3.1 Community Consulations

As the design has progressed from the competition winning scheme we have developed and refined design which best meets the school communities' needs through consultation with the school stakeholders and council stakeholders. The school community has been regularly updated with project progress, in the form of presentations from the Headmaster, design updates from the Architectus team and through school newsletters

The school has engaged with Woollahra Council throughout the early stages of the project and most recently presented the latest plans to the Council in November 2017 to provide relevant information about the proposal to residents and community stakeholders to create awareness about the proposal and forthcoming SSDA application. This presentation was well received and gained positive feedback, especially in regards to the architectural design and the provision of car parking on the site.

Cranbrook and Architectus also presented the scheme to the Government Architect NSW (GANSW) in order to demonstrate that design excellence will be achieved in accordance with Schedule 4 Schools design quality principles of State Environmental Planning Policy (Education and Child Care Facilities) 2017. Overall, GANSW commended the process which was undertaken to develop the proposal including the preparation of the scheme and the design competition and the supporting letter is attached in Appendix A.

The consultation with GANSW provided the project team with the opportunity to incorporate stakeholder feedback into the design and provide the additional information requested.

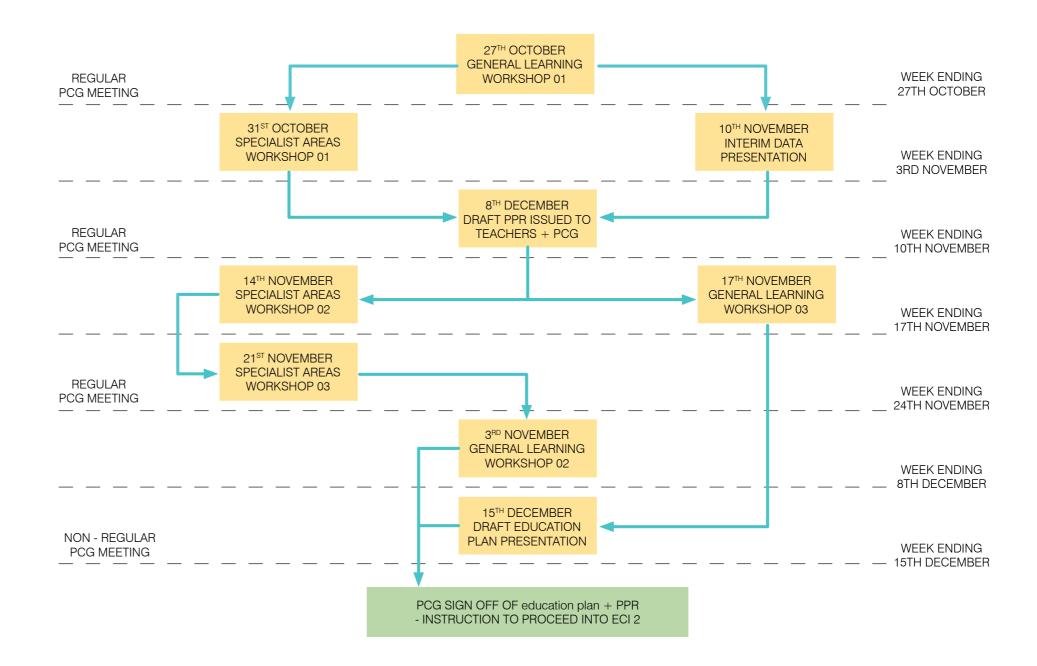
Cranbrook has also engaged in discussion with Transport for NSW and Roads and Maritime Services to inform them of the proposals.



3.2 User group process

A carefully conceived, documented and thoroughly engaging briefing process was established with the key stakeholders at the school to define a pedological vision for the school and a built form to facilitate this vision. The design team nominated 'Champions of Change' which included, education policy makers, teachers, students, and the Project Control Group (PCG) to champion and drive a high-quality design outcome to support the pedological vision of the school.

This process was named the 'Discovery Workshop Process' and was split into two streams, with three workshops for "Learning and Teaching" and three individual workshops for each of the three "Specialist" spaces. During this process, the findings of these workshops were reported back to the PCG, as shown on the diagram.



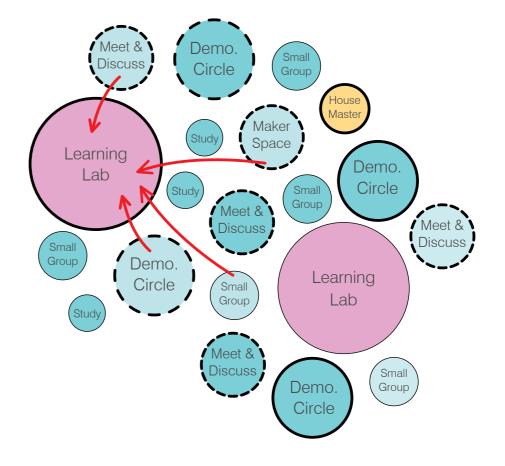
3.3 User group process

By engaging the students, educators, and the school community early in the design process, it allowed the school to determine which teaching style(s) and environment was suitable for them. The teachers and students were engaged in round-table discussions and butchers paper mark-ups. The workshop activities set the students and teachers the task of describing Learning Settings which they aspire to have and then to define diagrams describing the relationships between the Learning Settings.

The major theme arising from this process was the desire for students and teachers to move between formal spaces and larger groups to informal spaces and smaller groups which was described during the discovery process as 'zooming in and zooming out'. We are exploring the best way to maximise use of space as well as facilitating spontaneous movement between spaces some of the time.

The workshops also repeatedly emphasised how the house system is fundamental to student life at the school. The design team investigated how to create a zone large enough to accommodate one house group to ensure there are enough opportunities for up to eight mentor groups to meet and work concurrently and also function as informal learning zones, within which are embedded the kinds of satellite library resources.

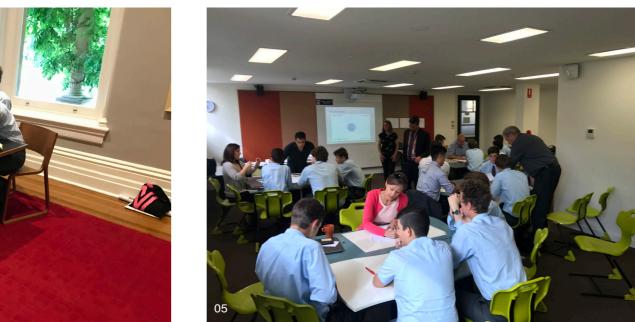
Learning Settings A suite of learning settings emerged through the workshop process, which include a range of spaces for very small groups, through to full classes of 30, and up to maximum house sizes at 120 students. Each of the settings is described, to define a "kit of parts" for learning spaces. Democratic Satellite Various Circles Libraries Maker Spaces Meet & Discuss 30 Learning House Labs 120 Zones Small Group Study Nooks House

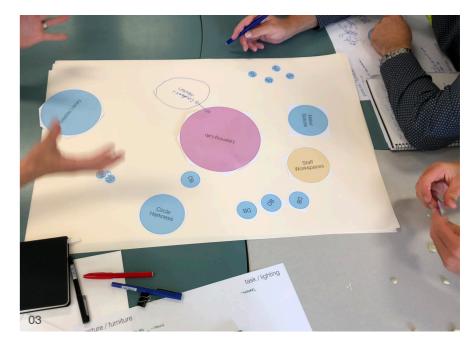


Master

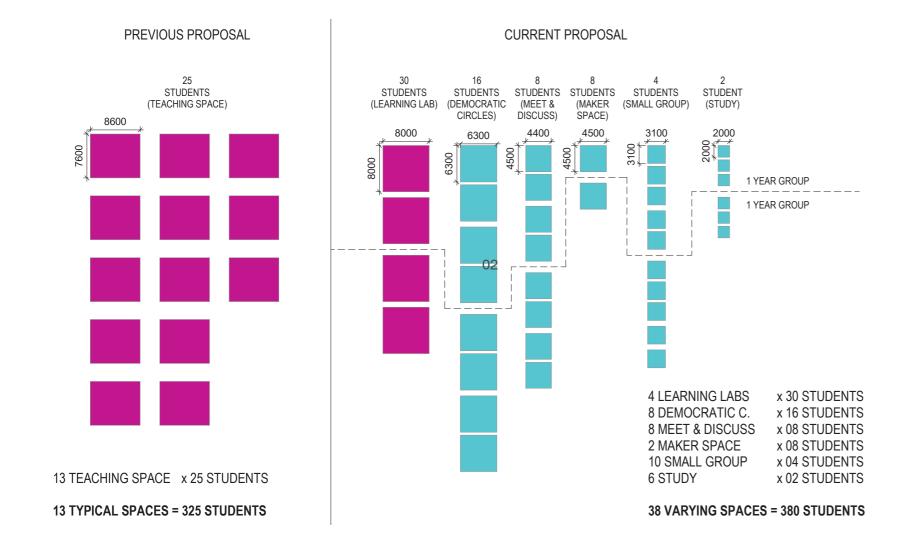




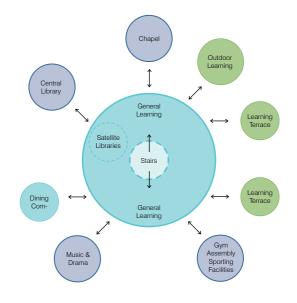




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3.4 User group process

During the Discovery Workshops, the design team also engaged with the timetable planning staff to ensure the physical environment which was being developed could support the pedagogical approach, curriculum and class structure proposed for Cranbrook. The feedback was invaluable and identified that the school has a great volume of large rooms but have only partial seat occupancy for many classes. Many of the later years classes are for smaller groups. For example, an existing 30-seat room may be holding a class for 12 students. This is illustrated in the timetable "heat maps" indicated. It was determined that the school's needs are better met by provision of a variety of spatial sizes, with more smaller spaces to complement the existing suite of mostly large (example 30) person rooms currently available on the campus.

The Hordern Precinct Development is seen as an opportunity to address this imbalance by providing predominantly smaller teaching spaces, whilst maintaining a self-sufficient and balanced mix of spaces in itself. Future stages should also be

assessed against the range of sizes required, rather than as a room count based on larger rooms. The space available can be used more effectively through smaller spaces, which will assist in reducing pressure on the decant strategy for future phases.

The inputs and themes from The Discovery Workshops emerged as unique aspirations of the culture and ethos of Cranbrook, to form guiding principles for the development which were encapsulated and incorporated into the design by the design team.





A Response to Design Quality Principles of the Education SEPP

4.1 Context, Built Form and Landscape

Cranbrook School's Senior School Campus is situated on steeply sloping topography along the northern face of Bellevue Hill. The site's landform has a generally north to north-westerly aspect with significant views in two directions towards the city of Sydney and out towards the Heads of Sydney Harbour. These views are highly valued by the School community for generating a sense of place but also crucially for establishing visual connectivity to and from local and distant communities. The local view is towards the city of Sydney and connects the campus to its place in Sydney. The distant view is towards North and South Head -the "gates" through which ships connected the early colony of Sydney to the outside world. The symbolism of these two views is recognised by the School as it purposefully seeks to be distinctively of its place yet simultaneously connected to a broader global community. This narrative of connectivity is given expression in the architectural and landscape solutions generated for the proposed Hordern Oval Precinct Redevelopment.

Firstly, an elevated platform – to be known as the Centenary Lawn - is proposed to be established at the highest most level of the Centenary Building. This external place will be of ceremonial purpose, connecting the proposed new Chapel with the historic Cranbrook House. Crucially however, it will also generate a gathering space from which both of the important views described above can be seen simultaneously. This will be the first time in the modern era that these views will have been re-established because the development of the War Memorial building, following the second world war, and its associated landscape of tall trees has obscured the view towards the Sydney Heads.

Secondly, the proposed development of the Aquatic and Fitness Centre will reinforce the connection with local community by transforming the northern boundary to New South Head Road from one of visual and physical separation to one of genuine

access and community engagement to the facilities available within. This is to be achieved by creating a generous portal along the proposed northern elevation of the Aquatic and Fitness Centre that will for the very first time give the School an actual point of address and access along this prominent interface with the local community. The proposed urban design for this area will improve amenity for pedestrians along this northern boundary as there will be an enhanced zone of pedestrian pavement and a landscape architecture solution that provides a physical and psychological buffer between the pavement and the busy vehicle corridor of New South Head Road.

Bounded by Victoria Road, Rose Bay Avenue and New South Head Road the School campus is characteristically described as being like an island – situated as it is within a distinctly residential community yet standing separate from that community because of its encompassing roads, associated boundary fences and historical difference of activity. Both of the view strategies described above will improve and enhance the School's physical and social relationship to its community.

The geology of the School campus is typical of the eastern suburbs of Sydney, being composed of wind-driven sand over lying bed rock strata of Hawkesbury sandstone. Originally this geology would have supported flora characteristic of the poor soils of the eastern suburbs such as native grasses and coastal Banksias. However the native landscape has been significantly altered by the importation of exotic species during the last 150 years which now characterise the planted context as being one of diverse and exotic origin. The intent with the proposed landscape architecture for the Hordern Oval Precinct Redevelopment is to provide a balanced consideration of native and exotic species that simultaneously give expression to the location's indigenous sense of place while also speaking to the overlay of an English tradition of garden-making.

Once a landscape inhabited by indigenous Cadigal people of the Eora nation, the site for Cranbrook School was formally established as a private estate in 1856 by Robert Tooth. The first and still the most historically significant building on the site was a residence for the Tooth family – now known as Cranbrook House. Built in 1859 Cranbrook House was constructed with sandstone blocks, projecting timber verandas and slate roofing. The House has had several expansions and renovations over time, some of which were undertaken by the highly regarded Architect John Horbury Hunt. Given its originating role in the site's establishment and the valued qualities of its architecture, Cranbrook House is the most significant architectural legacy on the School campus. Its warm coloured and oxidised sandstone exterior contributes much to the School's sense of identity and connection to place. The Cranbrook School community is very conscious of this original legacy of sandstone and recognises that many of the post WW2 campus developments have been unsympathetic to this material heritage. The proposed Hordern Oval Precinct Redevelopment seeks to re-address this approach and to set in place a harmonious palette of building materials for Cranbrook's physical environment as the School looks forward to its second century as a place of education. The majority of the external elevations proposed for both the Centenary Building and the Aquatic Fitness Centre are to be clad in sandstone sourced from the Sydney region. This strategy for external architectural appearance is underpinned by the intent to respect and respond positively to the physical context, character and heritage of Cranbrook while also generating a narrative of built form that responds meaningfully to the sandstone geology of the area - comprising as it does cliffs, headlands and rock platforms of Hawkesbury sandstone. Consistent with this approach, the landscape architecture is proposed to utilise sandstone blocks, wall panels and paving in the formation of seating benches, ground paving and in the cladding of landscape retaining structures.

The architectural built form for the Centenary Building is composed as a series of volumes intersected by planted landscape. This strategy seeks to breakdown the volume of the development and relate it as a series of functional parts that are harmoniously scaled with the neighbouring School buildings in this precinct of the campus. The datum of the ground threshold around Cranbrook House is carried across to this new development, forming the proposed Centenary Lawn with the Chapel as the upper most occupied floor level. With external terraces stepping down towards the Oval, the Centenary Building gives expression to cantilevering rock forms and wind eroded cliffs – a reference to the local geology that is further developed in the form of the Aquatic and Fitness Centre which is conceived of as an undercut headland. The curved form of the Aquatic and Fitness Centre responds to and echoes the sweeping bend of New South Head Road, engaging this new building positively with the predominant geometry of its urban context.

The banks of Hordern Oval are characterised by a singularity of tree species in the form of mature Jacarandas. These trees blossom in November each year and give the Hordern Oval Precinct a distinctive character that is fondly regarded by the School and local external community alike. The ensemble effect of these trees is to be retained with proposed additional planting of Jacarandas along the northern end of the bank and the necessary removal of one Jacaranda tree at its southern end.



Response to Design Quality Principles of the Education SEPP

4.2 Sustainable, Efficient and Durable

The proposed architecture for the Hordern Oval Precinct Redevelopment is responsive to the local temperate maritime climate of Sydney's eastern suburbs. Oriented mostly towards the north, the proposed built form uses a series of screening devices and projecting balconies to provide deep passive shade to the double-glazed facades in order to minimise direct solar heat gain during the hotter weather seasons. The projecting shading will facilitate solar light transmittance during the cooler weather seasons when the sun's path has a lower angle of incidence.

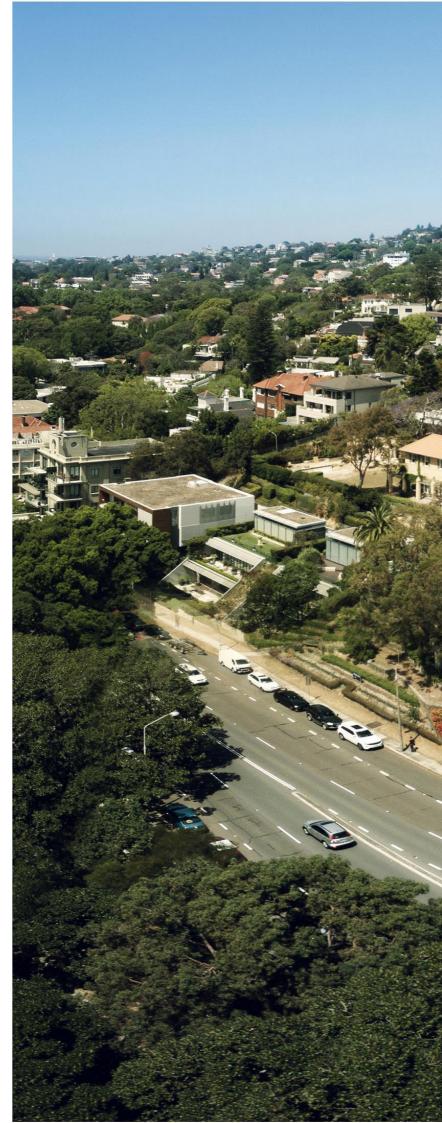
Natural ventilation to the Centenary Building will draw air through the assembly hall using a stack effect at the southern edge of this space, minimising the reliance on mechanical cooling and limiting energy use.

Masonry construction using sandstone panels on a concrete frame will provide a robust and durable fabric to the proposed Centenary Building and Aquatic and Fitness Centre. Both buildings will be insulated to minimise energy losses and both buildings will have significant areas of turfed roofing that will act as a natural insulator to enhance building performance. Integrated planting is proposed for the terraces of the Centenary Building with deep soil zones proposed around the exterior for ground water recharging and the planting of trees.

Rain water is to be captured in a proposed water storage tank that will be constructed beneath Hordern Oval and used for the irrigation of its turfed playing surface.

It is not currently proposed to install photovoltaic panels on the Hordern Oval Precinct Redevelopment however roof structures on the proposed Centenary Building and field maintenance shed will be designed to support their future installation.

The improved amenity of the proposed forecourt to the Aquatic and Fitness Centre will promote safe walking while bicycle storage facilities within the proposed car park will facilitate opportunities for cycling as a mode of transport. The School has existing bus stops located on Victoria Road and New South Head Road within close pedestrian access to the proposed Hordern Oval Precinct Redevelopment.











The design for the proposed Hordern Oval Precinct Redevelopment addresses the importance of safety and applies the principles of crime prevention through environmental design to ensure that security measures are designed and integrated with the built form. This includes the integration of a new pedestrian gate proposed for Rose Bay Avenue and a new access point for pedestrians and vehicles associated with the proposed Aquatic and Fitness Centre

Currently the northern boundary of the School campus is a high fence that acts as a physical and visual barrier, separating the School from passers-by and the adjacent community. The proposed design of the Aquatic and Fitness Centre will positively transform this condition through an architectural solution for a new portal and inclined elevation that simultaneously eliminates the need for perimeter fencing and establishes a new school frontage that is visible, engaging and welcoming.

As a core component of the architectural engagement the students, educators and local community have been engaged and consulted by the design team in developing the vision and the design brief for the proposed Hordern Oval Precinct Redevelopment. This process is ongoing through the design development phase to refine solutions that will optimise accessibility and inclusiveness of the project, inclusive of the provision of diverse, attractive and accessible places to learn, play and socialise.

The accommodation for the proposed Hordern Oval Precinct Redevelopment is inclusive of a chapel, a drama theatre, an assembly hall with multi-purpose functionality, learning spaces, a fifty metre eight lane swimming pool, a learn-to-swim pool and a gymnasium. All of these facilities have great potential for access by local communities and it is the School's intention to make these available outside of normal school timetabling. Clear and logical wayfinding will be progressed in subsequent stages of design development to facilitate access and orientation through the development for all users including after-hours community users.

An access consultant is engaged on the project team to guide design outcomes that ensure accessibility for all users of the proposed development.

