Response to Education SEPP Design Quality Principles

The Education SEPP Design Quality Principles and Design Considerations as outlined in the Design Guide for Better Schools [GANSW] have been addressed in the design of theHastings Secondary College Upgrade and our response is summarised as follows:

1. Context Built Form and Landscape

Schools should be designed to respond to and enhance the positive qualities of their setting, landscape and heritage, including Aboriginal cultural heritage.

The design and spatial organisation of buildings and the spaces between them should be informed by site conditions such as topography, orientation and climate.

Landscape should be integrated into the design of school developments to enhance on-site amenity, contribute to the streetscape and mitigate negative impacts on neighbouring sites

School buildings and their grounds on land that is identified in or under a local environmental plan as a scenic protection area should be designed to recognise and protect the special visual qualities and natural environment of the area, and located and designed to minimise the development's visual impact on those qualities and that natural environment.

The proposal has sought to respond to and enhance both the existing school campus and the wider context of the surrounding precinct, placing new built form to respond to the topography, the existing campus framework and climate.

The original masterplan of the site is orthogonal, with areas of currently degraded vegetation. The site has wide vistas which look out over the surrounding turfed playing fields, borrowing views from both the wider site and also the playing fields of Port Macquarie Park beyond. Three interconnected courtyards, provide access to protected outdoor recreation areas, and these courtyards are sheltered from the strong winds in winter. The existing campus circulation uses external balconies, which then move through the buildings as doubled loaded corridors. The site, including the PCYC site to the north, has three main levels, which are defined by the courtyards.

The proposal aims to provide a more integrated approach to landscape across the campus and to reintroduce new landscape learning opportunities across the campus, providing a linkage between each open space and also where possible to the learning spaces in both the new and refurbished buildings.

2. Sustainable Efficient and durable

Good design combines positive environmental, social and economic outcomes. Schools and school buildings should be designed to minimise the consumption of energy, water and natural resources and reduce waste and encourage recycling

Schools should be designed to be durable, resilient and adaptable, enabling them to evolve over time to meet future requirements.

In developing the design for Hastings Secondary College, Port Macquarie Campus, the existing fabric was carefully reviewed due to the proximity of the campus to the coast. The materiality of off form concrete and brick have proved to be extremely durable and resilient, therefore these materials have been selected for the new additions, with additional contemporary materials of acidulated timber and integral colour fibre cement sheeting.

The responsible reuse of existing fabric provides positive environmental, social and economic outcomes.

The new buildings have been developed in line with the SiNSW development of a standardised grid, which will provide future flexibility across the campus. The introduction of connections between new and existing buildings provides additional flexibility for expansion and contractions of departments and changes of functional use.

The services design meets the identified benchmark of 4 Star Green Star and passive design and initiatives such as natural ventilation are maximised and encouraged.

3. Accessible and inclusive

School buildings and their grounds should provide good way finding and be welcoming, accessible and inclusive to people with differing needs and capabilities . (Note: Way finding refers to information systems that guide people through a physical environment and enhance their understanding and experience of the space)

Schools should actively seek opportunities for their facilities to be shared with the community and cater for activities outside of school hours.

The main entrance to the school is realigned to provide broad vistas deep into the campus, with a focus on connections between the external landscaped areas.

The existing movement pathways have been reinforced to enhance way finding through either increased visibility and/or a commonality of functional use.

The masterplan for the campus provides a fully accessible and equitable response to way finding.

4. Health and Safety

Good school development optimises health, safety and security within its boundaries and the surrounding public domain, and balances this with the need to create a welcoming and accessible environment.

Security and safety of pedestrians is fundamental. The design provides a hierarchy of access from public to private, enabling the students to be safe and secure within their learning hubs, but to still have a connection to their environs.

Student amenities are designed as separate facilities (single water closet), rather than combined, shared facilities. The amenities are located in visible areas along main access ways to provide adequate surveillance and to discourage bullying.

A greater transparency across the learning spaces - both between levels and across the floor plates will enable a more inclusive learning environment.

Response to Education SEPP Design Quality Principles

5. Amenity

Schools should provide pleasant and engaging spaces that are accessible for a wide range of educational, informal and community activities, while also considering the amenity of adjacent development and the local neighbourhood

Schools located near busy roads or near rail corridors should incorporate appropriate noise mitigation measures to ensure a high level of amenity for occupants

Schools should include appropriate, efficient, stage and age appropriate indoor and outdoor learning and play spaces, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage and service areas.

The main purpose of the proposal is to redevelop the College's facilities to meet the current and future expectations of learning methodologies.

Important aspects which will be considered in the design are:

— a diversity of learning spaces (availability of spaces of differing scale)

— open or enclosed spaces,

— spaces which are interconnected and

— spaces with a strong connection to the landscape.

The acoustics of the learning spaces is very important and internal acoustics will be mitigated through absorptive wall, floor and ceiling treatments. Open plan areas should be off-set by more intimate enclosed rooms to provide learning diversity.

With regards to the the external space, consideration will be given to creating a diversity of play spaces to cater for different stages; learning opportunities in the landscape and space for the students to run around and play sports.

6. Whole of life, flexible and adaptable

School design should consider future needs and take a whole-of- life-cycle approach underpinned by site wide strategic and spatial planning

Good design for schools should deliver high environmental performance, ease of adaptation and maximise multi-use facilities.

The proposal has carefully considered site wide strategic and spacial planning to ensure that future development of the site is not precluded.

Because the pedagogy of the school will change over time, it is important that the proposed buildings are as flexible as possible - clear circulation, good access to daylight, generous floor to floors to provide adequate space for services reticulation and a simple structural grid which is to the perimeter of functional zones.

7. Aesthetics

School buildings and their landscape setting should be aesthetically pleasing by achieving a built form that has good proportions and a balanced composition of elements

Schools should respond to positive elements from the site and surrounding neighbourhood and have a positive impact on the quality and character of a neighbourhood

The built form should respond to the existing or desired future context, particularly, positive elements from the site and surrounding neighbourhood, and have a positive impact on the quality and sense of identity of the neighbourhood.

The design has considered the existing fabric of the College and rather than providing a new contrasting aesthetic, the new buildings are designed to be complementary to the massing, scale and materiality of the surrounding buildings. To acknowledge, the celebration of a greater landscaped approach to the site, the canopies and linkway are a combination of natural timber, stainless steel and pre finished steel.

The integration of landscape is very important, especially as the campus has very poor access to outdoor learning areas.

Embodied in the brief is the aspiration for a positive environmental, social and economic outcome. The functional layouts are efficient with clear way-finding: access stairs are egress stairs, always with a connection to the landscape; the interstitial spaces enable light to penetrate deep into the interior and the facades are shaded or have deep set glazing to provide good penetration of daylight yet mitigate thermal gain.

The structural grid and the location of support facilities such as services risers, amenities, stores and vertical circulation enables future reconfigurations of the layout plans, as do the regular sizes of the learning spaces.

Passive design principles with a focus on high performing facades will be incorporated into the design. All services will be designed to sustainable benchmarks.

Response to SDRP Feedback

One session has been held with the GANSW

— 17 February 2021 First Briefing

— Feedback provided on 26/02/21

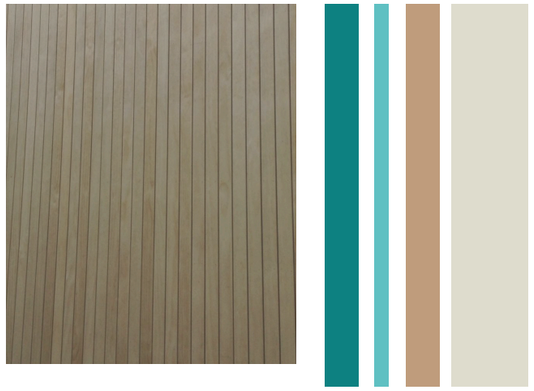
It was noted that "[The SDRP] anticipate further review of this project as the design progresses, and advise that the issues outlined above should be resolved prior to the project returning to the SDRP. " Please refer to attached response to each Commentary Item.

	SDRP Commentary	Design Development
1.0	**Connection with Country** An understanding of Country offers the potential to inform richer and more place responsive design solutions. The Draft Connecting with Country Framework outlines opportunities to better respond to place and enrich project outcomes. As yet, this potential is not demonstrated in the proposal. The following strategies are recommended:	We note that as outlined in the GA NSW, Better Placed Draft Connecting with Country Framework, that the engagement process will appropriate allocation of time and resources to be undertaken in an authentic and lasting manner therefore we recommend that the further development of the connection with Country is identified as a condition of approval and a review of the developed ideas is provided post SSD Approval. Consultation has commenced however this will require an appropriate time to reach accepted outcomes.
1.1	Engage with Traditional Custodians, including Indigenous parents and local organisations to inform a meaningful approach to Country.	Refer Connection with Country. A strong connection already exists with the Birpai Hastings Community working with both the Hastings Secondary College and through the local feeder schools. Hastings Secondary College has a connection with two groups within the College - the Contarf Academy and Sista Connect. Working with these groups and also with the local Elders and Birpai Hastings Community representatives a collaborative process has commenced which will provide a connection to Country. Two initial discussions have been held with the College representatives, the project team and the local Aboriginal community to discuss how an authentic and collaborative process can be developed to inform the ongoing design development.
1.2	Consider the inclusion of an Indigenous consultant in the design team - one who has local knowledge if possible - acknowledging that story threads extend beyond specific sites.	EMM Consulting Pty Limited (EMM) and Indigeco, who have authored the ACHAR will assist with the engagement with the Birpai community. Initial engagement has taken place with a number of member of the local Land Council and the school community members (through the Clontarf Academy). These representatives are confirming the relevant stakeholders to enable further discussions and collaboration. Refer 1.1.
1.3	Consider opportunities to approach Birpai elder groups, Birpai language groups and the Local Aboriginal Land Council (LALC) to seek input into the design of the school and how it relates to this place.	Refer Item 1.1. Two initial discussions have been held with representatives of the LALC and Elders.
1.4	Articulate, in future presentations, how engagement with Traditional Custodians, including Indigenous parents and local organisations is informing the design approach	Noted - we commit to an ongoing process of engagement with the Traditional Custodians, including parents and also the 2 organisations already embedded in the College. As we recognise that this process must not be rushed we envisage that the design development will evolve during the next phase of the project. At the time of the submission of the SSDA, the group member ship has yet to be determined.
1.5	There is an opportunity to anchor the connection to Country and amplify the significance of the site's river and coastal location within the design approach – this will help to establish a place based identity for the school.	Noted - once the narratives of the site are communicated we will collaborate with the various stakeholders to understand how best these connections to Country can be anchored into the design approach.
1.6	Draw on both historical and contemporary modes of habitation and respond to the specific ecology of the area.	Noted -refer above Item 1.5
1.7	Consider opportunities for practices & processes, naming, massing, materiality, form, circulation and movement, landscape, specification of plant species that are endemic to the bioregion and so on.	Noted - although specific engagement has not yet been undertaken with the local Birpai community, we have used our pre existing knowledge of local species to inform the plant selection. Other opportunities for practices & processes, naming, massing, materiality, form, circulation and movement will evolve through continued consultation.
1.8	Explore how a rich connection with place might reinforce the school's strengths and inform its pedagogical approach in how it relates to built and natural form.	Noted - the development of the curriculum is not part of this SSA Approval, however the provision of cues within the landscape and the built form will assist with informing an ongoing approach. It should be noted that the College already have robust programmes in place.
1.9	Refer to the draft framework Connecting with Country on the GANSW website.	Noted - this has been referenced.

Response to SDRP Feedback

	SDRP Commentary	Design Development
2.0	**Masterplan & Landscape** Engaging with and protecting the natural environment provides ecosystem benefits and enhances the landscape amenity.	
2.1	The immediate context of the Port Macquarie Campus at the mouth of the Hastings River, and with such proximity to the ocean is exceptional; the ecological significance, natural beauty and spatial quality provide rare opportunities for school design. Develop the design to integrate the built form with landscape elements and amplify the unique character of the setting. Provide detail of the form and character of these interfaces including opportunities for undercover play and learning areas.	Refer Landscape Architectural Design Statement
2.2	Demonstrate how the site integrates with the natural environment and provides continuous vegetation and habitat zones.	Refer Landscape Architectural Design Statement
2.3	Acknowledging the prevalence of koala habitat on the site and surrounding area, provide an informed and considered approach to preserving and enhancing koala habitat on-site.	Refer Landscape Architectural Design Statement. We acknowledge the importance of the koala habitat to the Hastings/Port Macquarie area and will identify a number of areas on the site for current and future regeneration.
2.4	Explore opportunities for the site's ecology to inform the schools' pedagogical approach.	Noted - the development of the curriculum is not part of this SSDA Approval, however the provision of cues within the landscape will assist with informing an ongoing approach.
2.5	Demonstrate how tree retention is maximised for biodiversity, sustainability, shade, amenity and aesthetic quality. Provide an arboricultural assessment that indicates the significance of existing trees and a drawing that identifies trees to be retained, new trees proposed and trees to be removed.	Refer Landscape Architectural Design Statement and Arborist Report
2.6	As the design develops, the panel encourages the pursuit of a more ambitious tree canopy coverage. Demonstrate how the proposal will exceed the 40% tree canopy target.	Refer Landscape Architectural Design Statement. Note that this target has been met and exceeded, within the scope of works which will be undertaken as part of this SSDA.
2.7	Increasing the tree canopy buffer at the school's entrance around the identified koala habitat is strongly encouraged.	Refer Landscape Architectural Design Statement It is proposed that a number of additional "koala habitat" trees will be located in the regenerated bushland area at the main entrance to the site.

Response to SDRP Feedback

	SDRP Commentary	Design Development
3.0	**Built form** The refined design aesthetic proposed for the new work within the campus is a clear acknowledgement of the architectural heritage of the site, a well preserved example of an early "Wyndham Scheme" school. The architectural and material strategy needs further development to respond to the special qualities of the site in order to achieve a truly place-led approach.	
3.1	Demonstrate how the coastal context and unique setting of the site informs the built form, including its massing, character, façade composition, operability (user controlled flexibility), and materiality. 	One of the most compelling aspects of the site, is the scale of the site and its immediate context with long, wide views out to the ocean to the east and the north. Located 300m from the coast, the smell and the sensation of the coast line is present. The inserted forms - the rectilinear built form of the Wyndham era college masterplan and the dominant linear silhouettes of the Norfolk Island pines, provide a counterpoint to the organic forms of the coastal cliffs, headlands and beaches. The new insertions onto the site are of two directions - one; a respectful built form aligning with the existing campus buildings providing a consistent and harmonious backdrop to the college's activity and two; a more exuberant and loose approach to the landscape providing a diversity of experience through either soft landscaping or hardscape. Passive design The new built forms are orientated to maximise their passive response. The facade to the north are protected by deep set verandahs which will enable outdoor learning and a continued connection to the environment. These verandahs are an extension to the Studios beyond. Windows will provide natural ventilation and harness the sea breezes. Materiality Whilst the materiality of the new buildings is predominately brick to align with the existing campus, the colour will be slightly lighter, referencing the sandy colour of the coast. Soffits and window reveals will be lined with either timber boards or integrated colour fibre cement sheets, again referencing the colours of the surrounding natural environment. The intention of the canopies is to provide a quiet and finely detailed timber and steel protective structure which provides a framework for the more exuberant landscape. The soffit of the canopies will be similarly lined with a warm toned material - timber boarding and/or integrated colour fibre cement sheet. There is also a potential to provide a carved patterning to the fibre cement sheeting incorporating artwork. Views Long views across the site will be enhanced as the users move along the axial connectors.
3.2	The reconfigured and setback entry from Owen Street is commended as it provides an opportunity to enhance the landscape setting of the school; the rational expression of the pavilion, however, feels institutional and formal. Reconsider the treatment and expression of the entry to demonstrate how it responds to the immediate context.	The intention is that the finely detailed rectangular canopy forms provides a quiet to an exuberant, organic landscape below. This landscape will be further developed following ongoing engagement with the Birpai community. More organic forms of the canopy were tested, however there was a conflict with the existing curved canopy adjacent to the Canteen.
3.3	Retention, augmentation and rehabilitation of the stand of trees in this entry area is recommended to amplify the landscape qualities of the littoral rainforest. This objective should also be supported by moderating the impact of adjacent built form.	The intention is to develop this area as a regenerated bushland. Trees will be replaced in accordance with the Hastings•Port Macquarie DCP, and koala appropriate species will be provided. it should be noted that the area identified is not "littoral rainforest", however the species selected will be considerate of this.
3.4	The architectural treatment and expression of the PCYC is was difficult to understand in relation to the rest of the proposal. This significant element within both the school and the streetscape requires further development to demonstrate how it responds to its context and to the overall campus.	Geometry The bold geometry of the PCYC east and west cantilever blade walls with the large circular opening, reflects the large scale of the context and is a counterpoint to the rectilinear geometry of the College. The circle is a compelling expression of harmony and unity, embodying the values of a community focussed facility, a centre for sports. The two blade walls play with the civic scale of the site emphasising its broadness and long views both north and east. Invitation The deep set verandah on axis to Gordon Street (Oxley Highway) provides a transitional public/private space. The verandah will be lined with timber boarding and has views down Gordon Street (Oxley Highway). 

Response to SDRP Feedback

	SDRP Commentary	Design Development
4.0	**Sustainability** The focus of the discussion was on the Masterplan Strategy and sustainability was only briefly discussed. Concern is raised however, that the approach to sustainability lacks ambition. As the design develops, the Panel encourages the demonstration of leadership in sustainability.	
4.1	Provide details of the proposed ESD initiatives and how they support a more ambitious sustainability strategy.	Refer Sustainability Development Plan by JHA. The new buildings of the project are targeting 4 star Greenstar. As outlined in the report; "In accordance with the NSW Resource Efficiency Policy all new facilities must be designed and built to exceed by 10% the reference building energy consumption as specified in National Construction Code (NCC) Section J deemed-to- satisfy provision. The design team must include Ecologically Sustainable Development principles in new school buildings to a level that could achieve a 4 Star Green Star certified rating."
4.2	Details are to include the response to the microclimate, urban heat island mitigation, and proposed passive design strategies to ensure that access to natural light and ventilation are provided and maximised for all internal spaces.	The new CAPA and PCYC are sited to maximise a passive design response. CAPA has a generous terrace facing north and large format southern glazing. The windows to the west will be used as display cases to the Ground Level, therefore will provide diffuse light only. The upper windows to the west will use performance glazing and are also deeply recessed. The PCYC has highlight windows to the north and the south which will provide diffuse light across the courts.
4.3	Capitalising on the natural qualities of the coastal environment for passive thermal comfort and ventilation is strongly encouraged.	All learning spaces will be naturally ventilated and there is an emphasis on connection to the natural environment through views internally and also access to outdoor learning areas.

Response to SDRP Feedback

GOVERNMENT
ARCHITECT
NEW SOUTH WALES

02 March 2021

David Wheeler
Project Director
School Infrastructure NSW

Via email –
david.wheeler26@det.nsw.edu.au

PROJECT: Hastings Secondary College upgrade
RE: SDRP SESSION 70 – 17.02.2021 (first review)

Dear David,

Thank you for the opportunity to review the above project. Please find below a summary of advice and recommendations arising from the design review session held on Wednesday 17th February 2021.

It is acknowledged that the current SSDA planning pathway was triggered after considerable work had already been progressed, including completion of the initial Masterplan and Concept Design phases.

The following elements of the design approach are supported, in particular:

- Clarity of the Masterplan and axial built form strategy which creates a legible and cohesive campus.
- Building layouts and relationships intended to promote visual permeability through the site.
- Opportunities created through the negotiation of topographical changes, such as the generous terraced landscapes.
- The potential for joint use of facilities with the wider community.
- The setback entry from Owen Street intended to provide ecological value and enhance the landscaped setting of the school along Owen Street.

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The following commentary provides advice and recommendations for the project:

Connection with Country

An understanding of Country offers the potential to inform richer and more place responsive design solutions. The Draft Connecting with Country Framework outlines opportunities to better respond to place and enrich project outcomes. As yet, this potential is not demonstrated in the proposal.
The following strategies are recommended:

- Engage with Traditional Custodians, including Indigenous parents and local organisations to inform a meaningful approach to Country.
- Consider the inclusion of an Indigenous consultant in the design team - one who has local knowledge if possible - acknowledging that story threads extend beyond specific sites.
- Consider opportunities to approach Birpai elder groups, Birpai language groups and the Local Aboriginal Land Council (LALC) to seek input into the design of the school and how it relates to this place.
- Articulate, in future presentations, how engagement with Traditional Custodians, including Indigenous parents and local organisations is informing the design approach
- There is an opportunity to anchor the connection to Country and amplify the significance of the site's river and coastal location within the design approach – this will help to establish a place based identity for the school.
- Draw on both historical and contemporary modes of habitation and respond to the specific ecology of the area.
- Consider opportunities for practices & processes, naming, massing, materiality, form, circulation and movement, landscape, specification of plant species that are endemic to the bioregion and so on.
- Explore how a rich connection with place might reinforce the school's strengths and inform its pedagogical approach in how it relates to built and natural form.
- Refer to the draft framework Connecting with Country on the GANSW website.

Masterplan & Landscape

Engaging with and protecting the natural environment provides ecosystem benefits and enhances the landscape amenity.

- The immediate context of the Port Macquarie Campus at the mouth of the Hastings River, and with such proximity to the ocean is exceptional; the ecological significance, natural beauty and spatial quality provide rare opportunities for school design. Develop the design to integrate the built form with landscape elements and amplify the unique character of the setting. Provide detail of the form and character of these interfaces including opportunities for undercover play and learning areas.
- Demonstrate how the site integrates with the natural environment and provides continuous vegetation and habitat zones.
- Acknowledging the prevalence of koala habitat on the site and surrounding area, provide an informed and considered approach to preserving and enhancing koala habitat on-site.

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Response to SDRP Feedback

- Explore opportunities for the site's ecology to inform the schools' pedagogical approach.
- Demonstrate how tree retention is maximised for biodiversity, sustainability, shade, amenity and aesthetic quality. Provide an arboricultural assessment that indicates the significance of existing trees and a drawing that identifies trees to be retained, new trees proposed and trees to be removed.
- As the design develops, the panel encourages the pursuit of a more ambitious tree canopy coverage. Demonstrate how the proposal will exceed the 40% tree canopy target.
- Increasing the tree canopy buffer at the school's entrance around the identified koala habitat is strongly encouraged.

Built form

The refined design aesthetic proposed for the new work within the campus is a clear acknowledgement of the architectural heritage of the site, a well preserved example of an early "Wyndham Scheme" school. The architectural and material strategy needs further development to respond to the special qualities of the site in order to achieve a truly place-led approach.

- Demonstrate how the coastal context and unique setting of the site informs the built form, including its massing, character, façade composition, operability (user controlled flexibility), and materiality.
- The reconfigured and setback entry from Owen Street is commended as it provides an opportunity to enhance the landscape setting of the school; the rational expression of the pavilion, however, feels institutional and formal. Reconsider the treatment and expression of the entry to demonstrate how it responds to the immediate context.
- Retention, augmentation and rehabilitation of the stand of trees in this entry area is recommended to amplify the landscape qualities of the littoral rainforest. This objective should also be supported by moderating the impact of adjacent built form.
- The architectural treatment and expression of the PCYC is was difficult to understand in relation to the rest of the proposal. This significant element within both the school and the streetscape requires further development to demonstrate how it responds to its context and to the overall campus.

Sustainability

The focus of the discussion was on the Masterplan Strategy and sustainability was only briefly discussed. Concern is raised however, that the approach to sustainability lacks ambition. As the design develops, the Panel encourages the demonstration of leadership in sustainability.

- Provide details of the proposed ESD initiatives and how they support a more ambitious sustainability strategy.
- Details are to include the response to the microclimate, urban heat island mitigation, and proposed passive design strategies to ensure that access to natural light and ventilation are provided and maximised for all internal spaces.

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- Capitalising on the natural qualities of the coastal environment for passive thermal comfort and ventilation is strongly encouraged.

We anticipate further review of this project as the design progresses, and advise that the issues outlined above should be resolved prior to the project returning to the SDRP.

Please contact GANSW Design Advisor, Liz Bowra (elizabeth.bowra@planning.nsw.gov.au), if you have any queries regarding this advice.

Sincerely,

Rory Toomey
Chair, SDRP

Distribution:

NSW SDRP Panel members	Rory Toomey (Chair), Matt Chan, Daniele Hromek, Simon Kilbane
GANSW Design Advisor	Liz Bowra
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CPTED

Reference: Crime Prevention Legislative Guidelines to Section 79C of the Environmental Planning and Assessment Act, 1979

CPTED is a strategic approach to the built environment that seeks to influence offender behaviour prior to an offence being committed, through the use of strategies that deter unwanted behaviours and promote the appropriate and/or desired use of space.

There are four key CPTED design principles:

Territorial Re-enforcement

Community ownership of public space sends positive signals to the community. Places that feel owned and cared for are likely to be used, enjoyed and revisited. People who have guardianship or ownership of areas are more likely to provide effective supervision and to intervene in crime than passing strangers and criminals rarely commit crime in areas where the risk of detection and challenge are high. Effective guardians are often ordinary people who are spatially 'connected' to a place and feel an association with, or responsibility for it.

Territorial Re-enforcement uses actual and symbolic boundary markers, spatial legibility and environmental cues to 'connect' people with space, to encourage communal responsibility for public areas and facilities, and to communicate to people where they should/not be and what activities are appropriate.

Surveillance

People feel safe in public areas when they can see and interact with others, particularly people connected with that space, such as shopkeepers or adjoining residents. Criminals are often deterred from committing crime in places that are well supervised.

Natural surveillance is achieved when normal space users can see and be seen by others. This highlights the importance of building layout, orientation and location; the strategic use of design; landscaping and lighting – it is a by-product of well-planned, well-designed and well-used space.

Technical/mechanical surveillance is achieved through mechanical/electronic measures such as CCTV, help points and mirrored building panels. It is commonly used as a 'patch' to supervise isolated, high risk locations.

Formal (or Organised) surveillance is achieved through the tactical positioning of guardians. An example would be the use of on-site supervisors, e.g. security guards at higher risk locations.

Access Control

Access control treatments restrict, channel and encourage people and vehicles into, out of and around the development. Way-finding, desire-lines and formal/informal routes are important crime prevention considerations. Effective access control can be achieved by using physical and symbolic barriers that channel and group pedestrians into areas, therefore increasing the time and effort required for criminals to commit crime.

Natural access control includes the tactical use of landforms and waterways features, design measures including building configuration; formal and informal pathways, landscaping, fencing and gardens.

Technical/Mechanical access control includes the employment of security hardware. Crime, Design and Urban Planning: From theory to Practice Formal (or Organised) access control includes on-site guardians such as employed security officers.

Formal (or Organised) access control includes on-site guardians such as employed security officers.

Space/Activity Management

Space/Activity Management strategies are an important way to develop and maintain natural community control. Space management involves the formal supervision, control and care of the development. All space, even well planned and well-designed areas need to be effectively used and maintained to maximise community safety. Places that are infrequently used are commonly abused. There is a high correlation between urban decay, fear of crime and avoidance behaviour.

The principles of CPTED are extremely relevant and applicable to educational facilities. The four key principles have been reviewed in the context of the Hastings Secondary College.

Territorial Re-enforcement

Due to the shared use of the PCYC, the Hastings Secondary College will have 2 groups who access the site - the local community and the school community. Due to this shared use it will be important that the boundaries between shared spaces which are accessed by the public and specific college spaces are very clear.

The brief from the College, is that the entrance to the College should be inclusive and welcoming.

The college site is very large, therefore the eastern, southern and part of the western boundary are protected by the current school security fencing. The eastern boundary interfaces with open public playing fields, where surveillance is distant, therefore fencing is the best solution. Similarly the southern boundary is facing residential properties, and a large open playing field sits between the fence and the buildings, therefore again a fence is appropriate.

The western boundary of the College which faces Owen Street, will have five entrances into the campus - two, specifically for the College, one (existing) for the MPC and two for the PCYC. As the campus is generally unoccupied in the evenings, weekends and the school holidays boundary security is important, however in order to remove the focus from a fence, which indicates a private boundary, the main College entrance is setback, with a large sliding security gate which will be open at the start and end of each day.

The gate, will be concealed within a rendered signage wall, identifying the College with signage. A controlled security system is located to the south of the main entrance, which provides access outside of standard college hours. In accordance with the Department of Education Guidelines, two gates with intercoms are provided. Similar to the main entrance, the security gate is also set back to focus the visitor on the man entrance.

The new CAPA building will interface directly with Owen Street, providing a more generous footpath. The area in front of CAPA and the entrance will be landscaped.

A third entrance gate is currently provided to access the MPC. This entrance gate will remain unchanged as is use by the local community to access the MPC.

Two new gates are provided to access the PCYC, one the carpark and the other to provide security between the College and the PCYC.

Similar to the Approach to the CAPA, the western facade of the PCYC, will provide the security line, thereby removing the symbolism of a “fence” facility.

CPTED

The provision of a more approachable elevation to the public domain, sends a positive signal to the community. The security line to the College is set back so that the focus is to the front entry of the PCYC, which is open and visible.

A fence will also be located to the east of the PCYC interfering with the existing playing fields.

Surveillance - College

Refer Public Access Diagram

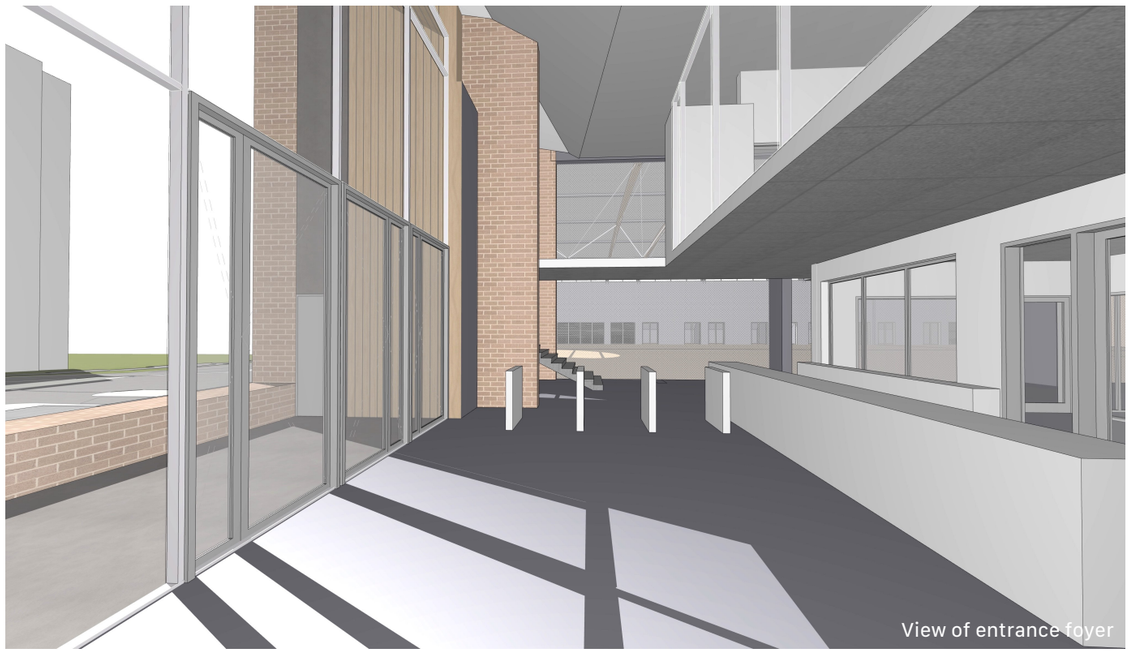
The College reception provides surveillance during school hours. Between 9.15 and 2.45, the main sliding school gate will be shut and all access is through the gate located to the south of the main entrance, which will be operated by intercom.

After hours the main entrances will be protected by CCTV cameras.

Surveillance - PCYC

Refer Public Access Diagram

Entrance to the PCYC is via the large verandah on axis with Gordon Street. This verandah provides a safe haven and a transition zone. Once inside the PCYC, there is excellent surveillance from the reception area which has full view of the Foyer and the courts. The adjacent Administration area is glazed, which will provide further visibility to the east of the courts and the Youth Hub.



View of entrance foyer

The two main staircases which provide access to Level 1 have views out to the precinct through large format windows which provide additional surveillance inside and out.

After hours the main entrances will be protected by CCTV cameras.

Access Control

Once inside the college campus, the access ways, with the exception of the new CAPA, Block B and Block L, east are open.

Space/Activity Management - College

A clear way finding system is set up using the framework of the existing campus with main circulation pathways a north/south and an east//west direction. All amenities are accessed from these pathways to provide a consistent approach. All pathways are accessible across the campus.

Space/Activity Management - PCYC

The arrangement of functional spaces and their relationships is carefully managed within the PCYC. As the facility is used by both the community and the college it is important that the shared use is clearly defined.

The foyer and connected Youth Hub act as a transition zone into the courts which are accessed through "speed" styles. All entrance areas are highly visible from the reception and the administration area which will be occupied whenever the facility is in use.

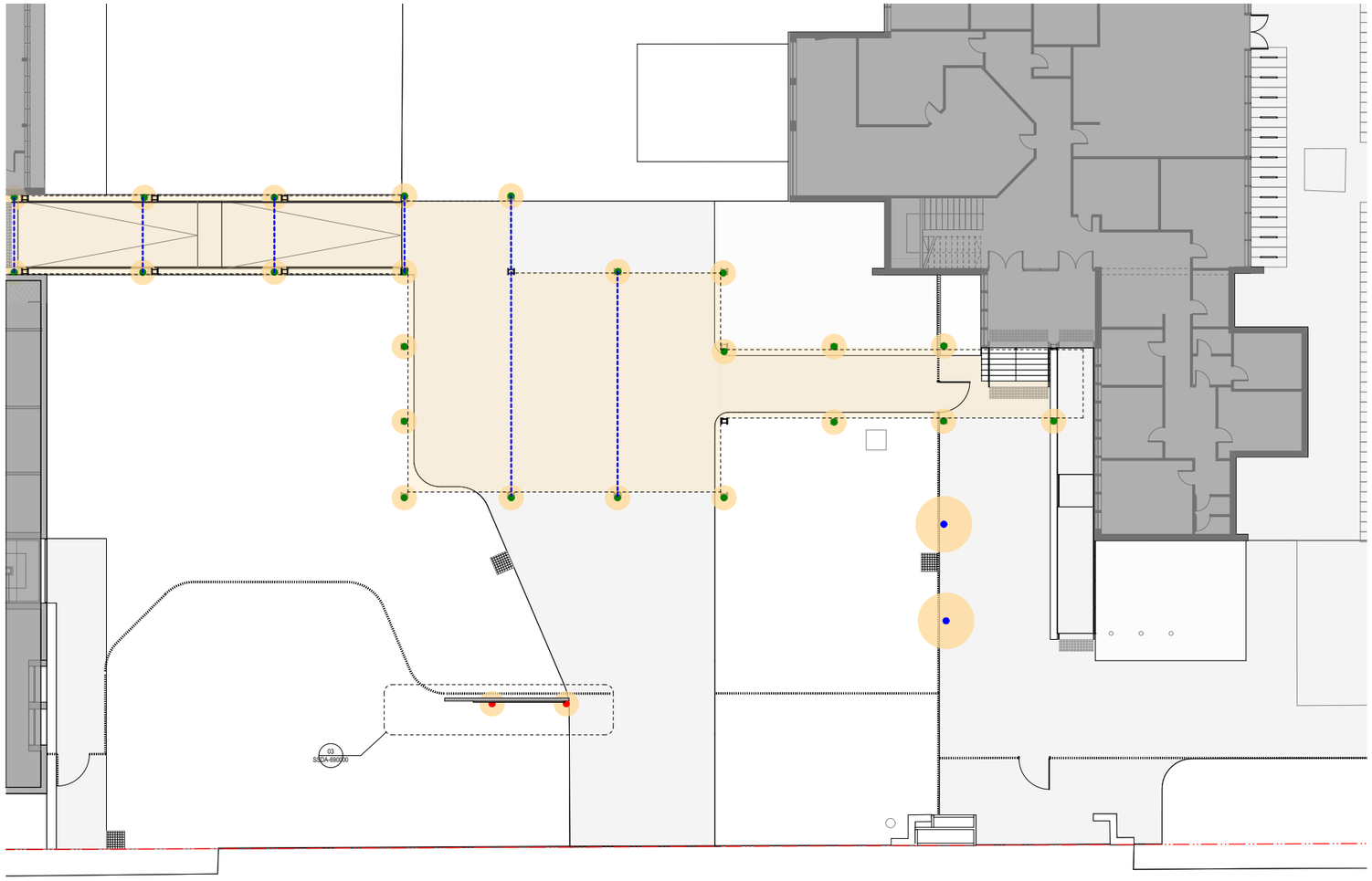
Amenities are located to the centre of the plan, easily accessed by all with highly visible entries. Open air locks are used as opposed to doors to provide ease of access.

External Lighting

The External Lighting Strategy builds upon the existing lighting strategy of the campus which currently provides safe egress routes from each building. This is currently managed with a combination of flood lights and free standing external lighting.

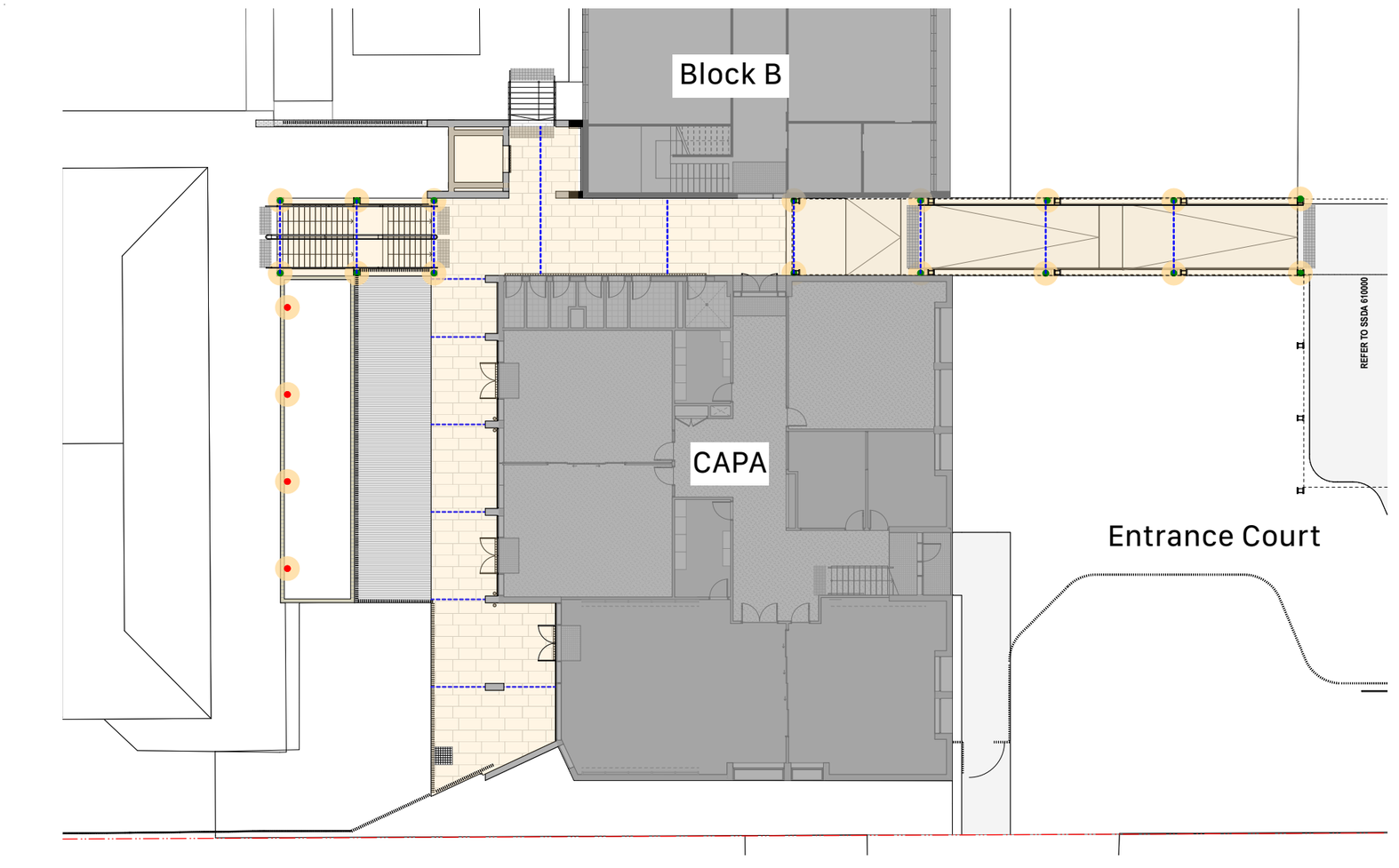
The new strategy will address safety and security to the Main Entrance and the new covered access ways. The lighting design will align with the new structure of the canopies providing a soft up light to each column and the soffit above. Bollard lighting is also provide to access the site boundary as indicated.

This strategy will also provide additional safe way finding from egress routes.



Main Entrance and Canopy Lighting Strategy

External Lighting



CAPA Lighting Strategy

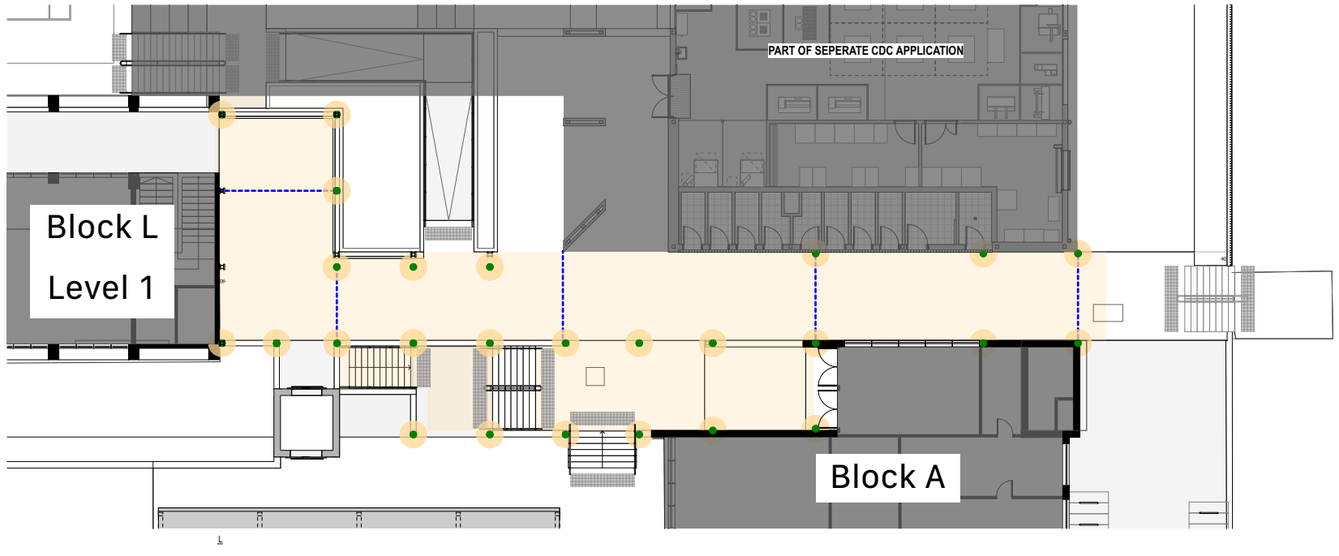
External Lighting



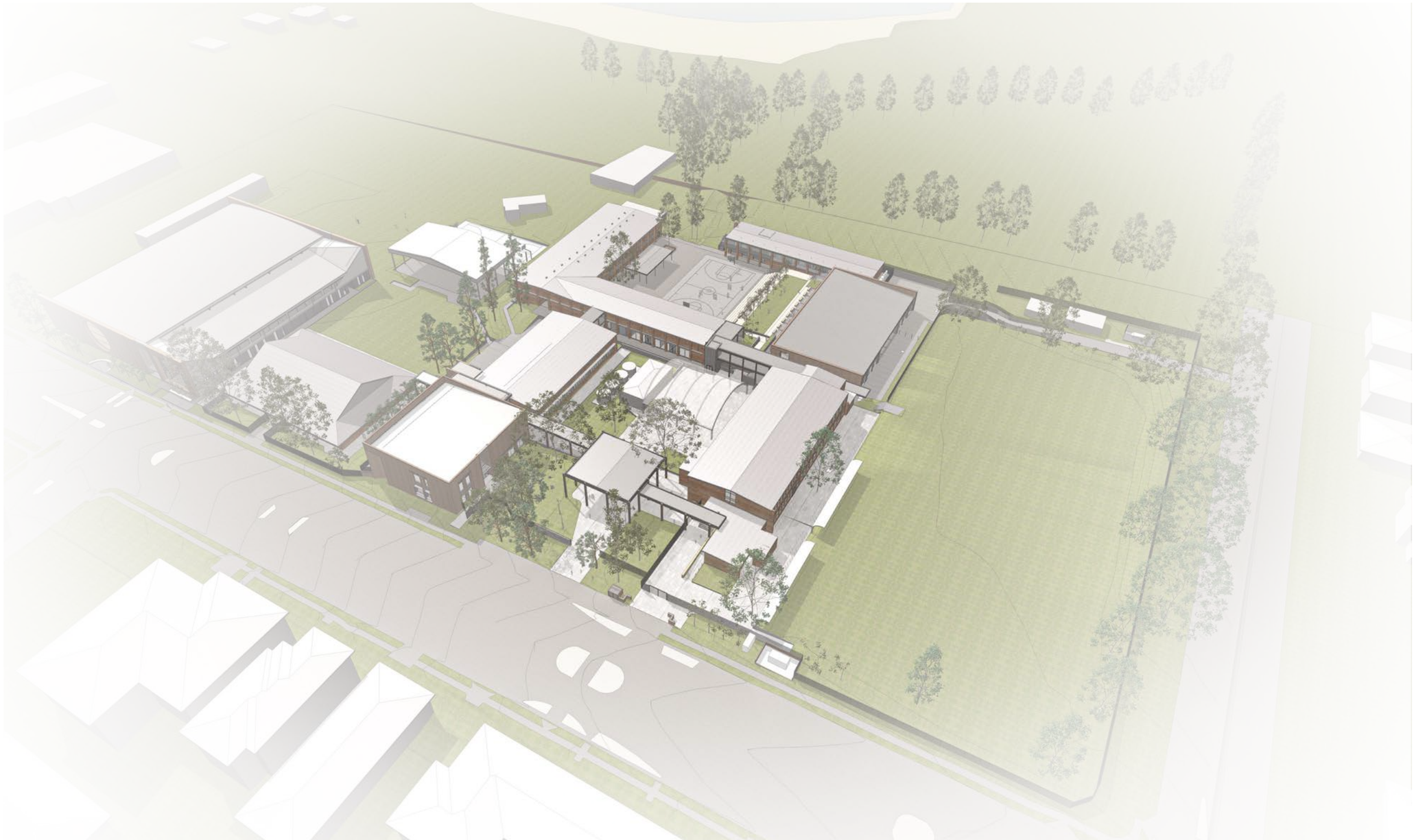
Block L Lighting Strategy

External Lighting





Block L/Block A and new Lift Lighting Strategy



Hastings Secondary College Upgrade | Port Macquarie Campus / Landscape Design Statement

Context and Site Analysis

The Design Principles are to be considered in conjunction with Hastings Secondary College, Port Macquarie School Plan 2018-2020.

Design Philosophy

The design philosophy for Hastings Secondary College, Port Macquarie School centres around providing diverse landscape areas at a variety of scales to maximise functional use as well as providing overlay of potential use and activities within the campus. The geographic location and topography of the site create key design opportunities within the landscape. Paths of pedestrian circulation and intuitive way finding are drivers of the design, consideration is given to visual impairment, wheelchair access and aspiration for universal access design where possible with respect to existing site grades. Overall, a diversity of connected functional spaces that appeal to common functional uses of schools and learning environments as well as the unique set of activities that occur at Hastings Secondary College.

Landscape Schematic Design Phase

The Landscape Schematic Design for Port Macquarie campus addresses the requirements for areas of landscape as identified in the scope and represented within the Entry Forecourt, TAS Terraces, External Spaces and Public Domain. The Landscape Schematic Design addresses the design principles, outlines the design principles applied to the campus, the design approach and design palette as well as the tree impact / strategy for the site.

Design Principles Applied

The Design Principles are categorised into overarching design principles for the campus and specific design principles relating to the key areas of landscape within the campus, these include the Entry Forecourt, the TAS Terraces and the Lower Courtyard, as well as External Spaces, Public Domain.

— Outdoor Learning Environments

— Flexible use and diversity of overlays

— Shade and shelter

— Natural materials

— Acknowledgement of student diversity

Design Approach

The design approach for the Port Macquarie campus is informed by the coastal environment that frames the campus. The three key areas for landscape are the Lower Courtyard (considered as the shoreline), the TAS Terrace (the dune zone) and the Entry Forecourt (Foreshore). The approach is reflected in the spatial arrangement, form, geometries and palette within the landscape areas.

Entry Forecourt

— Create a statement entry

— Provide shade and shelter

— Clear movement

External Spaces

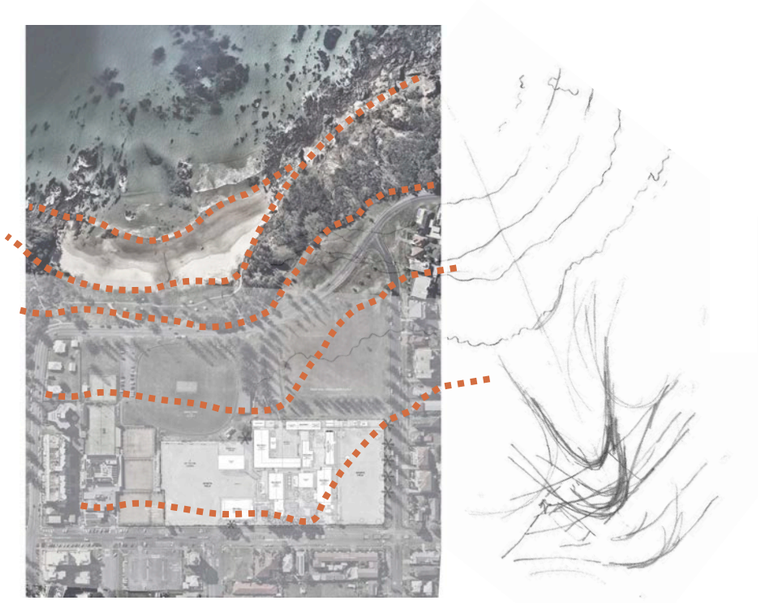
— Connecting key landscape areas through a consistent design approach and palette

— Allow for clear circulation and paths of movement

Public Domain

— Allow for clear circulation and paths of movement

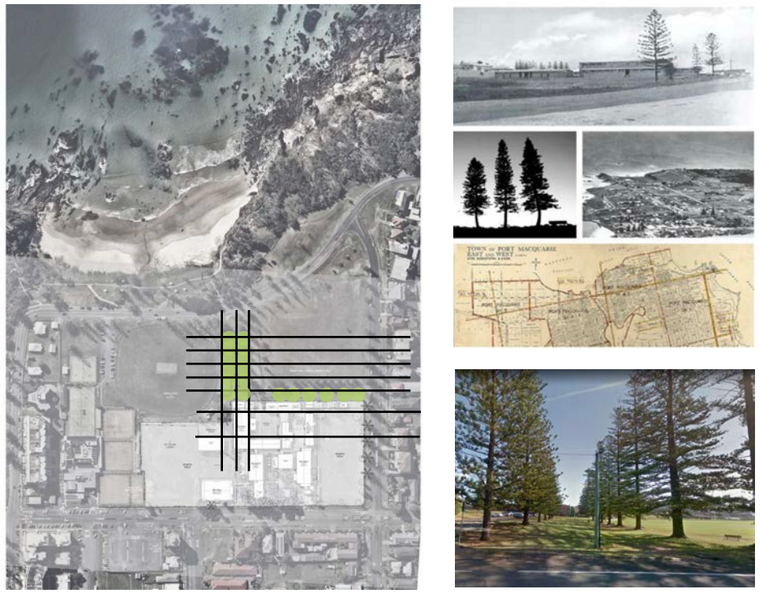
— Allow for clear view lines and encourage safety and security



Principal 1 - Coastal radiating contours



Principal 2 - Layers of landscape typology



Principal 3 - Historic weave

Reference Documents

The design has been developed to align with the following strategic documents and guidelines:

Develop the design to integrate the built form to landscape elements and amplify the unique character of the site

Entry Forecourt Objectives

— Design Guide For Schools, GA NSW

— Greener Places, GA NSW

— Urban Green Cover in NSW Technical Guidelines

— National Koala Tree Planting List

— Australian Standard Protection of trees on development site (AS4970-2009)

The landscape design considers and is generally consistent with the Technical Guidelines for Urban Green Cover in NSW (OEH) 2015.











Landscape Design Approach

Design Approach

The design approach for the Port Macquarie campus is informed by the coastal environment that frames the campus. The three key areas for landscape are the Lower Courtyard (considered as the shoreline), the TAS Terrace (the dune zone) and the Entry Forecourt (Foreshore). The approach is reflected in the spatial arrangement, form, geometries and palette within the landscape areas.

Develop the design to integrate the built form to landscape elements and amplify the unique character of the site

<u>Entry Forecourt Objectives</u>

__ Create a statement entry

__ Provide shade and shelter

__ Clear movement

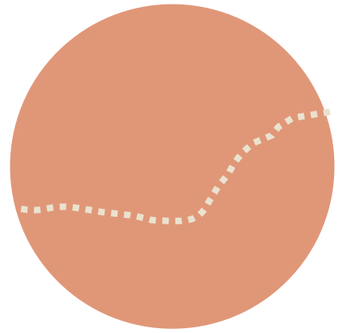
<u>CAPA Terrace Objectives</u>

__ Outdoor Learning Environment

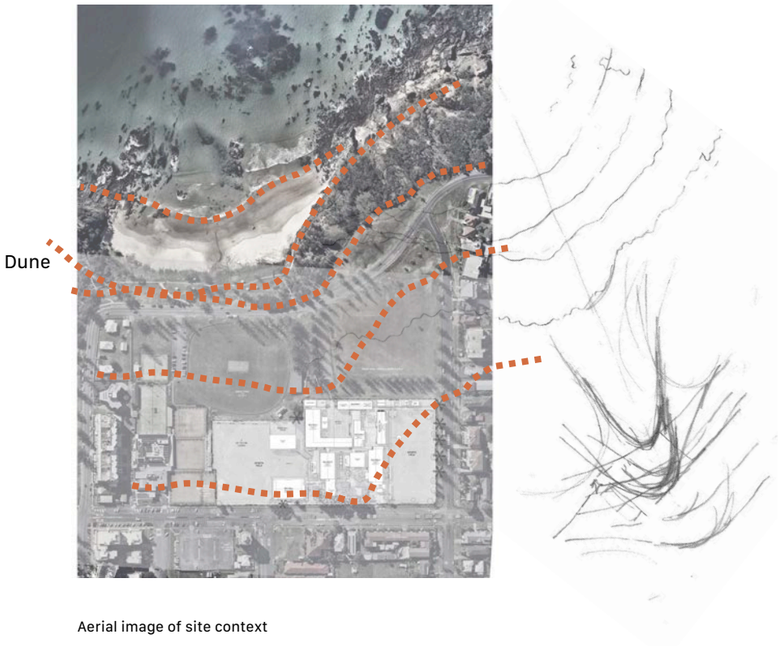
Refer Landscape Architectural Drawings



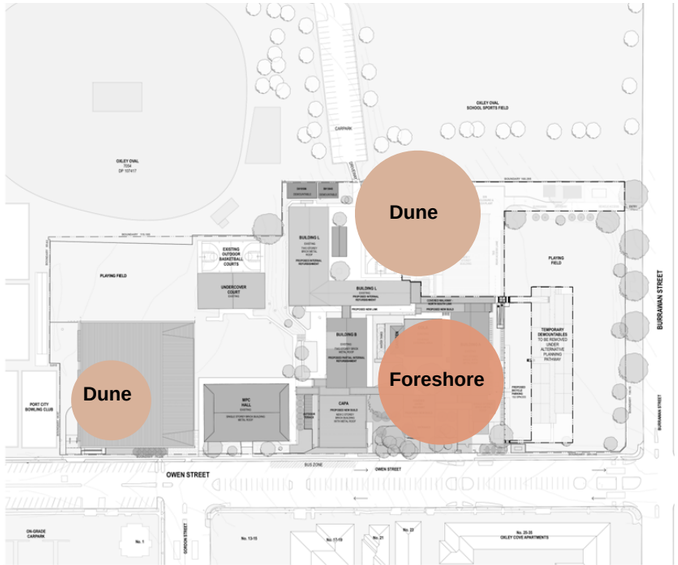
Coastal Environment



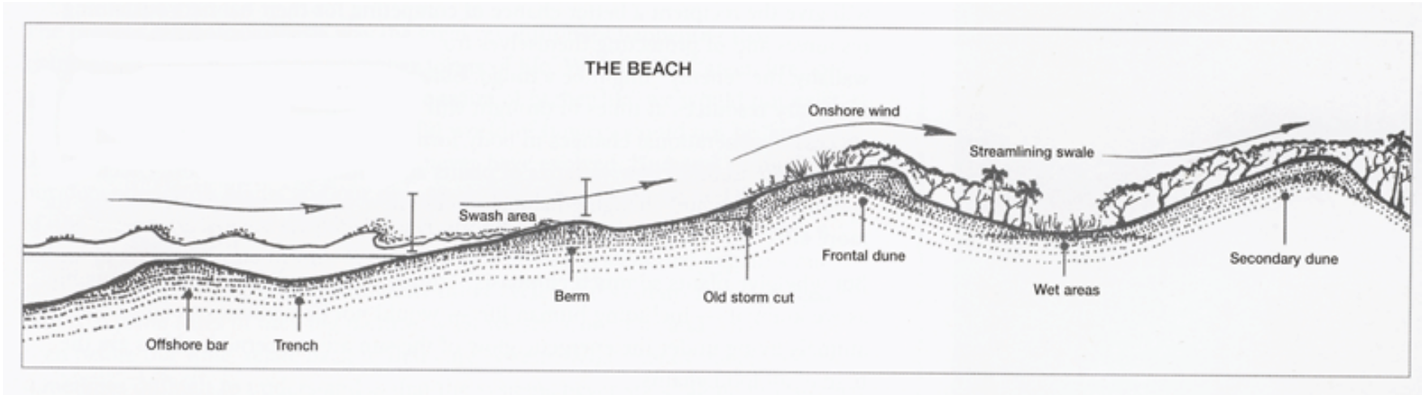
Foreshore



Aerial image of site context



SIte Plan Diagram



Ecological Context

Planting Approach

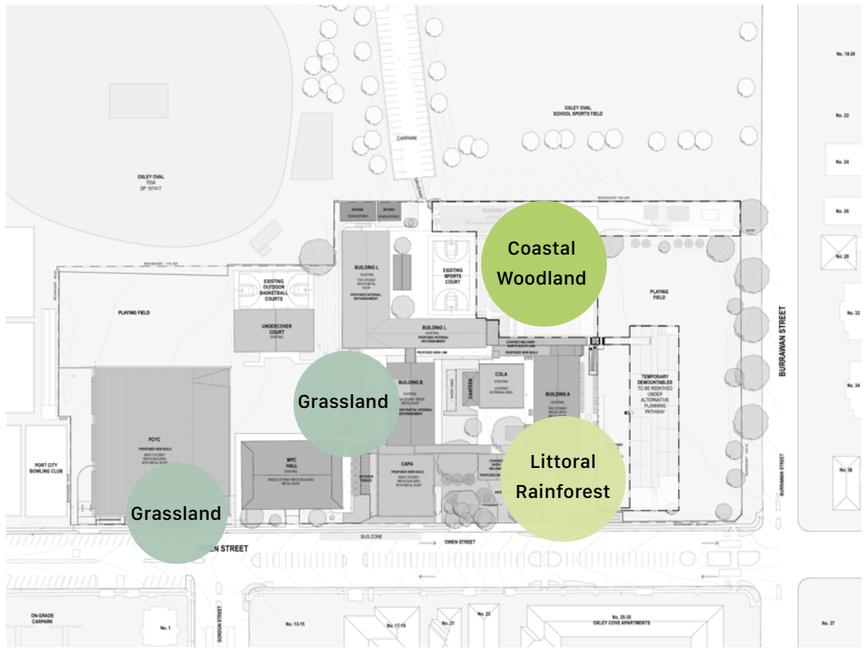
The planting strategy has been developed with consideration to the Ecological Vegetation Classes (EVCs) within the site context. These include littoral rainforests, coastal woodlands and headland grasslands (Vegetation PtMAcquarieLGA_4205).

Themeda Headland Grassland,

Coast Banksia - Coastal She-oak Headland Woodland

Coastal Headland Brushbox Littoral Rainforest

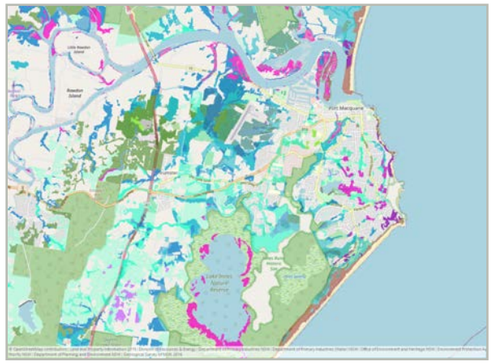
— Engaging with and protecting the natural environment provides ecosystem benefits and enhances the landscape amenity.



Site Plan Diagram



Aerial image of site context



EVC Mapping Port Macquarie



EVC Mapping Site Context

Koala Habitat Strategy

<u>Habitat Strategy</u>

The acknowledges the ecological context of the site in consideration of koala habitat zones.

<u>Koala Habitat Trees in Existing Trees</u>

Tree 23 and Tree 27 *Eucalyptus microcorys* - Tallowwood are listed in the National Koala Tree Planting Lists as being Primary Koala Food.

<u>Koala Habitat Trees in Proposed Trees</u>

Eucalyptus grandis

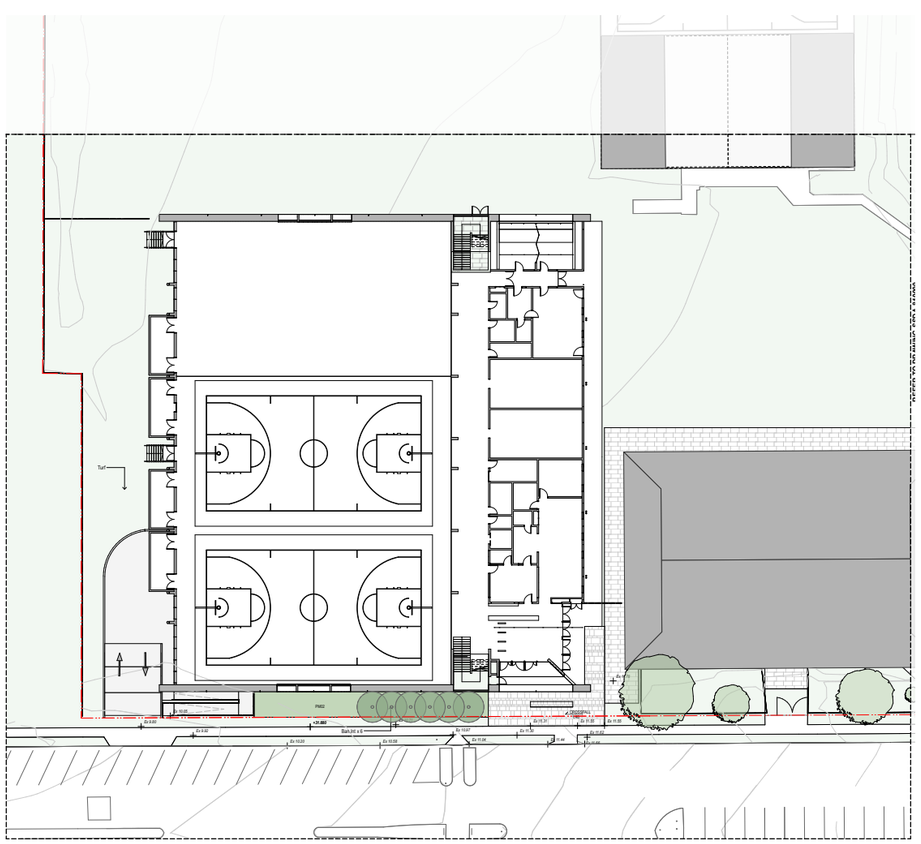
Eucalyptus microcorys

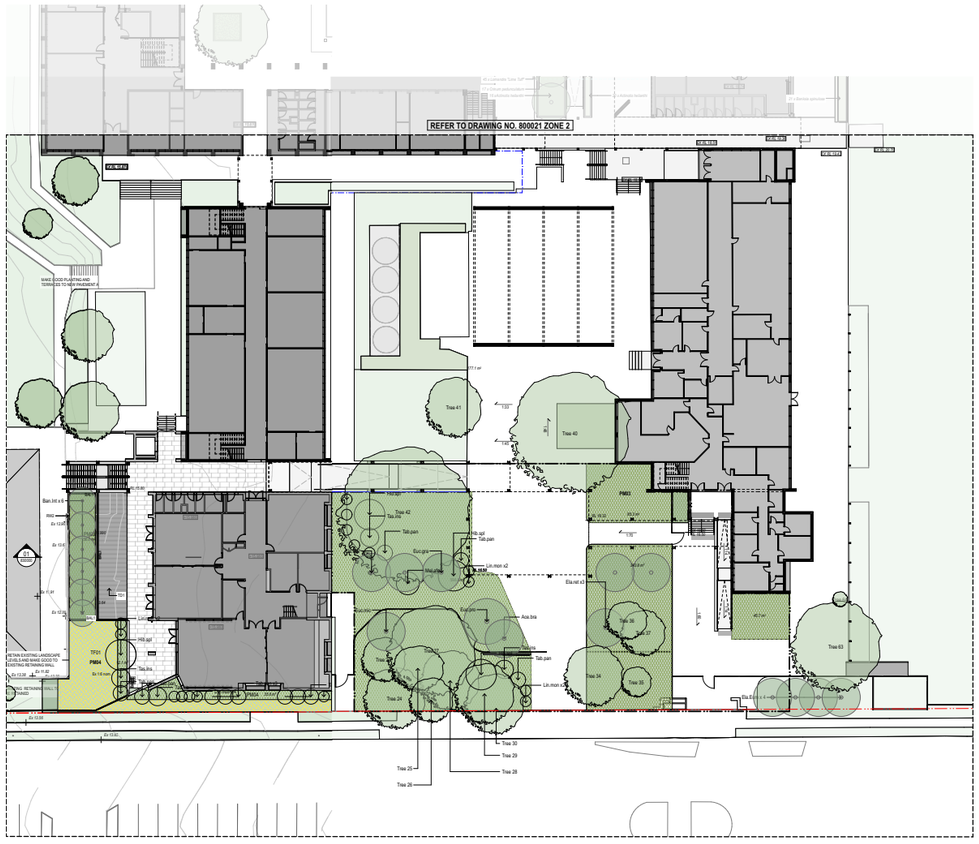
Eucalyptus propinqua

Eucalyptus obvata

(Planted in close proximity for connected specimens within a habitat zone).







Indigenous Planting Palette










Proposed Planting Mix 01

1 DOODIA MEDIA - RASP FERN
2 ALPINIA CAERULEA - NATIVE GINGER
3 ASPLENIUM NIDUS - BIRD'S NEST FERN
4 ALOCASIA BRISBANENSIS - ELEPHANTS EAR
5 TRIPLAIDENIA CUNINGHAMII - SPICE BUSH
6 VIOLA HEDERACEAE - NATIVE VIOLET
7 PANDOREA PANDORANA - WONGA WONGA VINE







Proposed Planting Mix 02

1 ACTINOTUS HELIANTHI - FLANNEL FLOWER
2 DICHONDRA REPENS - SILVER FALLS
3 HISTOPTERIS INCISA - BATSWING FERN
4 BANKSIA SPINULOSA - HAIRPIN BANKSIA

Proposed Planting Schedule

BOTANICAL NAME	COMMON NAME	INDICATIVE CONTAINER SIZE	SPACING	QUANTITY
CAMPUS CORE PLANTING				
Planting Mix 01 - 300mm min on existing	Total Area: 159.2sq/m			
Histiopteris incisa	Batwing Fern	300mm	2 per m2	320
Actinotus helianthii	Flannel Flower	150mm	6 per m2	960
Banksia spinulosa 'Coastal Cushion'	Hairpin banksia	300mm	2 per m2	320
Dichondra repens	Kidney Weed	150mm	3 per m2	480
Planting Mix 02 - Understory on existing	Total Area: 25.4 sq/m			
Alocasia brisbanensis	Elephant Ear	300mm	0.5 per m2	12
Alpinia caerulea	Native Ginger	300mm	0.5 per m2	12
Asplenium nidus	Birds Nest Fern	300mm	1 per m2	25
Doodia aspera	Rasp Fern	300mm	3 per m2	75
Pandora pandorana	Wonga Wonga Vine	200mm	3 per m2	90
Tripladenia cunighamii	Spice Bush	150mm	2 per m2	50
Viola hederacea	Native violet	150mm	3 per m2	75

Indigenous Planting Palette





























Proposed Planting Mix 03

1 CASUARINA GLAUCA - COUSIN IT
2 PULTANEA MARITIMA - COASTAL HEADLAND PEA
3 MIRBELIA RUBIFOLIA - HEATH MIRBELIA
4 DOODIA MEDIA - RASP FERN
5 VIOLA HEDERACEAE - NATIVE VIOLET
6 DIANELLA CAERULEA - FLAX LILY

Proposed Planting Mix 04

1 LINOSPADEX MONOSTAYCHA - WALKING STICK PALM
2 TASMANIA INSIPIDA - BRUSH PEPPER
3 TABEMAEMONTANA PANDACAQUI - BANANA BUSH
4 ALOCASIA BRISBANENSIS - ELEPHANTS EAR
5 TRIPLAIDENIA CUNINGHAMII - SPICE BUSH
6 VIOLA HEDERACEAE - NATIVE VIOLET
7 PANDOREA PANDORANA - WONGA WONGA VINE

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