant capital investment value that will provide new and improved educational infrastructure to support the local community;
- 266 new construction jobs and up to 20 additional full-time equivalent operational jobs.

Environmental impacts of the proposal have been assessed and are capable of being mitigated to achieve acceptable levels of impact subject to a number of measures being adopted, as set out in the assessment material supporting the EIS and this response to submissions.

Yours faithfully

DFP PLANNING PTY LTD



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Reviewed:

