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Brisbane

Sydney Catholic Schools

c/- CTPG
Carmichael Tompkins Property Group
Suite 14.04 Aurora Place
88 Phillip St
Sydney NSW,2000

Att: Brodie McHutchison

20.05.2022

Dear Sirs

**Re: Marist Catholic College North Shore (SSDA-10473)**

We refer to DPIE letter dated 20.12.2021 Response to Submissions and SDRP Third Review in response to State Significant Development Application for Marist Catholic College North Shore and specifically comments raised in relation to the Architectural design.

This letter should be read in conjunction with;

- SSDA Architectural Design Statement, Response to Submissions dated 20.05.2022 prepared by WMK Architecture
- Architectural Documentation prepared by WMK Architecture
- Landscape Documentation prepared by Oculus
- Heritage Impact Statement prepared by Weir Phillips Heritage and Planning
- Traffic engineering report prepared by TTPP Transport Planning
- Other consultant documentation and reports

The following table specifically responds to the following architectural concerns;

RESPONSE TO DPIE

| MATTER RAISED | COMMENT |
|---|---|
| **Heritage** | |
| The bulk and scale of the building at the corner of Miller and Carlow Street has not been assessed. The Department has raised this concern earlier and considers that the scale of the proposal at this corner should be reduced. The design should | Refer to Architectural design statement Section 2.0 Architectural response, drawing DA-200 Streetscape Elevations, DA-210 Building Elevations<br><br>The scale of the building has been reduced by revisiting the design of top floor of the |

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| be revisited with the goal of being able to provide a proposed corner building of a form, that more sympathetically responds to the heritage aspects of the surrounding context. | Miller Carlow building. The lightweight metal portal framing around the upper windows has been removed and the glazing line setback from the facade. This has reduced the visual bulk of the top floor. This also emphasises the double storey window frame elements in the brick facade similar to the language of the adjacent North Sydney Hotel. Additional curved brickwork detailing has been added to soften the facade. The main bulk of the facade is maintained within the LEP height plane and is sympathetic to the surrounding context. |
| Drop Off/Pick Up Area and Car/Bicycle Parking | |
| Clarification of the design and use of the pick-up/drop-off (PUDO) zone for kindergarten to year 1 students on the north-south access, including:<br>updated architectural / landscape plans to show the surface PUDO zone.<br>confirmation of the number of PUDO spaces and vehicle queuing capacity as well as the ability of vehicles to pass in the event the PUDO spaces are occupied. | Refer to Architectural design statement Section 5.0 APPENDIX F - Student Drop off/Pick up for existing and proposed Drop off/Pick up zones for kindergarten and year 1 students.<br>Architectural and Landscape drawings show the North/South access and PUDO zone arrangement.<br><br>Refer to traffic engineering report for further information. |
| Clarification of the adequacy of PUDO facilities including:<br>whether the existing PUDO facility is capable of accommodating existing peak demand, whether it results in queuing onto Ridge Street and if so the extent of queuing.<br>an assessment of the proposed PUDO spaces (12 spaces for Years 2-12, three spaces for Kinder to Year 1 and nine spaces for childcare) to demonstrate that this is sufficient to meet demand during peak periods.<br>confirm the predicted maximum vehicle queue length for each proposed PUDO during peak periods.<br>confirm whether the PUDO times for Years 2-12 and the childcare overlap, and whether this cumulative demand results in any adverse queuing. | Refer to Architectural design statement Section 5.0 APPENDIX F - Student Drop off/Pick up for proposed Drop off/Pick up zone for year 2-12 students.<br><br>Refer to traffic engineering report for further information. |

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| **Residential Amenity** | |
| Provide an assessment of the impact from the Carlow Street building on the residential amenity of the adjoining Marist Brothers residences fronting Carlow Street (located on the site). The assessment should include:<br>confirmation of the internal layout of existing residential habitable rooms and location of windows.<br>consideration of Apartment Design Guide (ADG) standards and the predicted amenity impacts, including:<br>overshadowing of habitable rooms windows and garden space.<br>impacts on the outlook from existing windows.<br>any reduction of privacy, with particular reference to proposed windows, the first-floor staff outdoor area and science courtyard. | Refer to Architectural design statement Section 2.0 Architectural response and Architectural plans and elevations for details.<br><br>The existing Marist Brothers residences are located to the east of the proposed Carlow Street building. The existing school building and rooftop outdoor recreation already pose a situation of overlooking.<br><br>Additional site survey was undertaken to locate the existing windows on the western facade facing the School building. It was noted there are three ground floor windows and one upper floor window were all covered to mitigate current overlooking.<br><br>Following receipt of the additional survey of the adjacent Marist Brothers Residence, the facade articulation of the Western facade has been amended to mitigate views from the first floor staff outdoor area towards the residence. The upper level courtyard has been removed. |
| **Architectural Plans** | |
| The architectural plans are required to be updated as follows:<br>correctly show the 6 parking spaces adjacent to St Mary's Church as accessible spaces (currently shown as 7 standard parking spaces).<br>include elevational / sectional drawings showing the amendments to the Ron Dyer Centre and Presbytery and the proposed 2 storey pavilion building.<br>include new and updated computer generate imagery (CGIs) including:<br>new CGI imagery taken from within the site to demonstrate the proposed changes - particularly showing the new courtyard north of the Church, changes and extension of the Presbytery, the revised Ron Dyer Centre and of the Carlow / Miller Street buildings from within the northern quadrangle. | Plans have been updated to show 6 parking spaces adjacent to St. Mary's Church<br>Refer to DA-102 GA Plan - Ground Zone 1<br><br>New drawings have been included with the submission to show plan, elevational and sectional views of the Ron Dyer Centre and Presbytery<br><br>Refer to DA-220 to DA-233 (St. Mary's Church, Presbytery and Ron Dyer Centre drawings)<br><br>CGI imagery has been updated<br>Refer to Section 2.0 Architectural response Public Recreation - Piazza for internal site view perspectives and DA-802 - Perspectives for Miller Street building |

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| updated DA-802 (CGI) to reflect the RtS amended Miller Street building.<br>include a temporary building plan and elevation(s) for the proposed portables / temporary classroom(s) etc during construction. In addition, confirm the predicted life-span of the temporary buildings and the trigger/timing for their removal.<br>include the entire site in the updated drawings. Currently the drawings do not show school buildings / structures at the western extent of the site adjacent to Cassini Avenue or the proposed internal changes to Block F.<br>provide a roof plan for all buildings shown on drawing DA-104.<br>delete all details of potential future buildings from the drawings and replace with the proposed or retained arrangement. This would be required to be consistent with the statement that "Stage 02A Building + Walkway" is "Subject to Separate Approval".<br>delete the Ron Dyer Centre connection to that future walkway from this application and including it with the Stage 02A future application. | New temporary buildings plan has been included<br>Refer to DA-112 - Temporary Buildings Plan<br><br>Extend of works towards the western portion of site has been clarified. There are no works in this zone<br>Refer to DA-021 - Site (Roof) Plan<br><br>Roof plan has been included<br>Refer to DA-110 and DA-111 - Roof Plan Zone 1 & 2<br><br>Floor plans have been updated to reflect existing arrangement including Stage 2A works and removal of terraces and Jacaranda Cottage. |
| Demolition Plans | |
| The demolition drawings continue to show the two terraces, Jacaranda Cottage and other site preparation demolition works for which separate Council DA approval has been granted (DA100/21) and no longer form part of this application. Either remove these works or include a clear annotation with colour change confirming separate approval has been granted for these works and they do not form part of this application. The demolition drawings include an annotation that that demolition of Block C Annex "Note: Proposed development subject to separate approval". This being the case, remove the demolition of this building from the demolition drawings. | Refer to DA-010 and DA-011 - Demolition Plans<br><br>Demolition plan has been updated to reflect existing conditions on site - the terraces and Jacaranda cottage have been removed. Block C annex demolition has been removed and Stage 02A is now shown as existing. |

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| RESPONSE TO GA NSW SDRP | |
|---|---|
| MATTER RAISED | COMMENT |
| Reorganise the planning and built form to provide a greater sense of height, increase solar access to the covered outdoor spaces in winter and provide outlook to the sky from the COLA; For example, the Student Support Area at the northern end of the campus could be relocated to enable a double-height termination to the north/south axis, improving solar access to the COLA. | Please refer to Architectural design statement Appendix I - Undercroft Solar Studies<br><br>A solar study has been performed reviewing the requested scenario of the relocation of the student services on the northern end. Although additional direct daylight is achieved, it is fairly minor and represents no substantial solar benefit to the undercroft and quadrangle area in terms of the solar access benefits as outlined above. |
| Provide sun studies illustrating the area of solar access to the ground plane (as a percentage of the total covered area) from 9am to 3pm in mid-winter. | Please refer to Architectural design statement Appendix I - Undercroft Solar Studies |
| Demonstrate that the Early Learning Centre outdoor area will perform in accordance with the NSW Child Care Planning Guideline which states that outdoor play areas should have year-round solar access to at least 30% of the ground area, with no more than 60% of the outdoor space covered. | Please refer to Architectural design statement 5.0 Child Care Facility - Main Child Care Floor |
| Implement acoustic design solutions and provide an acoustic report that demonstrates acoustic comfort in the undercroft areas during times of high activity. Consider acoustic absorption and attenuation through:<br>a. The introduction of soft planting<br>b. The geometry of the walls and columns<br>c. The floor and ceiling surfaces<br>d. The surface treatment of walls and columns, such as:<br>i. Textured or perforated surfaces<br>ii. Recessed graphics and artwork<br>iii. Surface depth | Acoustic design solutions that have been implement include:<br>Acoustic lining to the underside of the soffits proposed will dampen the noise and reverberation within the space<br>Soft planting has been proposed as a barrier between the undercroft area and the traffic noise from Carlow street.<br>Textured finishes and soft surfaces are proposed on the loose furniture<br><br>Successful precedents of similar undercroft areas have been studied and acoustic solutions implement have been adopted. Please see Appendix J - Acoustic Precedent Studies |
| Provide a secure lobby space between the lifts and the entrance to the child care centre in order to enable controlled access. | Refer to DA-101 -GA PLAN - BASEMENT ZONE 2 and DA1-5 - GA PLAN - LEVEL 1 ZONE 2<br>A dedicated lift to the childcare has been provided to control the access to the |

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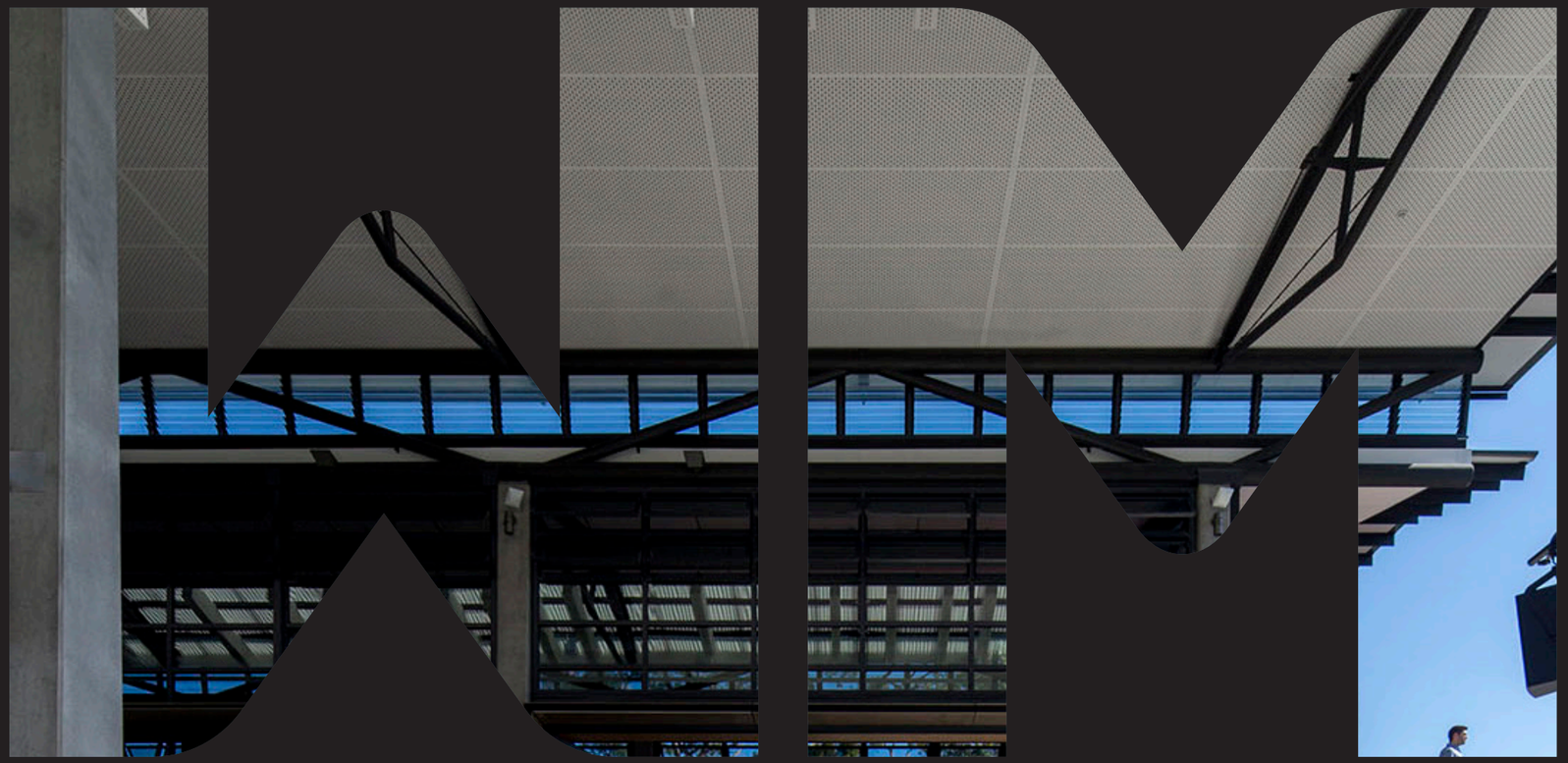
| | learning floor. This lift cannot access any other floor apart from the Child Care and the Miller St. entry and vice versa. Furthermore, a secured, dedicated lobby has been provided for this lift as an additional secured line for children exiting the lift. |
| Deliver a safe and effective pedestrian and vehicular traffic strategy and demonstrate how the shared zone will be used at drop-off/pick-up times and during school hours. There is a conflict between students using the proposed shared zone and vehicles entering and exiting the Ron Dyer Centre basement carpark. | Please see Appendix F - Traffic and refer to Transport Impact Assessment (by others) |

We trust this information alleviates the concerns raised.

Yours sincerely,

Belinda McHarg
Director Projects
Registered Architect – NSW ARB7356
WMK Architecture



STRATEGY
ARCHITECTURE
INTERIORS
BRAND

WMK
ARCHITECTURE

Sydney Catholic Schools

MARIST CATHOLIC COLLEGE NORTH SHORE

ctpg
Sydney | Melbourne

# Marist Catholic College North Shore Masterplan

## SSDA Architectural Design Statement

## Response to Submissions

30.05.22

# INTRODUCTION

## PURPOSE OF THIS DOCUMENT

The following document presents a report to inform the lodgement of the State Significant Development Application (SSDA) for the Marist Catholic College North Shore Masterplan.

This report captures the Marist Catholic College values and principles, pedagogical strategies and implementation, opportunities on site and the resulting architectural response.

As part of the masterplanning strategy, construction sequencing is considered to allow the school to function during the building works.

## CONFIDENTIAL



| DATE | TITLE OF DOCUMENT | REVISION | CREATED BY | CHECKED | APPROVED BY |
|---|---|---|---|---|---|
| 22/12/2020 | Marist Catholic College Masterplan - Design Report | A | BE | SL | JA |
| 11/02/2021 | Marist Catholic College Masterplan - Design Report | B | BE | SL | JA |
| 13/09/2021 | Revised for Response to Submissions | C | BE | SL | BM |
| 30/05/2022 | Revised for Response to Submissions 2 | D | BE | BM | BM |


MARIST CATHOLIC COLLEGE
NORTH SHORE

# TABLE OF CONTENTS

# MARIST COLLEGE

# VISION & MASTERPLANNING STRATEGY

# 1.0

# MARIST COLLEGE OVERVIEW

## WORKING IN PARTNERSHIP WITH THE SCHOOL - ENGAGEMENT

In collaboration with CTPG and other specialist consultants, WMK have been engaged to develop an Educational Brief and Masterplan for the Marist Catholic College North Shore Precinct.

Marist College is a heritage, boy's Catholic school for students in Year 7 to Year 12, shifting to co-education K-12 precinct in 2021. Marist College is well regarded and maintains a record of significant achievement at all levels, which has enabled students to look to the future with confidence; and to develop a response to core ontological questions.

The dynamic transition of the school into the co-educational learning space reflects the school's continued efforts to service the demographics of its community, and has profound impact on the development of its spaces. The mission, vision, hope and values of the school was reinforced throughout this process and enriched the recommendations for functional design.

## MARIST COLLEGE AT A GLANCE

**Mission:**
Marist Charism, Quality Education for All

Marist education enacts the principles of the Marist Order and the teachings of Marcellin Champagnat to provide quality education for all. Marist Charism centers on the lived expression of the gospel message of Jesus Christ and devotion to the example of the Virgin Mary.

**Marist Charism:**
5 Pillars + Lifelong Learning

The five essential pillars of Marist Charism defines the objectives of a Marist education. The pillars are: Presence, Simplicity, Family Spirit, Love of Work, In the way of Mary. Lifelong Learning, in addition to the pillars a commitment to continued learning as part of a educational practice and career building

**Values:**
Quality Relationships, Learning for All, A community of Faith, Wellbeing

Values reflect the identity of a community and the standard of behaviour that makes the community thrive. At Marist College the values define the aspirational culture of the school within and beyond the classroom.

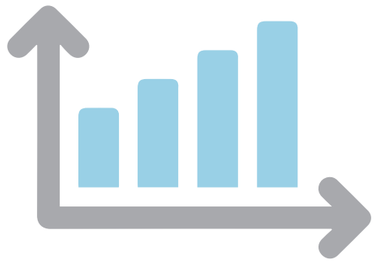
**132**
**YEARS OF EXCELLENCE**
ESTABLISHED IN NORTH SYDNEY IN 1888

**864**
**STUDENTS ENROLLED**
WITH HIGH RETENTION RATES

**80+**
**DEDICATED STAFF**
WITH LONG-TERM TEACHING STAFF

**A CONNECTED CATHOLIC PRECINCT**

COMMUNITY OF SCHOOLS, PARISH & LOCALS



**ACCOMPLISH HIGH NAPLAN AND HSC RESULTS**

IDENTIFIED & CONTINUED IMPROVEMENT

**NURTURING A CO-ED COMMUNITY OF LEARNERS**

COMMITMENT TO STUDENT WELLBEING

# DESIGN PRINCIPLES

## CAMPUS PRINCIPLES

### 1. Catholic Architectural Heritage

Working with existing heritage fabric within the precinct celebrates and rejuvenates the building assets of the site.

The objectives of the master plan for heritage include:

> To work within best heritage practice principles and respect the existing heritage fabric with any new works

> For any new additions should where possible enhance and re-use the existing heritage buildings.

> If possible, careful demolition should be undertaken to reinstate the clarity of the heritage fabric, provided learning spaces are not compromised

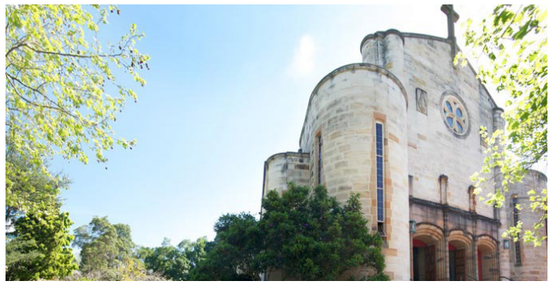
> To provide a complimentary palette of materials to the heritage materials

> To understand and respond to the existing character of the heritage fabric

### 2. Catholic Education 'One-Stop-Shop'

The masterplan aims to create a precinct for Catholic education that accommodates all academic stages from early learning to secondary school, with the potential of extension to tertiary education through on-site university tenancy.

This provides opportunity to centralise functions on-site into an activated hub, with opportunities for further commercial partnerships for the schools, church and parish.



### 3. Campus Heart

The campus heart provides literal and symbolic accessibility to all facets of learning: mind, spirit and body. In creating an activated heart, the masterplan interweaves the old and the new to create a strong network of diverse learning and recreation spaces.

The masterplan seeks to enhance and strengthen a sense of place in the campus, connected to the wider precinct. The Miller St street-front has been identified as the "front" of the precinct, flowing to a central "spine" that connects all functional areas of the [precinct physically by the common internal "street".

It is important that this "street" is enhanced in any new works to the development of the campus. The intention of the masterplan is that this central "spine" acts as a fulcrum point for circulation around the campus.

### 4. Connecting Axis/ Accessibility And Wayfinding

Clear and equitable access will create a new campus core and connect the disparate functions of the precinct. In order to strengthen the campus core the Master Plan proposes that access to each of the buildings is related back to the main driveway level, either through physical links or visual links. Movement around the campus is always directed back to the core of the site, away from the edges of the site, hence strengthening the sense of community and containment.

The masterplan proposes:

> Any new building addition should address accessibility to the precinct

> To provide a staged (high priority) approach to accessibility so that full accessibility can be realised as soon as is practicable

> To fully integrate accessible pathways into the existing and new fabric so that each response is where possible equitable

> To develop the access circulation and "campus connectors" to provide new orientation points

> For new campus connectors to resolve accessible access to all buildings within its precinct.

> To provide where possible a covered route with the new additions

### 5. Enhancing The Topography (Landscape)

Overlaid onto the new extended campus core are new opportunities for external learning and engagement.

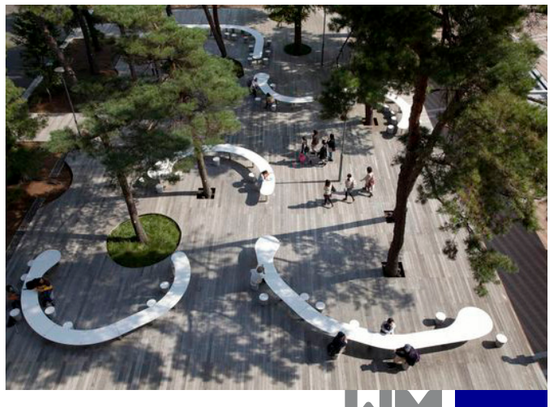
The masterplan aims to:

> Preserve where possible the existing landscape

> Orientate to and engage new works always with landscape

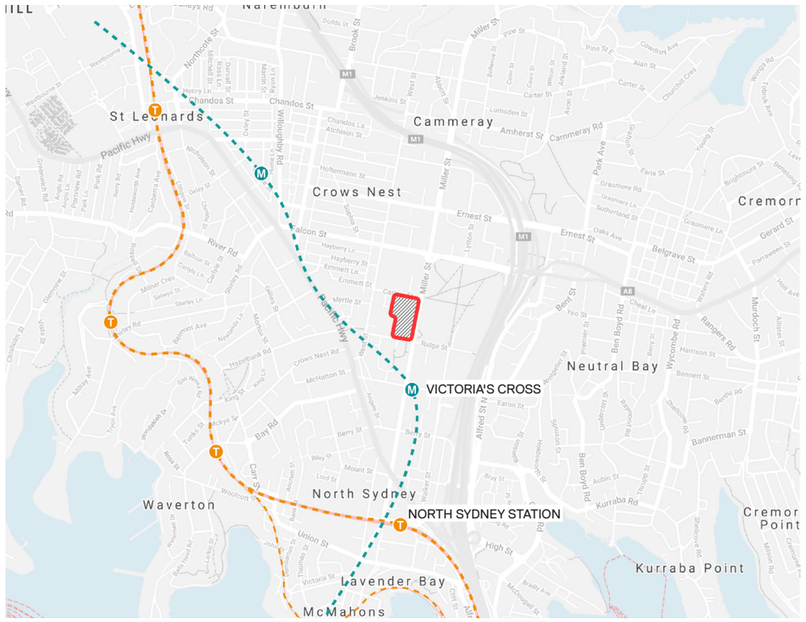
> If tree removal is required to meet other functional needs of the brief replace with like

> Soften the edges - the current campus where possible utilises the roof tops of the lower level buildings. In the masterplan, the use of roof tops is further developed.



# PROJECT CONTEXT

## LOCATION




The precinct is located in North Sydney, bordered by Miller Street, Ridge Street and Carlow Street with additional lane access via Cassins Avenue.

On site the precinct can be divided into 4 main blocks:
1. Marist College North Shore
2. St Mary's Primary School
3. Ron Dyer Centre (Parish)
4. St Mary's Church + carpark

Currently the site has direct pedestrian, car and bus access with North Sydney train station within 1km distance. Additional future transport access will be the addition of Victoria Cross station as part of the Sydney Metro project.

The precinct is adjacent to retail amenities and sports facilities on Ridge Street, as well as North Sydney Council, community centre and Stanton Library. Along Miller Street the site is bordered by North Sydney Oval, and The Greens North Sydney Bowls Club.

## EXISTING SITE



1. Marist College North Shore


2. St Mary's Primary School

3. Ron Dyer Centre (Parish)

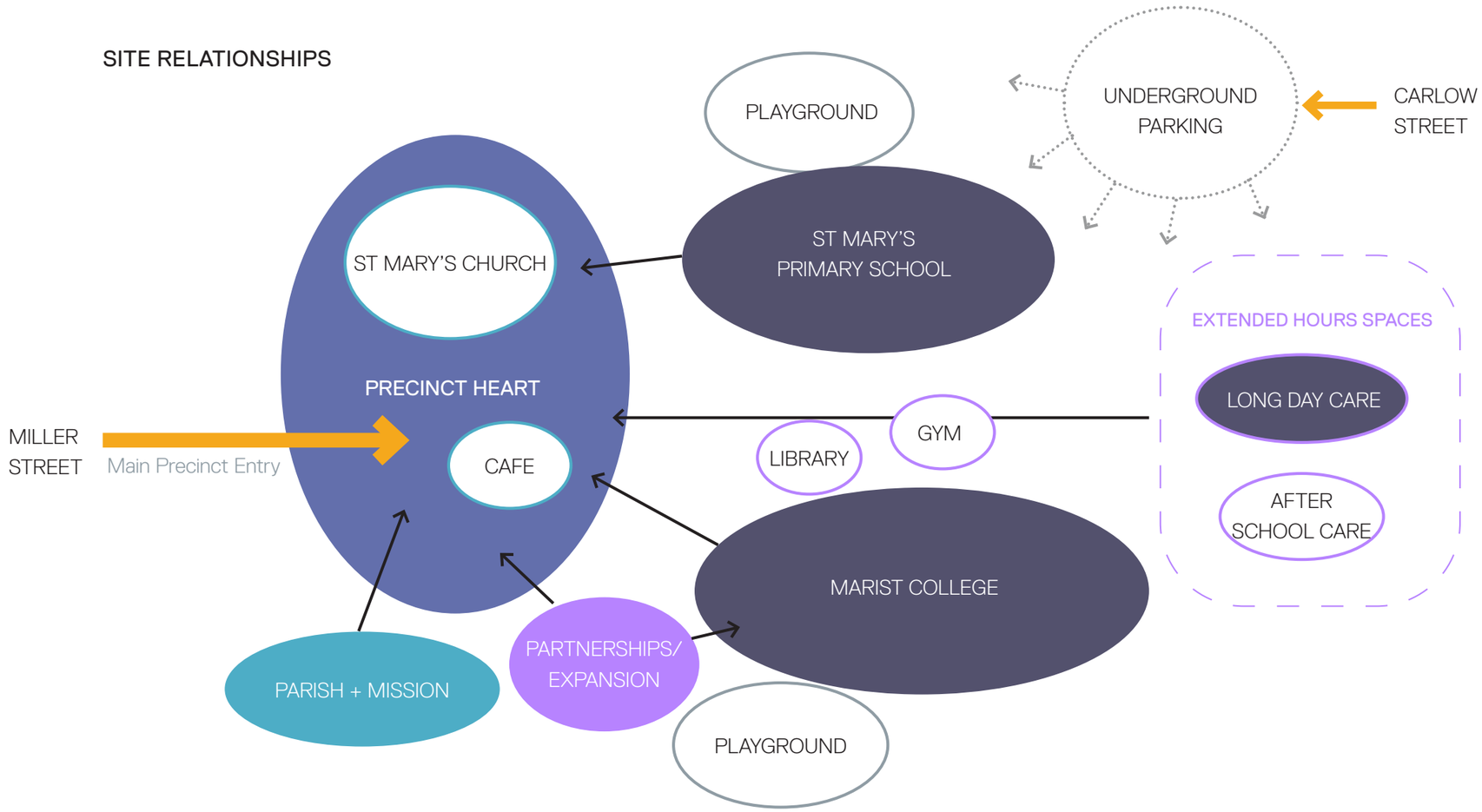

4. St Mary's Church

# SITE RELATIONSHIPS AND OPPORTUNITIES

The Church, parish and the schools are the soul of the North Shore Education Precinct. Providing a physical heart to the precinct is a key move within the master plan. It geographically connects to all key elements of the precinct and provides a centre for soul to thrive.

For the visitor there is activated sequencing, with an impressive main entry flanked by heritage buildings and consolidated efficient circulation routes within the precinct environs, plus effective connection to the wider local context.

The site relationship diagram demonstrates the over-arching connections and opportunities for the precinct masterplan.




## SITE OPPORTUNITIES

The site conditions provide a number of community and spatial opportunities for the masterplan redevelopment:

> Build on community
> Create a central heart and identity
> Centralise common use areas
> Activate library
> Improve the outdoor space format + quantum
> Create all-weather areas
> Improve linkages through site
> Enhance health and wellbeing opportunities
> University - commercial co-location
> Create a secure + flexible learning experience for new cohort
> Consideration of the drop-off and pick-up process

# SITE OPPORTUNITIES AND STRATEGY

The masterplan for Marist Catholic College was developed with the idea of creating a holistic campus. Currently, Marist Catholic College, St. Mary's Primary School, and St. Mary's Church are segregated due to a lack of pedestrian connection on site and existing infrastructure such as roads and carparks.

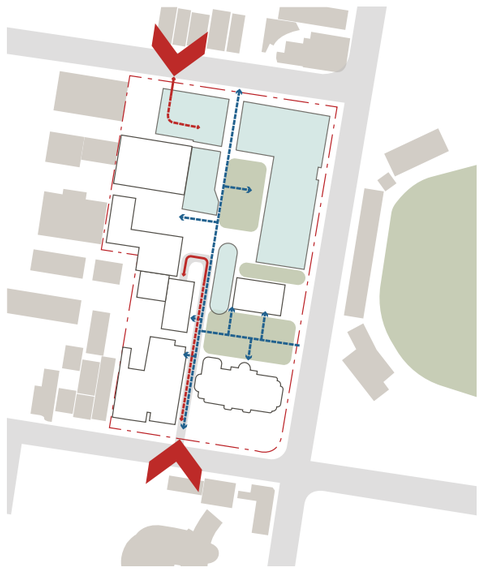
Through the analysis of existing significant buildings on site and the surrounding urban fabric, opportunities were identified to create a cohesive, connected campus through improved pedestrian pathways, diversion of vehicular traffic from the ground plane, and improving points of access.

**1. Identify existing significant buildings and buildings to-be-retained on site**

- St. Mary's Church, the Presbytery, and part of the St. Mary's Primary school are heritage listed buildings
- The Ron Dyer Centre and Year 7/8 block are recently built and are to be retained

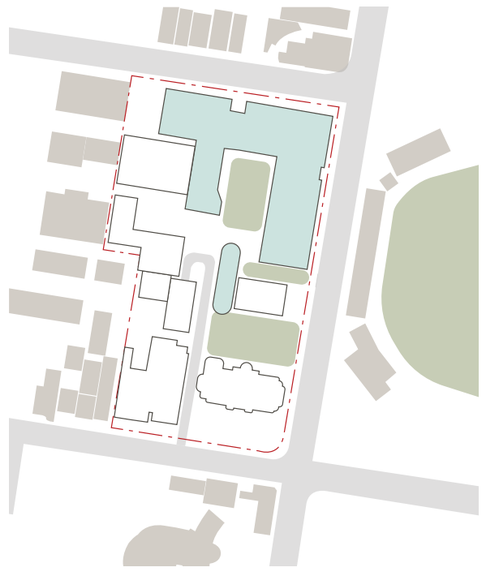
**2. Identify opportunities for through-site connection and a campus front door**

- A masterplan central 'spine' was implemented to create a strong through-site link
- The entry from Miller Street was identified as a suitable front door as it connects to all key parts of the site
- A new piazza is created to act as the campus heart where the new entry was identified



**3. Improve pedestrian and vehicular traffic on site**

- Through the masterplan spine, pedestrians can access all points of the campus
- Vehicular traffic is redirected to reduce vehicles on the ground plane.
- Vehicular entry points are diverted off Miller Street to decrease traffic on the main road
- Recreation space is a priority for the masterplan to ensure there is adequate landscaping for student and wider community use.



**4. Resulting footprint for the masterplan**

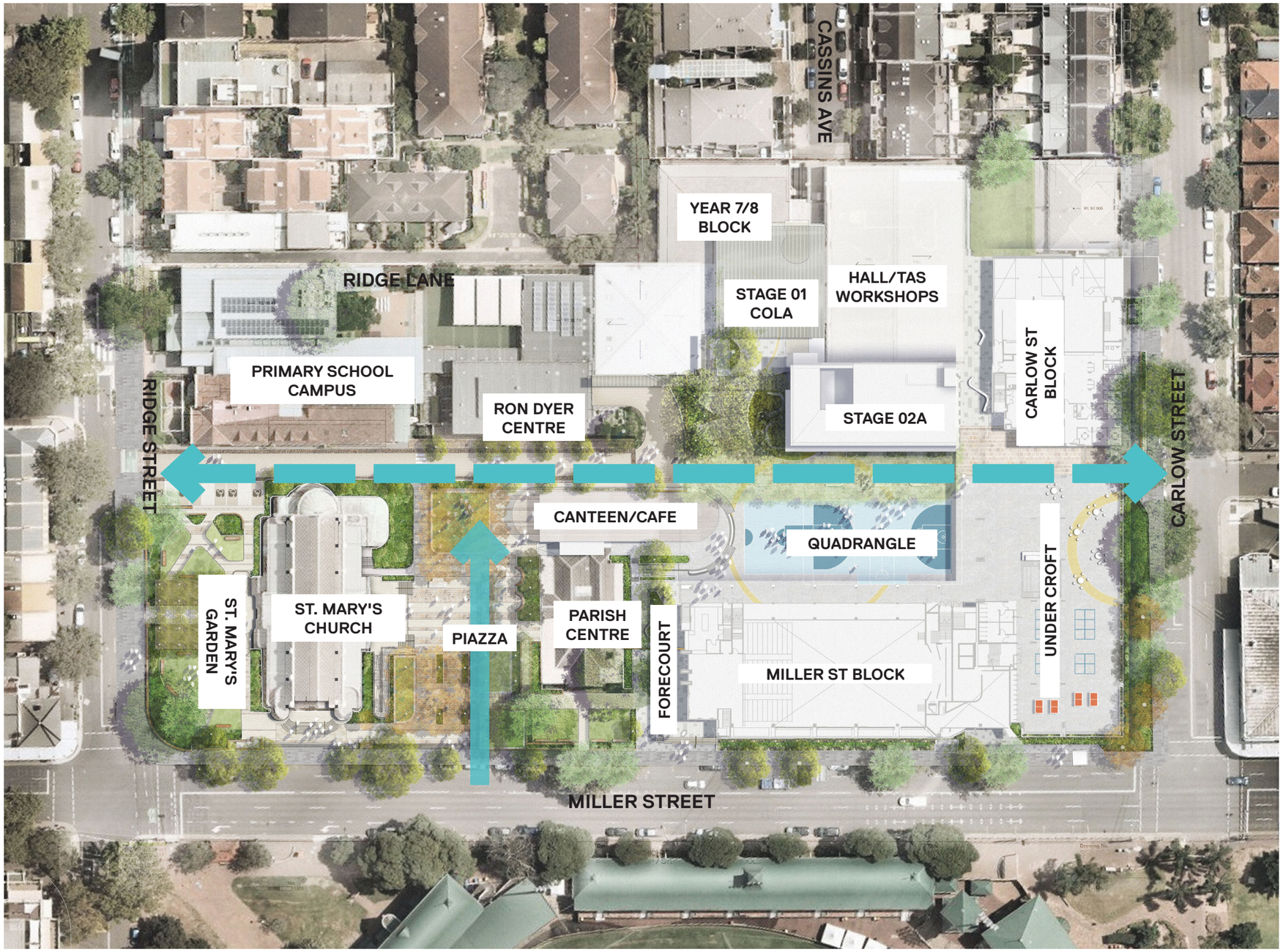
- The resulting building envelope aligns to the Miller and Carlow streets, and is set back to define a landscaped threshold to the public domain while creating a strong building edge to both streetscapes. This also maximises recreational area on the site with the creation of a connected series of play spaces on the ground plane which varies in scale, character and suits active and passive uses. This series of play spaces extends right through to Carlow Street as a large covered outdoor learning and recreation space at the ground level of the Carlow building.

# SITE OPPORTUNITIES AND STRATEGY

The masterplan delivers a connected, sustainable and activated precinct that assists the schools in achieving their academic objectives and services the wider community.

To accomplish these initiatives, opportunities on site include:

1. The introduction of an entry piazza: creates a 'front door' for the new Marist Catholic College precinct which lead to key spaces in the site including St. Mary's Catholic Church, St. Mary's Primary School, Marist Catholic College, Parish Centre, and the Ron Dyer Centre which houses the Public Reception for K-12
2. The creation of a central masterplan 'spine': improves the linkages throughout the site and increases connectivity between all parties within the precinct.
3. The implementation of a new vehicular and pedestrian traffic strategy: accommodates the school's drop-off and pick up requirements while taking into consideration traffic on surrounding streets and encourages more sustainable travel as part of the overall ESD strategy for the masterplan.
4. Elevated circulation walkways to connect the Primary School to the Secondary School, creating a cohesive learning experience within the K-12 precinct.
5. Addition of civic program on site with potential for wider community use such as the auditorium

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RL 92.780
RL 92.630
RL 91.906
FALL
FALL
FALL

# MARIST COLLEGE

# ARCHITECTURAL RESPONSE

# 2.0

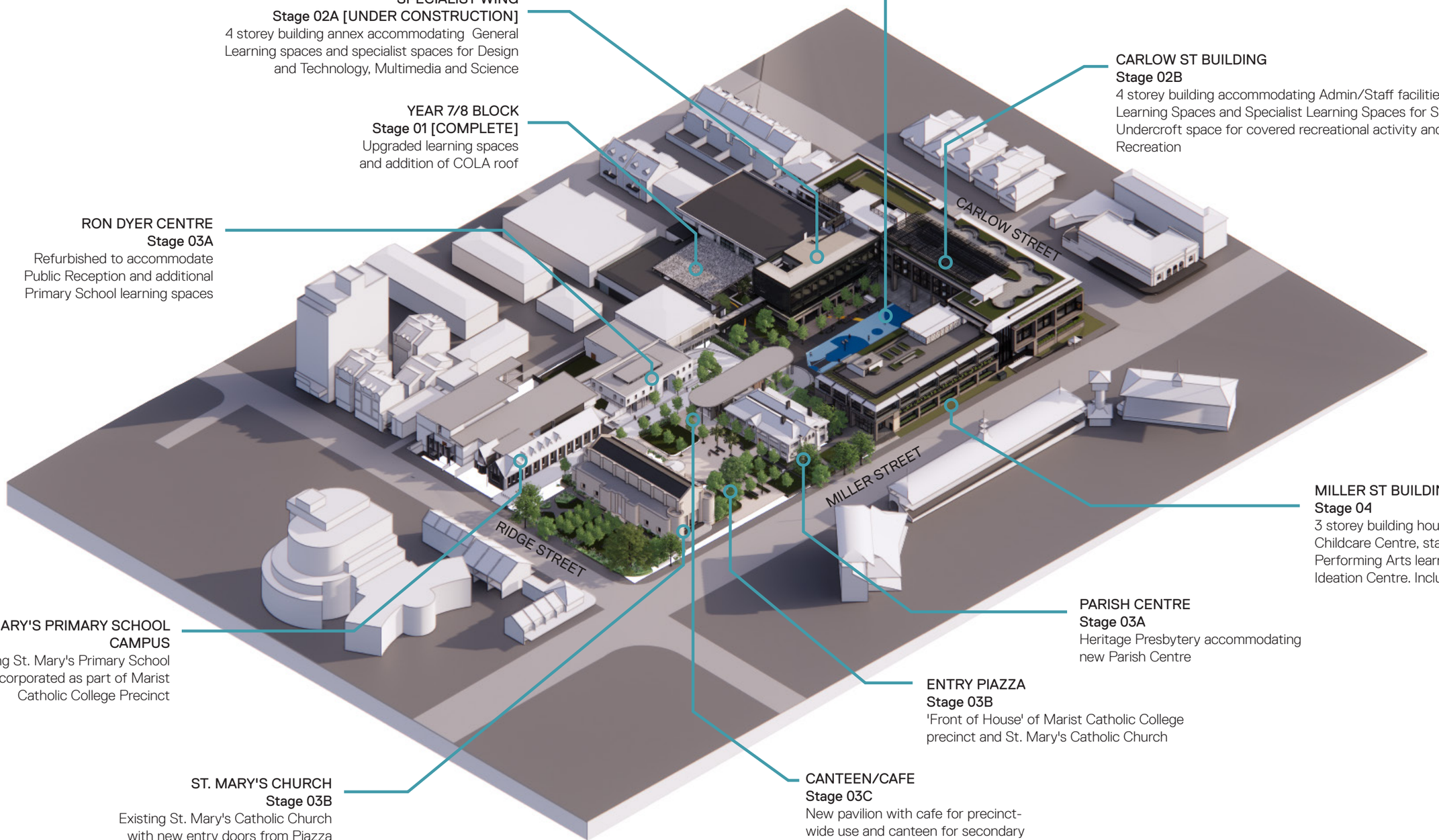
# ARCHITECTURAL RESPONSE

## ARCHITECTURAL DESIGN AND FORM

The following pages present the architectural response to the brief, with considerations towards the greater urban context, character of surrounding heritage buildings, and scale of adjacent infrastructure.

Comments from the Government Architect NSW SDRP Session 2 and Session 3 regarding the architecture have been addressed. In particular, the architectural language, outdoor learning spaces and concerns over height and scale of the proposed development. Furthermore, it highlights considerations towards the GANSW Design Guide for Schools and Education SEPP's seven design principles, seven objectives from the Better Placed Design Guide and CPTED principles for safer environmental design.

# PROPOSED MASTERPLAN




**QUADRANGLE**
**Stage 05**
Recreation space with multi-purpose courts and landscaping

**SPECIALIST WING**
**Stage 02A [UNDER CONSTRUCTION]**
4 storey building annex accommodating General Learning spaces and specialist spaces for Design and Technology, Multimedia and Science

**YEAR 7/8 BLOCK**
**Stage 01 [COMPLETE]**
Upgraded learning spaces and addition of COLA roof

**CARLOW ST BUILDING**
**Stage 02B**
4 storey building accommodating Admin/Staff facilities, Library, General Learning Spaces and Specialist Learning Spaces for Science. Includes Undercroft space for covered recreational activity and Open Roof Recreation

**RON DYER CENTRE**
**Stage 03A**
Refurbished to accommodate Public Reception and additional Primary School learning spaces

**MILLER ST BUILDING**
**Stage 04**
3 storey building housing new Auditorium, Childcare Centre, state-of-the-art Performing Arts learning spaces and Ideation Centre. Includes Roof Recreation.

**PARISH CENTRE**
**Stage 03A**
Heritage Presbytery accommodating new Parish Centre

**ENTRY PIAZZA**
**Stage 03B**
'Front of House' of Marist Catholic College precinct and St. Mary's Catholic Church

**ST. MARY'S PRIMARY SCHOOL CAMPUS**
Existing St. Mary's Primary School to be incorporated as part of Marist Catholic College Precinct

**ST. MARY'S CHURCH**
**Stage 03B**
Existing St. Mary's Catholic Church with new entry doors from Piazza and redesigned front garden

**CANTEEN/CAFE**
**Stage 03C**
New pavilion with cafe for precinct-wide use and canteen for secondary school use

# ARCHITECTURAL DESIGN

## FORM AND FACADE

The form of the façade is driven by a clear urban design strategy which draws from the greater context and streetscapes of both Miller and Carlow Streets, and the defining heritage of the St. Mary's Church and St. Mary's Presbytery.

The overall massing on the site responds to key masterplanning principles and is orientated for optimal daylight and unobstructed views of the street. An efficient grid structure is set out to allow for an adaptable form, flexible layout and potential for further expansion in the future.

Brick is used as the dominant facade material to reference the sandstone materiality of the St. Mary's Church. It defines a solid form which responds directly to the scale of adjacent buildings. Shifts in the brick base are used to highlight key entry points into the school and civic programs such as the auditorium.

The brick blade walls follow the structural grid and establishes a facade pattern, alluding to significant structures such as the North Sydney Oval stand. These vertical extrusions act as subdivisions to break up the horizontality of the structure. The blade walls are softened with the use of curved brick, acknowledging the curvature in the Church form.

The curved detailing, proportions and horizontal layering of the building has taken reference from the adjacent North Sydney Hotel.

**Design Response**

1. Articulation of facade to reduce visual bulk
2. Planting to soften facade edges
3. Recessed upper floor to reduce scale and height of buildings
4. Use of curved brick to soften edges of the building
5. Miller Street wing reduction in building height


Note: Street trees in front of building not shown for clarity

# ARCHITECTURAL DESIGN


Note: Street trees in front of building not shown for clarity

On Carlow St. this rhythm shifts in form to create irregularity and playfulness in the façade responding explicitly to the adjacent residential terraces.

The brick massing is disrupted at key intersections on the site; the masterplan spine, and the separation between the Carlow St and Miller St buildings. These breaks are recessed and glazed, expressed with a vertical screening device.

Window fenestrations are recessed to articulate the solid brick form. Framing devices within each glazing bay provide finer grain detail. Operable window awnings are expressed and integrated into the facade composition.

The top level has been recessed with an extruded canopy to cap the building. This minimises the visual impact and overall bulk of the top floor. It is softened by curved glazing.

Visual continuity is maintained on the ground plane through the undercroft on Carlow St and glazing in and through the auditorium, allowing views into the quadrangle and greater school precinct.

The central atrium allows natural light and ventilation to permeate through the education floors.

The western facade has been redesigned with a more sensitive approach to the adjacent residential buildings.

**Design Response**

1. Articulation of facade to reduce visual bulk
2. Planting to soften facade edges
3. Recessed upper floor to reduce scale and height of buildings
4. Use of curved brick to soften edges of the building

# PREVIOUS SCHEME COMPARISON

PREVIOUS SCHEME

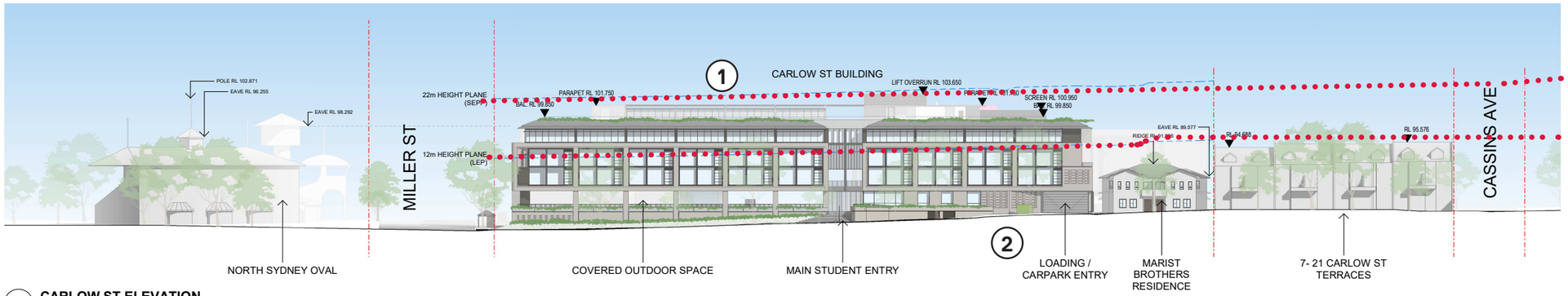

CURRENT SCHEME

**Design Changes**

1. Removed lightweight metal framing on top level, simplified the glazing and recessed to reduce the visual bulk of top floor.
2. Added curved corner brick detailing to soften brick base
3. Recessed extent of roof recreation to reduce presence along street
4. Refined window fenestration details for further articulation on facade

# PHOTOMONTAGE - BUILDING IN-SITU

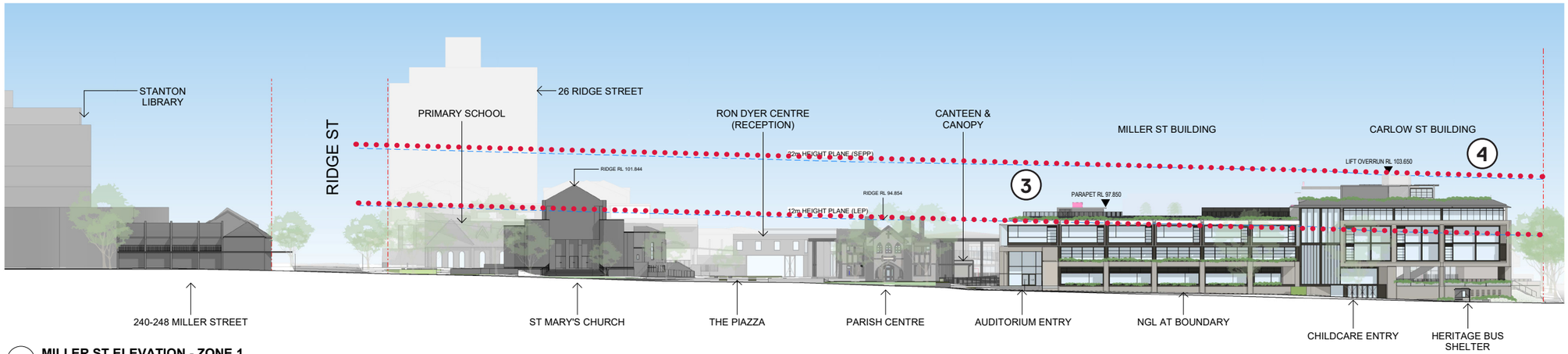
# RESPONSE TO SURROUNDING CONTEXT




1 **CARLOW ST ELEVATION**

1. Upper storey within the 22m SEPP height plane is recessed to reduce the appearance of height and bulk

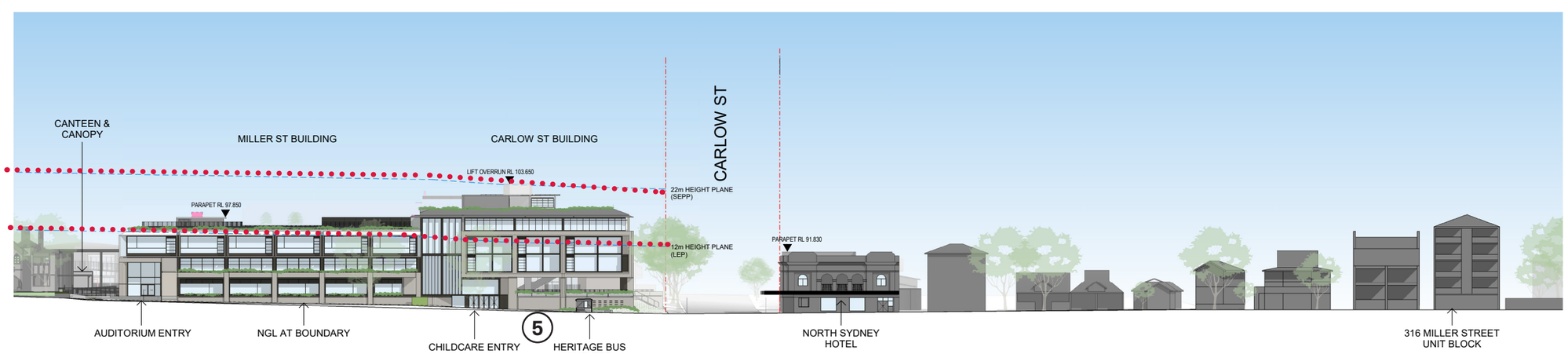
2. Articulated brick facade within the 12m LEP height plane to form a consistent streetscape matching the height, bulk and materiality of the neighbouring 7-21 Carlow St terraces




2 **MILLER ST ELEVATION - ZONE 1**

3. Three storey Miller Street Wing. Proposed roof garden within the 22m SEPP height plane

4. Upper storey within the 22m SEPP height plane is recessed to reduce the appearance of height and bulk

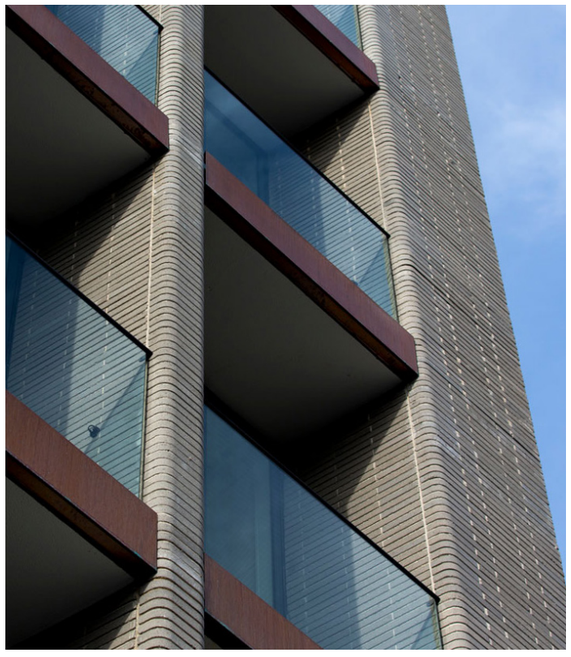


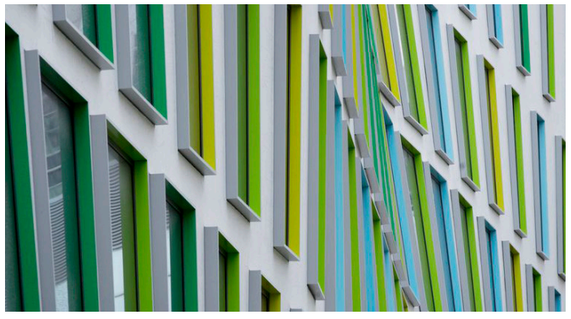

3 **MILLER ST ELEVATION - ZONE 2**

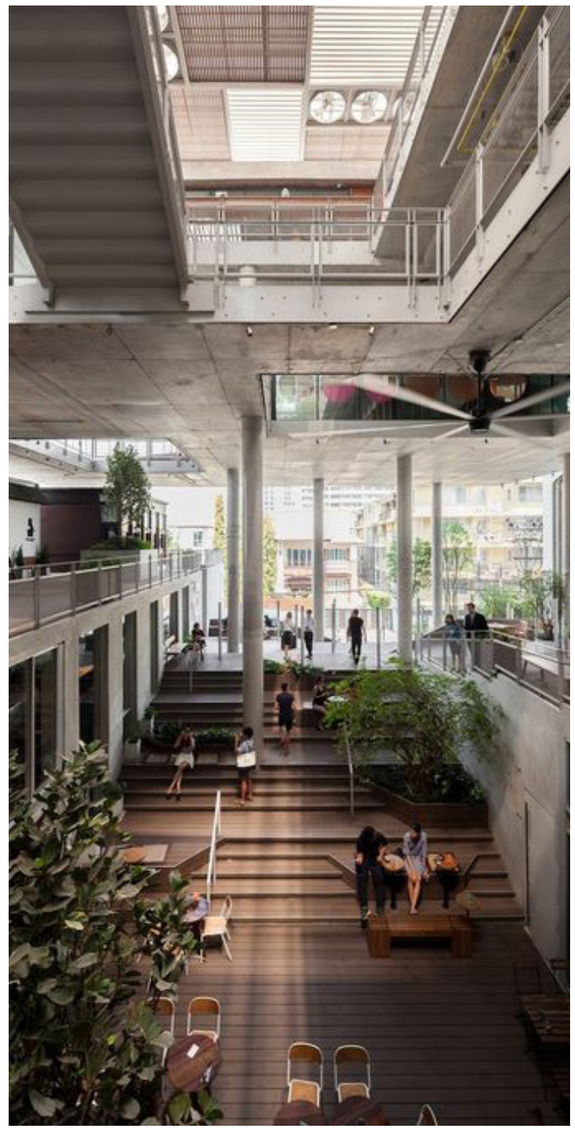
5. `Articulated brick facade within the 12m LEP height plane to form a consistent streetscape matching the height, bulk and materiality of the neighbouring 3 storey unit buildings on Miller Street

# MATERIALITY AND FORM

The materiality of the buildings draws from the rich heritage of the site and surrounds. The St Mary's Church anchors the southern end of the site with its sandstone materiality, bold semi-circular forms and deep window openings, and sandstone detailing. Adjacent to the North, the Presbytery building presents finer-grain detailing with brick walls and pillars, rendered finishes, window fenestration.





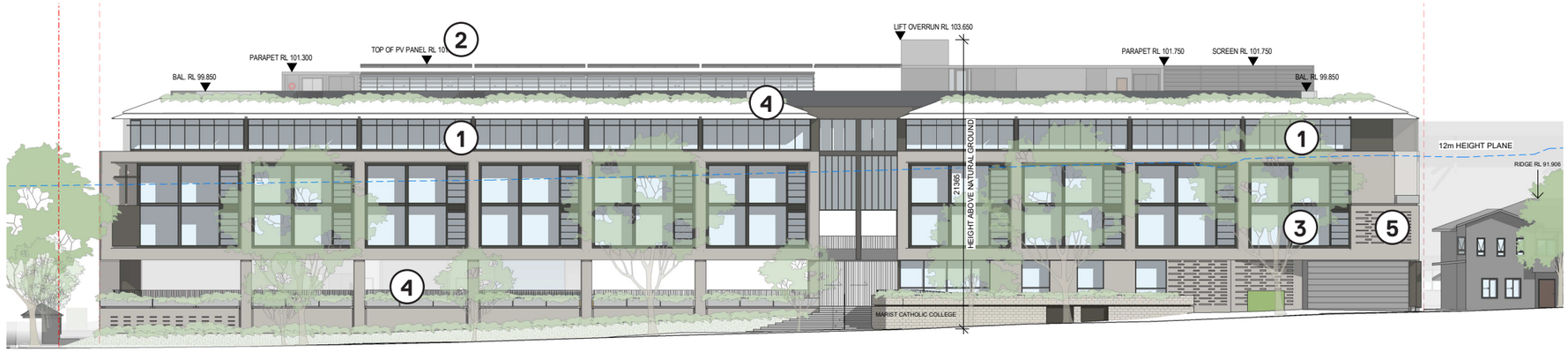


St. Mary's Catholic Church

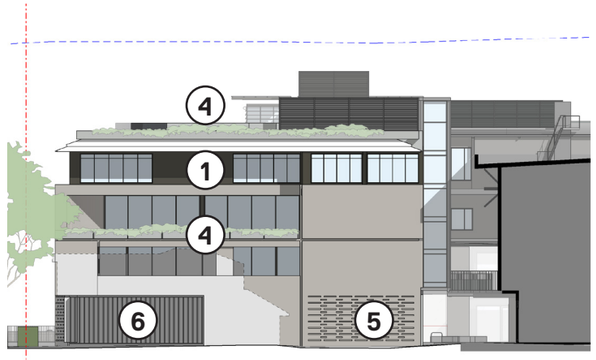
St. Mary's Presbytery

# ARCHITECTURAL FACADE


MILLER/CARLOW BLOCK - EAST




MILLER/CARLOW BLOCK - NORTH




MILLER/CARLOW BLOCK - WEST

**Design Response**

1. Recessed upper floor to reduce scale and height of buildings
2. Solar panels to be installed flat to reduce perceived height
3. Articulation in brick facade to reduce visual bulk
4. Planting to soften facade edges
5. Articulation in brick pattern within the facade to reduce visual bulk
6. Articulation & materiality within the facade to reduce visual bulk & mass
7. Miller Street wing reduction in building height

**BK01**
**BRICKWORK**
Bowral 76
Brick Colour: Simmental Silver

**MF01**
**METAL FINISH**
Colour: Off-White

**MF02**
**METAL FINISH**
Colour: Light Blue Grey

**MF05**
**METAL FINISH**
Colour: Dark Grey

**GF01**
**GLASS FINISH**
Colour: Clear

**CF01**
**CONCRETE FINISH**

View of St. Mary's Church and Piazza on Miller Street


View of Miller Street and Carlow Street Intersection looking South

View of Carlow Street Streetscape looking East

# OUTDOOR RECREATION SPACES

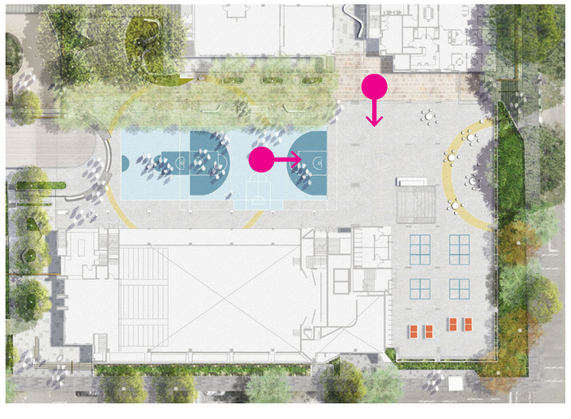
## UNDERCROFT

The undercroft and quadrangle spaces accommodate various modes of active recreational activities and act as an extension of the learning space.

The inclusion of tiered seating achieves an inviting entrance to the learning floors above and activates the undercroft with passive recreation. It also acts as an extension of the library program, and can be used as a gathering space for the school.

The undercroft is designed to be as an extension of the adjacent quadrangle. The large, double height volume of the space maintains the openness of the uncovered playscape.

Undercroft and Quadrangle Landscape Design



# OUTDOOR RECREATION SPACES

## QUADRANGLE

Interface between outdoor covered spaces and the quadrangle has been kept open. The landscape design further reinforces that connection visually and blurring the line between outdoor and covered outdoor by playing on the design of the sports court line markings, and applying as a unifying and playful pattern throughout the school outdoor areas. This responds directly to the idea that the recreational space is multi-layered and multi-functional, one of the spaces which happens to be able to be used as a sports court.

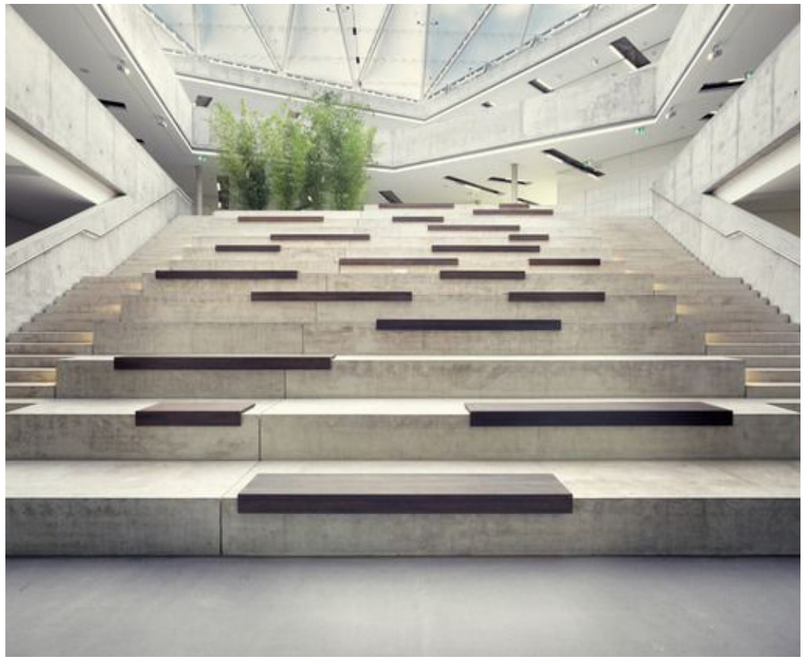

QUADRANGLE - SOUTHERN VIEW

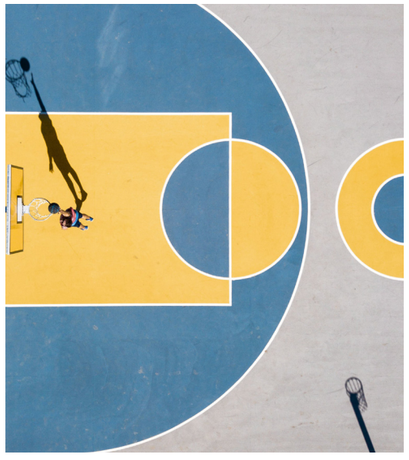
KEY PLAN - GROUND FLOOR

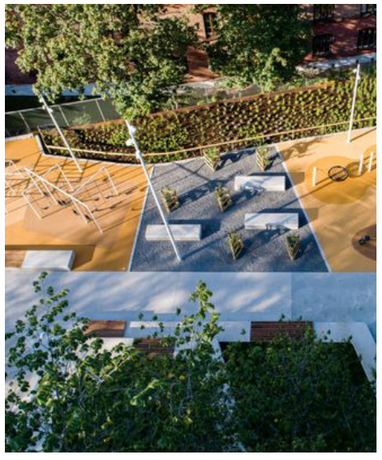

QUADRANGLE - NORTHERN VIEW

# OUTDOOR RECREATION SPACES

PRECEDENT IMAGERY







Undercroft and Quadrangle Landscape Design

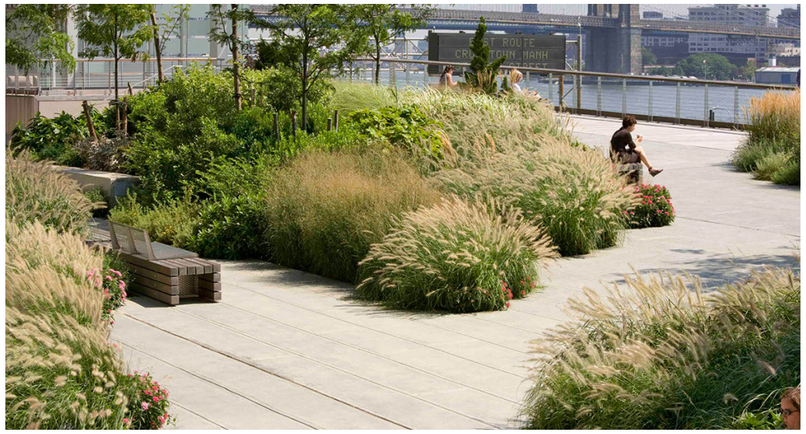
# OUTDOOR RECREATION SPACES

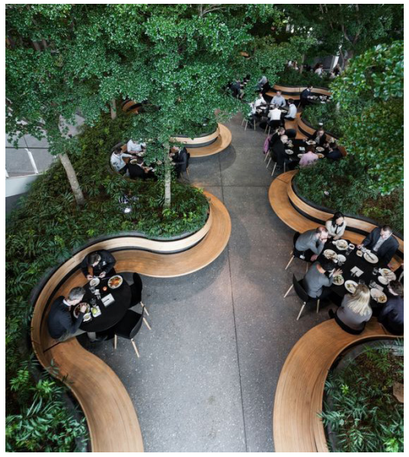
## ROOFTOP COURTYARD

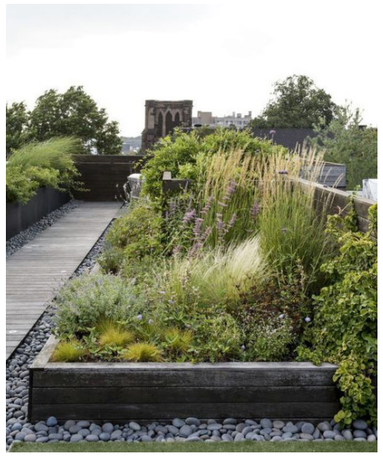
The rooftop courtyard is intended to be a passive recreation space and defined by a series of soft and hard landscaping.

All active recreation activity will be positioned on the ground floor and sports hall/gym. This alleviates the requirement for tall fencing on the roof and therefore will not add to the height of the structure. Soft landscaping with balustrading will be integrated along the perimeter of the rooftop, acting as the fencing device for safety.

Photovoltaic panels are integrated into an arbour structure providing shade to passive recreation area below.







Rooftop Recreation Landscape Design

# PUBLIC RECREATION - PIAZZA

## PIAZZA

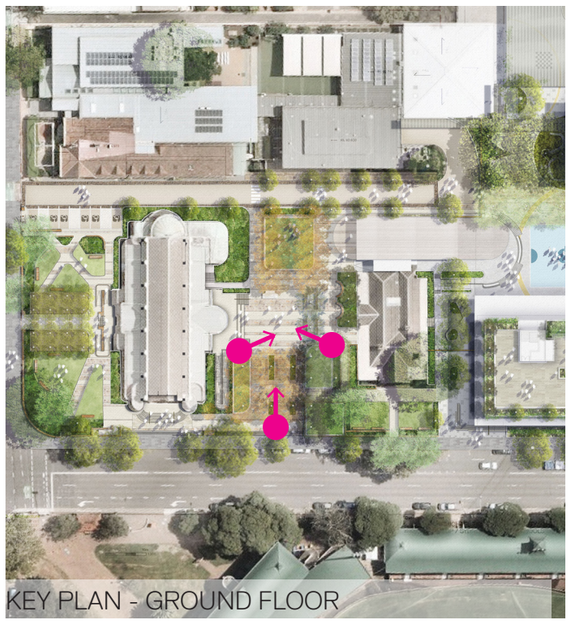
The piazza functions as a main entrance into the new, unified precinct and provides an open recreation space for public and precinct use.

The landscaping has been designed to be sensitive to the surrounding heritage and provide a seamless transition from the church to the presbytery. A variety of programs can be conducted on the grounds while providing passive recreation areas to be used throughout the week.

For further details on the landscape design, please refer to Landscape Design Statement and Documentation.

PIAZZA - CHURCH VIEW

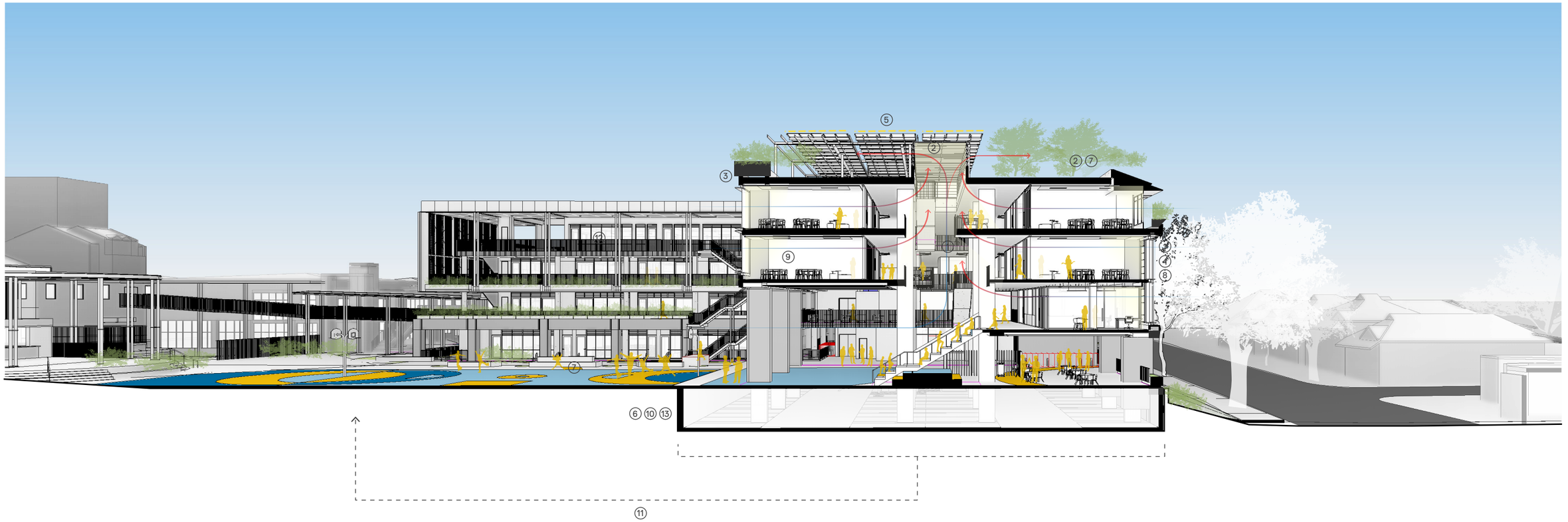
PIAZZA - PARISH CENTRE VIEW



KEY PLAN - GROUND FLOOR

PIAZZA - LOOKING WEST

# ESD STRATEGY




## ENVIRONMENTAL AND SUSTAINABLE DESIGN INITIATIVES:

1. Use of central atrium and operable windows on the façade and roof top skylight to promote passive cross ventilation and passive cooling, and assist in preventing mould and pollutant build-up. Central skylight also used to allow for natural daylight deep into the building floorplate.
2. Roof top landscaping including small trees provide amenity and shading, and in conjunction with light-coloured roof materials aim to mitigate heat island effect.
3. Building fabric including insulation and detailing to meet or exceed NCC part J1 requirements.
4. Use of high performance glazing and blinds to minimise head gain and glare in teaching and learning spaces.
5. Photovoltaics on the roof to offset electricity consumption and reduce peak demand, while providing shade to roof areas for students' amenity.
6. Rainwater/ greywater collection and re-use on site for irrigation and toilet flushing.
7. Use of native or low-water use landscaping and drip irrigation systems with moisture sensor override.
8. Selection of materials with low environmental impact, and use of steel sourced from responsible steel maker. Use of certified PVC for pipes, cables, flooring as far as practicable.
9. Use of low VOC paints and carpets, and engineered wood to have low formaldehyde emission.
10. Implement holistic strategy to provide adequate waste facilities, reduce overall waste generation and encourage recycling.
11. Target diversion from landfill of at least 90% for demolition and construction waste.
12. Incorporate educational productive garden
13. Incorporate active transport facilities for staff and students to encourage sustainable transport through developing a Green Travel Plan for the site.

## OTHER INITIATIVES NOT SHOWN IN THIS SECTION ALSO INCLUDE:

> Use of energy efficient LED lighting throughout and use of zoned switching with occupancy and daylight sensors to minimise lighting energy consumption, and design to best practice illuminance, uniformity and glare levels as per AS1680.1:2006. Design external lighting to control light spill to comply with AS4282.

> Design teaching and learning spaces to have internal noise levels to be no more than 5dB(A) above the lower figure in AS/NZS 2107:2016, and meet reverberation times below the maximum stated in AS/NZS 2107:2016.

> Use of energy efficient HVAC system

> Metering and monitoring of all major uses of energy and water to allow efficient energy and water management

> Carrying out of comprehensive commissioning activities to ensure plant and equipment operating as intended.

> Setting of energy and water consumption environmental targets, and monitoring against those targets twice yearly.

> Use of water efficient appliances, and implementing a closed loop system to capture and reuse fire system testing and maintenance water to minimise water consumption.

> Designing site stormwater system to meet Green Star Pollution reduction targets.

> Use of certified printers to minimise harmful emissions.

> Implementation of best-practice Construction Environmental Management Plan during construction, and ensure Head Contractor holds ISO 14001.

> Comprehensive Operation and Maintenance information to be developed by the Contractor and made available to the school facilities management team

# RESPONSE TO STATE ENVIRONMENTAL PLANNING POLICY (EDUCATIONAL ESTABLISHMENTS AND CHILD CARE FACILITIES) 2017


The State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 highlights key considerations for the design of an educational precinct. The GANSW Design Guide for Schools provides a framework to achieve seven design quality principles for best design practice. The following pages highlight how the proposed masterplan accomplishes these requirements:

### 1. Context, Built Form, Landscape

The Marist Catholic College precinct is designed to be visually integrated within the North Sydney urban context, and enhance the streetscape around the site.

The built form is designed to suit the character of the site's heritage buildings, while the implementation of landscaping strategies work to improve horizontal connection to the greater community, further reinforced by the provision of civic programs.

The massing of the Carlow/Miller buildings establishes the street facade and defines the corner. The material selection and detailing of the architecture is driven by the heritage of the St. Mary's Catholic Church, a significant figure in the precinct.

With the reduced height scheme, overshadowing on site has decreased. As the built form is concentrated to the north of the site, there is little to no impact on adjacent buildings.

Furthermore, recessing the top floor glazing has reduced the visual bulk of top floor along the street. The predominant form being the brick base sits below the 12m LEP height plane, situating it well within its surrounding context.

The introduction of the Piazza space between the Church and the Presbytery enhances the Miller Street streetscape. Considered landscaping design for this space creates a new formal landscaped entry into the precinct and green space for public recreation use.

The removal of the Miller Street vehicular entrance mitigates traffic build up on Miller Street, especially during peak hours. This is replaced by an entry forecourt, further adding to the landscaping along the streetscape.

Vehicular traffic into the school has been moved to Ridge St and Carlow St. and is diverted underground. This minimises traffic impact to the aforementioned streets, as well as removing vehicles on the ground plane, separating it from pedestrian pathways within the site.

### 2. Sustainable, Efficient and Inclusive

The main proposed building maximises the northern frontage and introduces an atrium that penetrates through the learning floors to take advantage of natural lighting to learning spaces.

Operable louvre systems are integrated into the facade as a passive ventilation strategy, minimising the reliance on mechanical cooling within the building. Infrastructure for energy and water capture are incorporated into the design. Photovoltaic panels are placed on the roof and orientated to maximise solar energy harvesting, while a rainwater tank is integrated underground to allow for rainwater capture.

The site is located within walking distance of public transport such as buses, the North Sydney Train Station and the proposed Victoria Cross Metro Station. Entrances to the school precinct is available at all frontages to allow for ease of access from any public transport hubs. To further encourage sustainable travel on site, bike parking and change facilities are provided on site.

The choice of brick as the primary building material contributes to the sustainability and durability of the built form. It also increases the energy efficiency of the building due to its thermal insulating quality.

### 3. Accessible and Inclusive

The introduction of a masterplan axis acts as a main thoroughfare for the precinct and creates a natural wayfinding tool to navigate the site.

For the school campus' specifically, elevated walkways are introduced to improve connectivity between the junior and senior school. These walkways are designed to accommodate students with special needs, in accordance to AS 1428.1. Vertical access such as lifts are placed in a centralised location for ease of use. The number of lifts provided on site are also taken into consideration to minimise travel required to go between floors.

Main corridors and thoroughfares from learning spaces have been designed to exceed minimum requirements to accommodate high volumes of student circulation between classes and during break times. Amenities such as lockers have also been located away from main paths of travel to reduce pedestrian congestion.

Recreation on both the ground plane and roof level are accessible to all students, with ramps integrated where required to ensure the ability to travel to all parts of the school.

Throughout the design process, a series of engagement sessions with educators, students, the parish and the wider community were arranged to ensure an inclusive design brief and vision development, and addressing comments of all parties involved.

# RESPONSE TO STATE ENVIRONMENTAL PLANNING POLICY (EDUCATIONAL ESTABLISHMENTS AND CHILD CARE FACILITIES) 2017

### 4. Health and Safety

Safety is a high priority in the masterplan, so design strategies are implemented to maximise security and minimise risk on site.

The public reception is the first point of contact for all visitors and is located outside of the primary and secondary school secure lines. Visitors are most likely to stay within this space. unless required to go into any of the school campus' to which they will be accompanied by a staff member.

At the main student entry, the student services is located with a staffed reception desk to screen all student entries.

Within the site, all learning and recreation spaces, including toilet facilities, have been located and designed to ensure passive surveillance at all locations and minimise hidden areas.

### 5. Amenity

The masterplan aims to maximise recreation space on site. Outdoor playscapes are available on the ground plane through the quadrangle, COLA and under croft space, providing both covered and uncovered recreation areas. In addition to this, roof space on the proposed development is used for passive recreation.

Student amenity such as learning spaces and recreation space have been designed to maximise daylight, allow equitable access, and achieve design excellence. Openings towards the street are required for natural ventilation. however acoustic engineering strategies are implemented to attenuate traffic noise to learning spaces such as recessed windows and acoustic treatment to learning spaces.

The auditorium has been purposed for both the precinct and wider community use. It is designed as a multifunction space with a lobby, foyer and close proximity to a catering kitchen. It can seat approximately 1500 in an auditorium setting, or be used in a function setting. This space can be used as an extension for church activities such as weddings or funerals, or rented after hours.

### 6. Whole of Life, Flexible and Adaptive

The future focused, pedagogical response of the masterplan establishes adaptive, flexible learning spaces within the school. This is supported by integrated technology within the learning spaces and state-of-the-art equipment for specialty workshops such as the STEM and TAS workshops.

The operability and reduction of walls allow for more flexible spaces which can be used for a variety of functions. Most importantly, it supports the Team Teaching pedagogical model which the school has implemented by allowing adjacent classrooms to connect and expand.

The library has been designed to be a multi-functional space through openable rooms and flexible furnishing. It aims to accommodate a range of group sizes, from individuals, to larger groups for conferences or exhibitions.

A series of informal learning spaces are distributed throughout the school to encourage learning outside of class hours and collaborative activities, and act as an extension of formal learning spaces. These include flexible learning spaces, tiered seating, and a new ideation centre.

The site has opportunity for further vertical expansion in case of future potential student population growth. The floors are efficiently planned around a rigorous structural grid. This provides efficiency in planning and structure and allows for future flexibility and adaptability through the life of the building. Learning areas and other spaces can be modified or rearranged to suit ever-changing educational requirements.

### 7. Aesthetics

The architecture prioritises the visual integration of the development within the urban context, as per North Sydney Council requirements, while maintaining design excellence.

The materiality is inspired by heritage buildings in and around the site such as the St. Mary's Church. The use of brick references to the iconic sandstone used for the Church, while the subtle curved corners commemorates the curvature of the Church's architectural form.

This is juxtaposed by the recessed curved glazing above which creates an overall contemporary aesthetic. The datum for the change in material responds to the scale of the Marist Brothers Residences and subsequent residential buildings along Carlow St.

The brick blades along Miller St visually ground the structure, while referencing to the rhythm of the North Sydney Oval stands across the road.

As the building frontage stretches along the streets, there is no requirement for security fencing along the majority of Miller and Carlow St.

# RESPONSE TO GOVERNMENT ARCHITECT NSW BETTER PLACED DESIGN POLICY


Better Placed highlights key considerations required to fulfil the collective aspiration for the built environment of NSW to achieve design excellence. It ensures good, inclusive design and a beneficial outcome for the community and urban fabric.

The following pages highlight how the proposed masterplan addresses these requirements:

**Objective 1 - Better Fit**
**Contextual, local and of its place**

The surrounding urban fabric informs the building's scale and architectural language. The existing character of the site is retained through the use of brick with curved detail and reference to existing architectural forms of the St. Mary's Catholic Church.

The proposal contributes to communal aspirations through the introduction of the Piazza on Miller St. This is in line with the North Sydney Civic Precinct Planning's objectives of establishing a civic domain within education precincts.

Throughout the design process, a series of engagement sessions were held to raise awareness of the development and allow local community input.

**Objective 2 - Better Performance**
**Sustainable, adaptable and durable**

Sustainability is an integral part of the building design and construction strategy for the masterplan. A comprehensive ESD strategy has been implemented to achieve a 4-star Green Star rating for the development.

The Carlow St building is orientated to maximise natural daylight on the northern edge of the site. Glazing on the northern and eastern orientation is recessed and framed to minimise heat loads into the learning spaces. Integrated operable louvres allow for passive ventilation and cooling throughout the building.

The choice of brick as the primary building material contributes to the overall sustainability of the construction, improves building performance due to its thermal insulating qualities and increases the durability of the facade.

Energy and water capture strategies are implemented in the building design such as photovoltaic panels on the roof and rainwater collection in the basement.

To reduce the environmental impacts of the development, considered construction methods are determined such as the diversion of landfill within the site and implementation of a best practice Construction Environmental Management Plan.

**Objective 3 - Better for Community**
**Inclusive, connected and diverse**

The carpark between St. Mary's Church and St. Mary's Presbytery will be removed to allow for the creation of a public landscaped piazza on Miller Street for community use. This is activated through landscape design to be a front door for the precinct or meeting place for the local community. The landscaping strategy is open and inclusive. Robust finishes specified for the piazza commensurate with its core nature. The piazza has been designed to be formal yet flexible and adaptable, allowing for a range of community functions such as markets to operate.

Additionally, programs such as the auditorium and library are available for public use after hours.

The site is located near public transport and entrances to the public domain are highly visible and accessible from the street. To further encourage sustainable travel methods, bike parking will be available on site.

The masterplan axis acts as the primary thoroughfare on the site, with elevated walkways providing a strong, secured connection between the junior and senior school. These pathways have been designed with consideration towards equitable access and inclusivity.

**Objective 4 - Better for People**
**Safe, comfortable and liveable**

The piazza acts as a public entrance for visitors into the school precinct, positioned in a centralised location on site. The public reception is located externally to the schools' secure lines, where visitors must go to before being able to enter the campus.

The centrality of the public domain allows for passive surveillance, with the openness of the landscape eliminating any hidden corners. The masterplan axis creates a strong link between all points of the site and act as a wayfinding tool to navigate the site. All entry points to the school are near staffed areas, therefore everyone entering and exiting the site can be monitored.

The buildings are designed to maximise natural light and wind, and all learning spaces have views to the outdoors. Within the landscape, trees are placed near seating areas to provide shading and increase thermal comfort.

# RESPONSE TO GOVERNMENT ARCHITECT NSW BETTER PLACED DESIGN POLICY

**Objective 5 - Better Working**
**Functional, efficient and fit for purpose**

Flexibility of the learning space is crucial to adapt to the changing educational landscape and fit the future-focused Marist pedagogical framework.

The internal program is designed with the ability to contract and expand for multiple uses and functions through the operability of walls.

Informal learning spaces are distributed throughout the plan to encourage spontaneous and collaborative activity.

The floors follow an efficient structural grid, allowing for modifications in spaces or vertical expansion to meet any changes in the building lifespan.

**Objective 6 - Better Value**
**Creating and adding value**

The premise of the masterplan is to accommodate projected student population growth on site, justifying the cost of the development. In addition to this, the precinct unlocks opportunities to enhance the streetscape and contribute to the wider community through the creation of a new public domain and offering of civic programs such as the auditorium.

The development of a sustainable and durable design is priority, ensuring a lower-maintenance and higher-performance building. This is achieved through considered facade design and investment in sustainable strategies such as energy and water capture.

**Objective 7 - Better look and feel**
**Engaging, inviting and attractive**

The overall masterplan has been holistically considered to be acknowledge the surrounding urban context and address a need for civic landscape in the district.

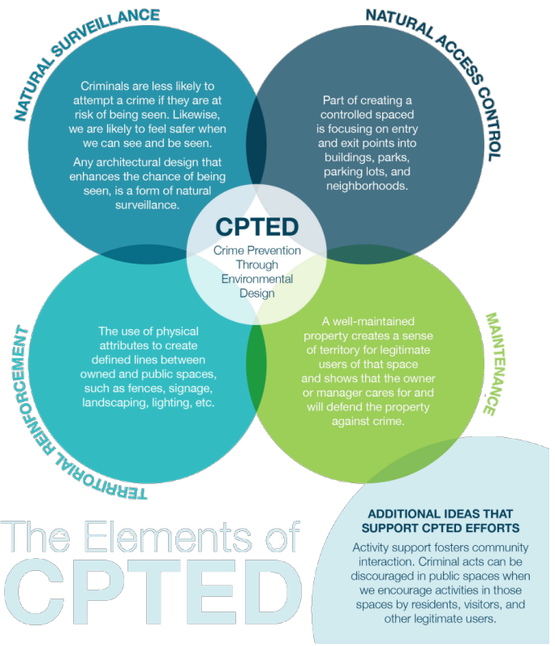
The choice of brick addresses the heritage of the church, juxtaposed with the use of modern building materials such as concrete and metal cladding to create an overall contemporary design language.

Variation in facade articulation creates a visually stimulating and interesting design while continuing to interact with the urban fabric. Deliberate undulations in the form create visual cues to entry points, acting as a wayfinding device for the streetscape.

The considered detail in the apertures on the facade add fine-grained layering and intricacy to the design.

The landscape strategy integrates a seamless transition from the street into the Piazza space to create an inviting and social environment for passive recreation and community use.

# CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN STRATEGIES




Crime Prevention Through Environmental Design (CPTED) Principles provide a framework to advocate for design that supports a safe environment and discourages criminal activity.

The following pages highlight how the design addresses the four key CPTED principles:

### Principle 1 - Natural Surveillance

Architectural design for schools requires prioritisation of child safety and encouragement of good behaviour. Passive surveillance is incorporated and considered in the design and spatial planning process.

All learning spaces have glazed partitions, or no walls at all, which maintain high levels of visibility into and out of the classrooms. The atrium allows for vertical visual continuity between floors to maintain natural sight lines.

Strategic spatial planning mitigates any areas hidden from surveillance. All thoroughfares are in highly visible locations. Specifically, all bathrooms are located in a centralised location for easy surveillance. Recreation areas are designed to be highly visible, where the plan allows for clear lines of sight and hidden corners are restricted through landscape design.

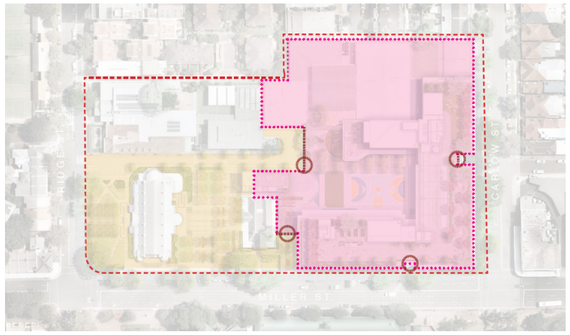
The campus has been designed to be naturally well lit. Otherwise, all areas will be lit with artificial lighting when required to ensure high visibility.

### Principle 2 - Natural Access Control

A strategic approach in the masterplan has been taken to control access within the school campus'.

Visitor entry will occur primarily through the public reception which is position outside of the schools' security lines. This allows the screening of all entrants prior to entry into the school.

All student entries from Carlow and Miller Street are located near staffed areas such as the student services and are continuously monitored. These access points will be controlled throughout the day to manage all entries and exits.



Landscape Security Line Diagram

### Principle 3 - Territorial Reinforcement

The Marist Catholic College Precinct is a holistic entity which takes ownership of the whole site.

The public reception and student services have been designed to ensure security to all staff members in case of an emergency. Clear sightlines from the back of house staff to the reception desk have been considered in the spatial layout. Other safety measures can be integrated such as emergency call buttons.

A sign in system will be implemented for external parties in the public reception, and for students in student services to track any incoming and outgoing visitors through the school.

A clear security line strategy is implemented to establish public and private domain in the form of fencing, built form and landscaping.

Fostering positive social interaction and activity by the community and other users in the precinct can also discourage criminal activity.

### Principle 4 - Maintenance

Maintenance of the building and landscape is integral to the prevention of criminal activity. Well-maintained properties discourage vandalism or other damaging activity as there is no indication of such behaviour available on the precinct.

# MARIST COLLEGE

# CONSTRUCTION STAGING

## 3.0

# CONSTRUCTION STAGING

For detail construction staging refer to separate document Preliminary Straging Plan.

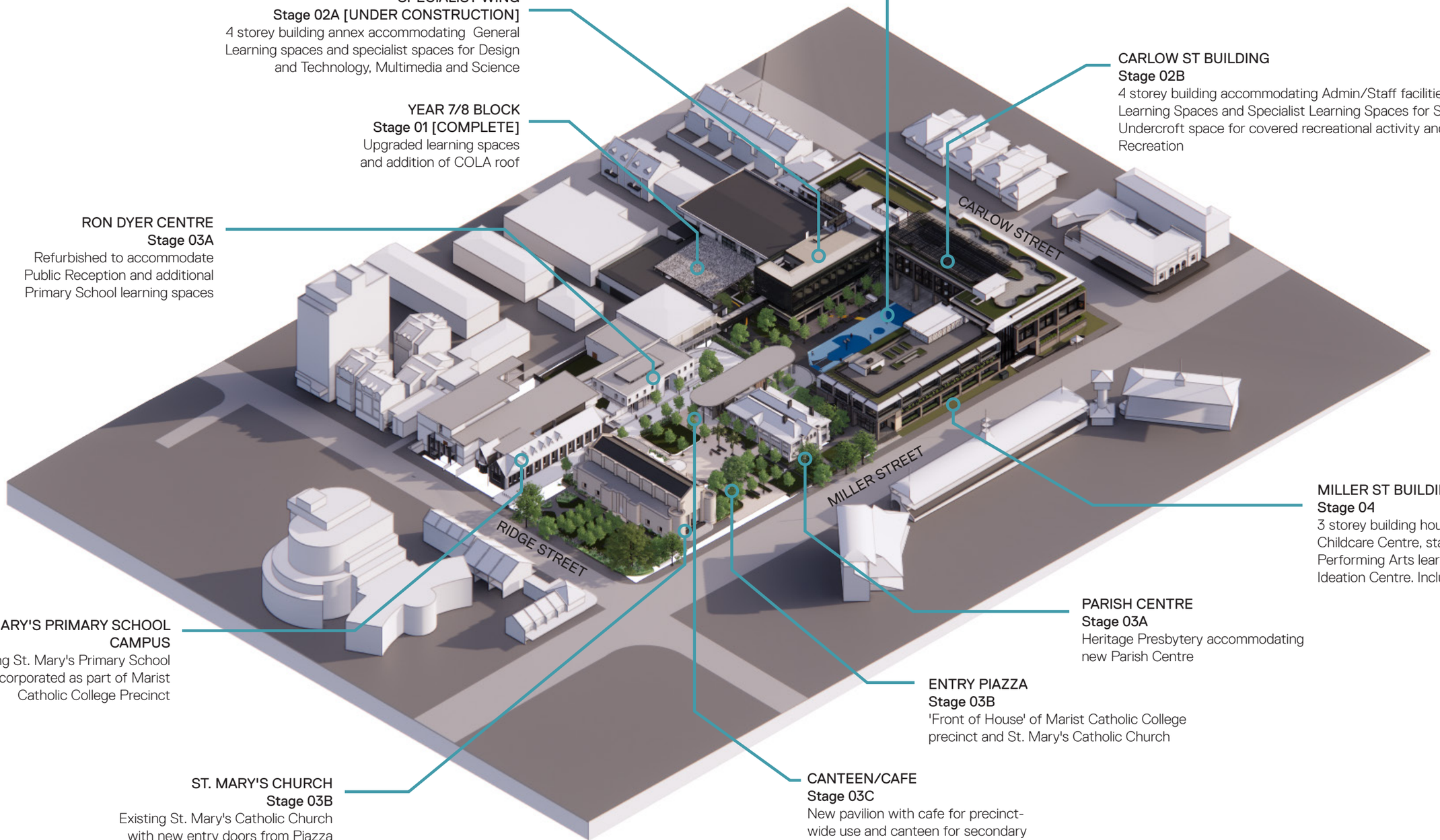
**QUADRANGLE**
**Stage 05**
Recreation space with multi-purpose courts and landscaping

**SPECIALIST WING**
**Stage 02A [UNDER CONSTRUCTION]**
4 storey building annex accommodating General Learning spaces and specialist spaces for Design and Technology, Multimedia and Science

**CARLOW ST BUILDING**
**Stage 02B**
4 storey building accommodating Admin/Staff facilities, Library, General Learning Spaces and Specialist Learning Spaces for Science. Includes Undercroft space for covered recreational activity and Open Roof Recreation

**YEAR 7/8 BLOCK**
**Stage 01 [COMPLETE]**
Upgraded learning spaces and addition of COLA roof

**RON DYER CENTRE**
**Stage 03A**
Refurbished to accommodate Public Reception and additional Primary School learning spaces




**MILLER ST BUILDING**
**Stage 04**
3 storey building housing new Auditorium, Childcare Centre, state-of-the-art Performing Arts learning spaces and Ideation Centre. Includes Roof Recreation.

**ST. MARY'S PRIMARY SCHOOL CAMPUS**
Existing St. Mary's Primary School to be incorporated as part of Marist Catholic College Precinct

**PARISH CENTRE**
**Stage 03A**
Heritage Presbytery accommodating new Parish Centre

**ENTRY PIAZZA**
**Stage 03B**
'Front of House' of Marist Catholic College precinct and St. Mary's Catholic Church

**ST. MARY'S CHURCH**
**Stage 03B**
Existing St. Mary's Catholic Church with new entry doors from Piazza and redesigned front garden

**CANTEEN/CAFE**
**Stage 03C**
New pavilion with cafe for precinct-wide use and canteen for secondary school use

# MARIST COLLEGE

# PEDAGOGICAL RESPONSE

# 4.0

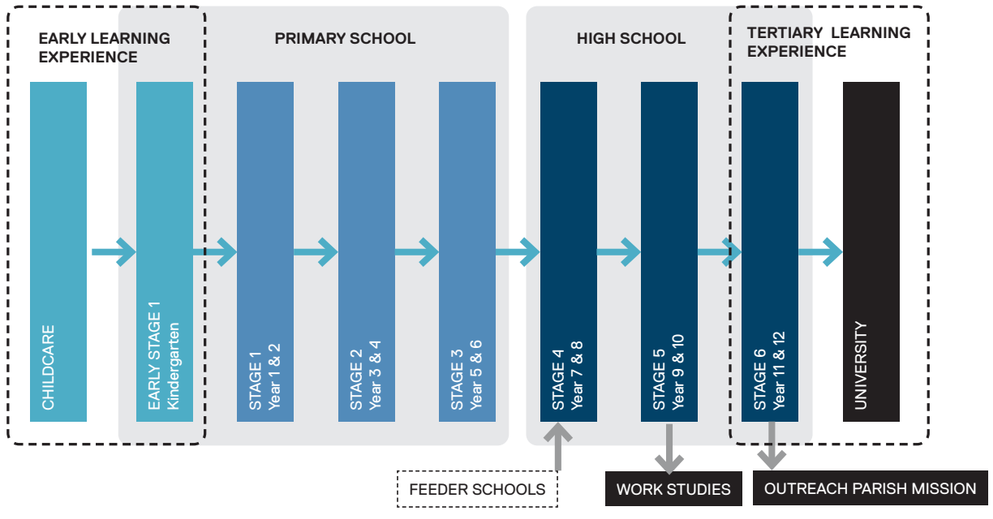
# EDUCATION STRATEGY SUMMARY

The Education Strategy for Marist Catholic College North Shore was developed to respond to the challenges of transition to a co-educational model and the increased capacity for the school as a result of new building works. The strategy defines projected numbers of students, and the teaching and learning model of the future.

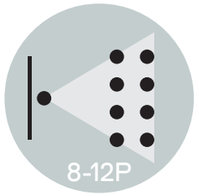
As previously noted, a Marist education is underpinned by Catholic values and the principles of the Marist Charisms, while also meeting the challenges of contemporary society and the future workforce. The practicalities of educational requirements (skills, theory and technology) are housed within the context of structured spirituality and values.

The wellbeing and development of the whole student as they transition through K-6 and into the secondary college (Year 7-12) and furthermore into tertiary studies or the workforce has been taken into account in the development of the education strategy, masterplan and now functional design development. (Refer to K-12 Marist education paradigm below).

The teaching and learning model in the future school adapts contemporary learning modes with a focus on flexibility and active engagement. The learning modes are facilitated in a strategic team teaching model or double classroom model that pedagogically and spatially represents the teaching/learning flexibility in the future school environment.

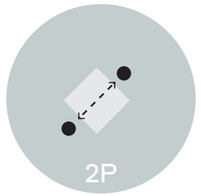



## CONTEMPORARY LEARNING MODES



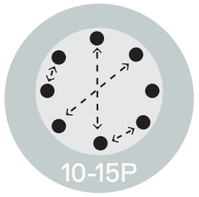

DELIVERING

Knowledge dispersed from one source. For example, activities like class presentations and lectures.




APPLYING

One-on-one learning activities, referencing traditional apprentice models or focused tutoring.

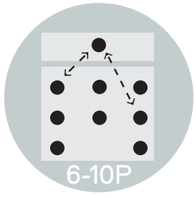



COMMUNICATING

One form of Active Learning, emphasising quick information exchange in groups of varying sizes


CREATING

Multiple disciplines and approaches coming together in this learning style. Incubation or workshop model delivery for activities.

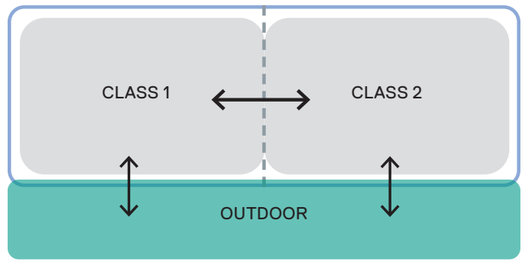



DECISION MAKING

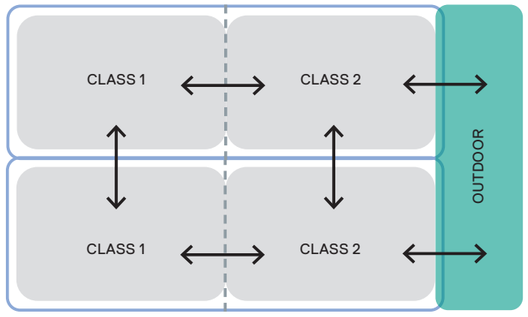
Formal, and controlled team environment with hierarchical knowledge dispersion delivery. Ideal for activities with teams engaged in different tasks, at different stages concurrently.

## TEAM TEACHING MODEL

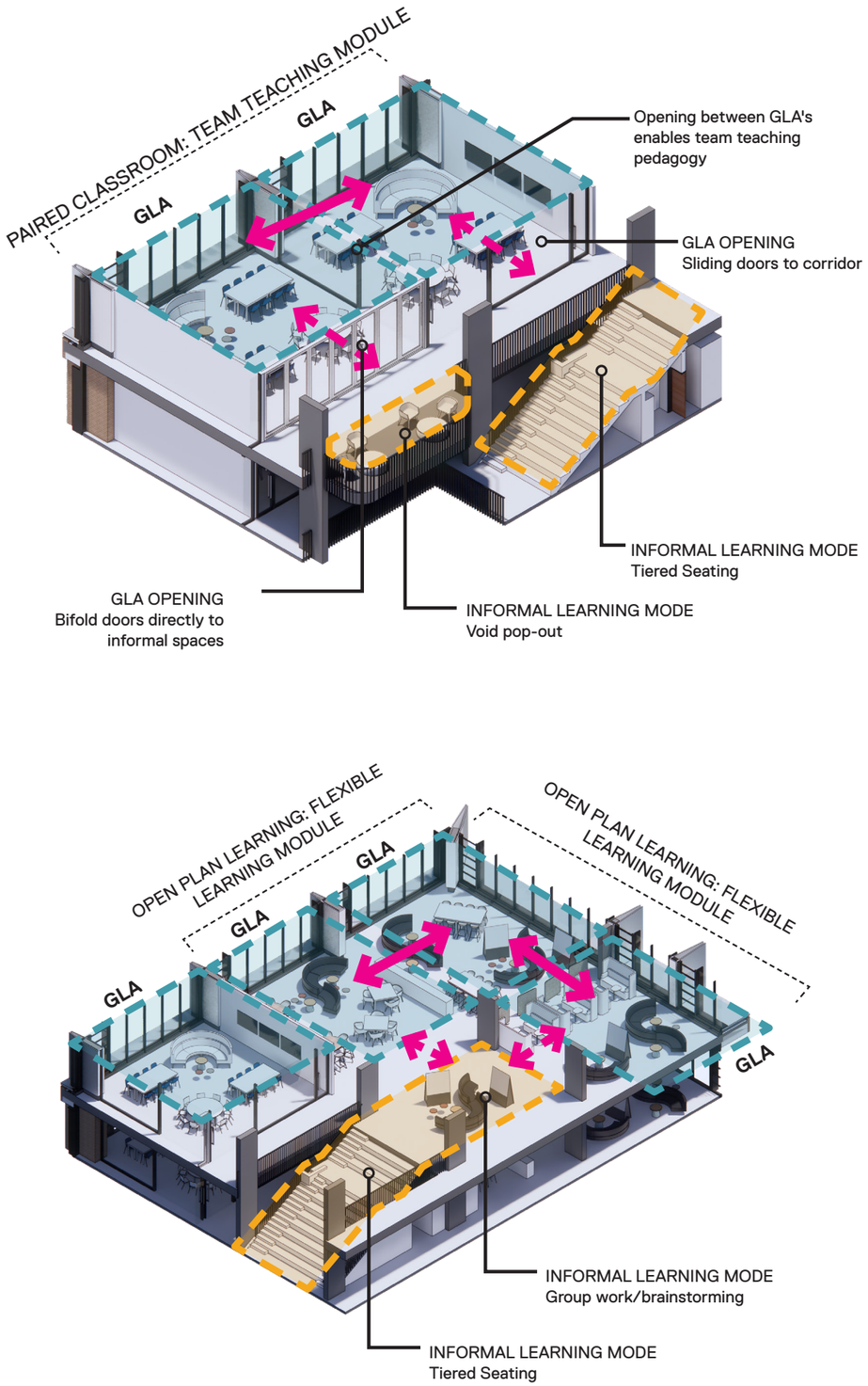
2 class groups = 1 space. Emphasising flexibility for different earning modes and class configurations. Both students and teachers are able to utilise the diversity of occupants and expanded space to full learning potential. Spatially, the team teaching/double classroom model is represented through classroom space that can be divided by moveable walls/ partitions and furbished with moveable settings.




The double classroom space allow multi-configurations. It can also be grouped and built upon in blocks, incorporate outdoor spaces to allow maximum flexibility.

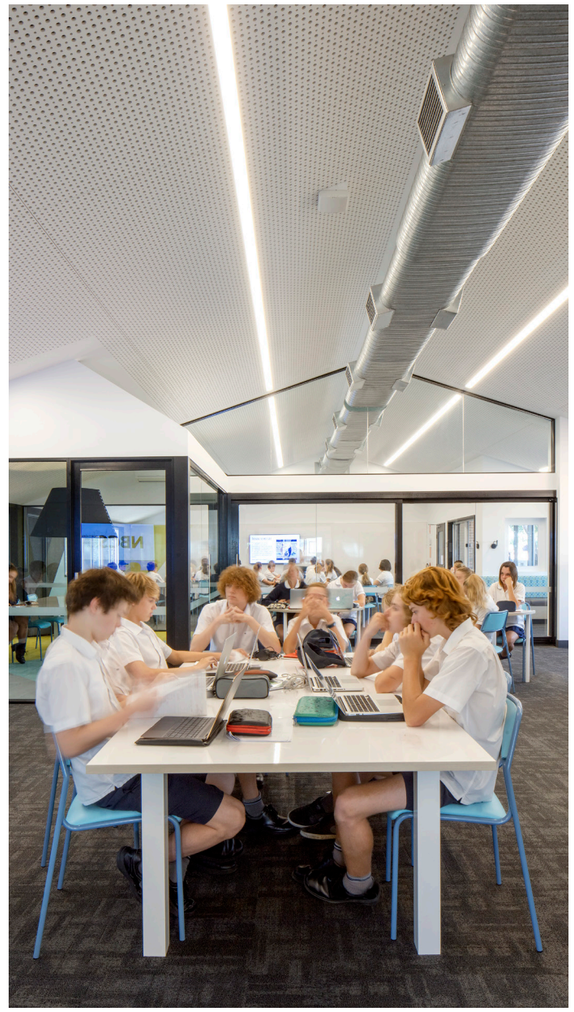


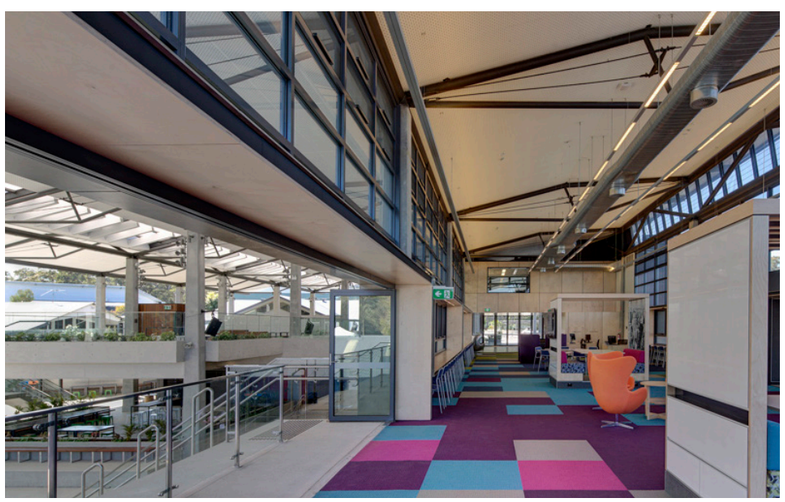
# GENERAL LEARNING AREA MODULES







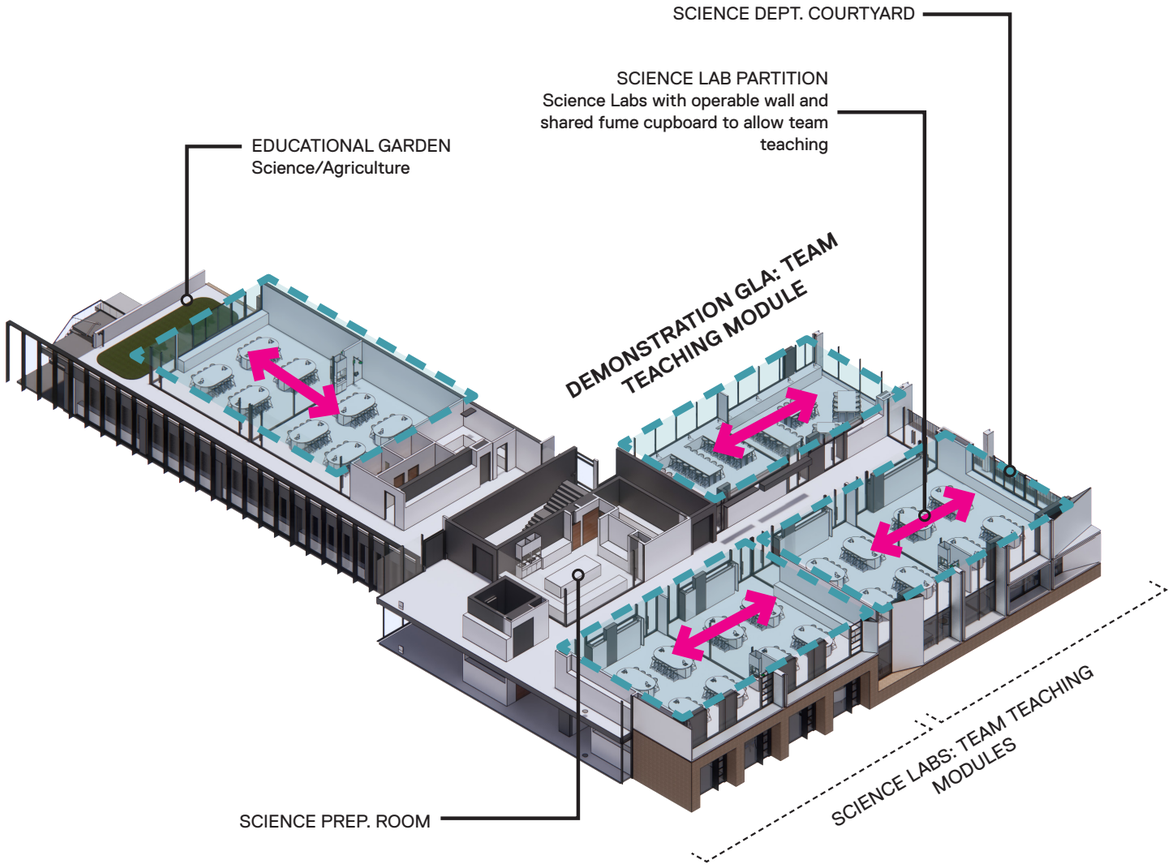


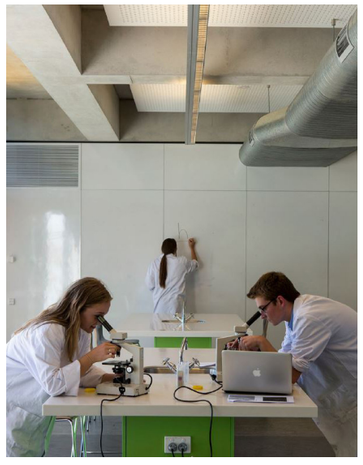


# GENERAL LEARNING AREA MODULES

# GENERAL LEARNING AREA MODULES

# SCIENCE DEPARTMENT MODULE



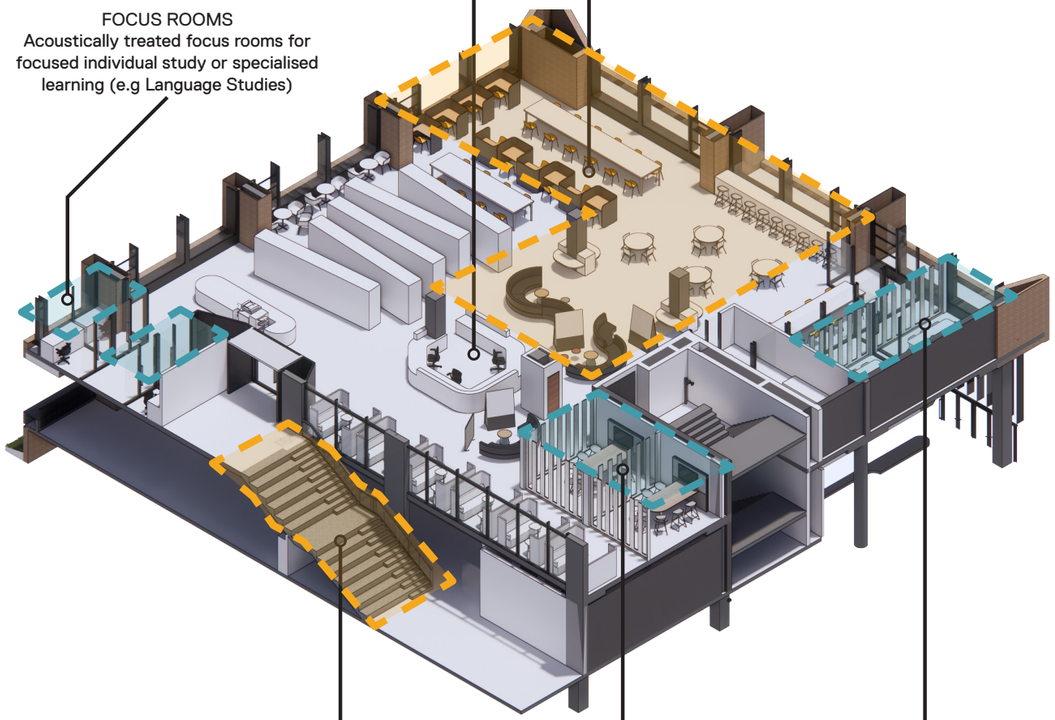



# LIBRARY (LEARNING RESOURCE CENTRE) MODULE

LIBRARY RECEPTION DESK
Reception Desk with Librarian and I.T Assistance in centralised location for ease of access for students and staff

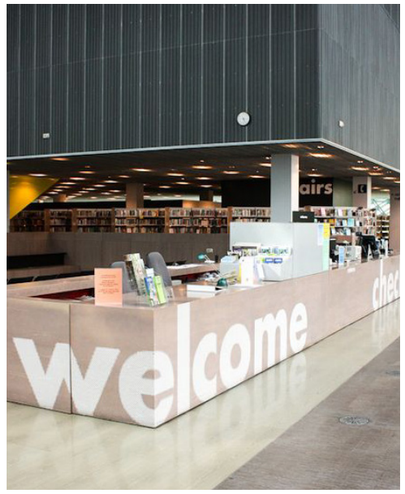
VARIOUS WORKING MODES
To cater for different ways of learning and collaboration, the library will have different learning modes such as individual study, group work, focused collaboration, etc.

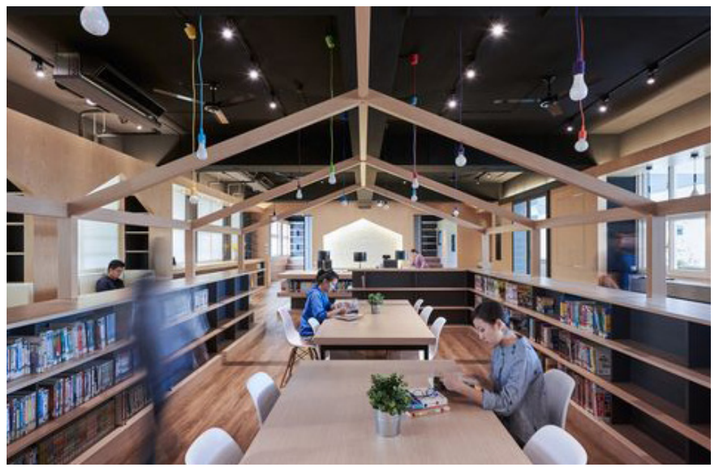
FOCUS ROOMS
Acoustically treated focus rooms for focused individual study or specialised learning (e.g Language Studies)



MEETING ROOM WITH A/V
Meeting rooms with Audio/Visual connection to allow focused group meetings

OUTDOOR CONNECTION
Library adjacency to tiered seating and covered learning area to extend program to the greater masterplan



# INTERNAL VIEWS - COVERED OUTDOOR LEARNING AREA & ATRIUM

# MARIST COLLEGE

# CHILD CARE FACILITY

# 5.0

# CHILD CARE CENTRE

The following pages present the design for the proposed child care facilities as part of the precinct. The fitout design has considered best practice principles from the Child Care Planning Guidelines as well as the pedagogical approach of the Sydney Catholic Early Childhood Services.

## MILLER STREET AND CAR PARK ENTRY

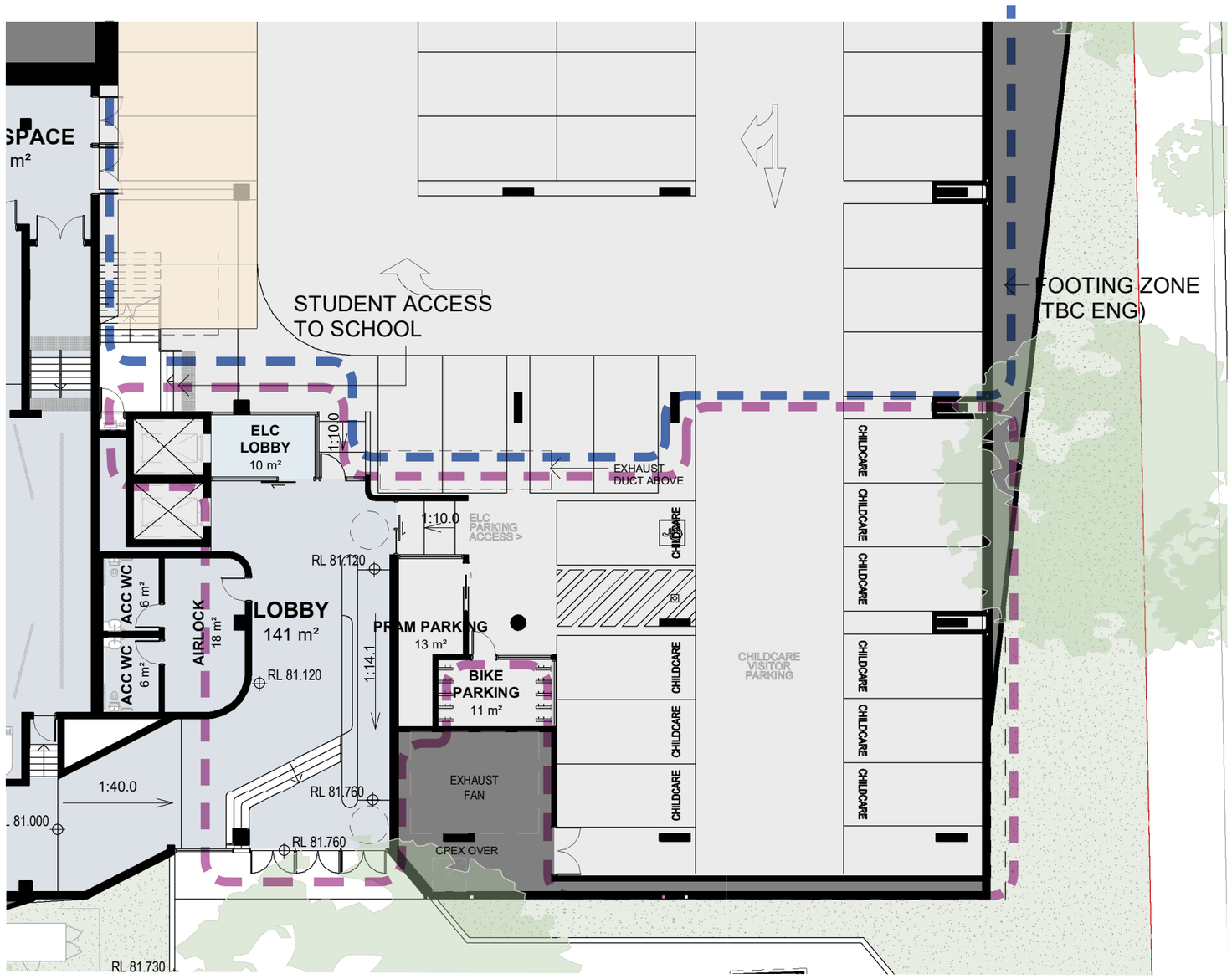
The front Childcare entry has been established with the separated Childcare lobby and lift within the Miller Street lobby.

Direct access is available either from public transport along Miller Street, or the dedicated Childcare drop-off/pick-up and car park adjacent.

This separated lobby provides an additional level of safety and security for young children as they access or exit the childcare lobby.

There is little overlap of pedestrian movement between the childcare facility and the rest of the school - therefore pickup and drop-off for the Childcare facility can occur independently from that of the rest of the school.

A dedicated pram-storage room is located next to the chlidcare parking for parents who require it - access will be secure.



# LEVEL 1 FLOOR PLAN - MAIN CHILD CARE FLOOR

## ENVIRONMENTAL DESIGN

The childcare design locates the outdoor play areas to the western half of the floor plan where it benefits from long hours of daylight and naturally ventilated. The location within the floor plate provides the required shading to outdoor spaces through a verandah arrangement. 38% of the outdoor space is open directly to the sky, the remaining outdoor space covered by the floor above. The outdoor play area is a large verandah space designed in accordance with the NSW childcare planning guidelines, as demonstrated by the checklist below:

| Criteria for Verandah as outdoor space | Proposed | Compliance |
|---|---|---|
| Be open on at least one third of its perimeter | Perimeter of Verandah = 140.6m<br>Length of opening = 47m<br>Opening = 33.4% | Yes |
| Have a clear height of 2.1m | Clear height provided = 3m | Yes |
| Have a wall height of less than 1.4 metres where a wall with an opening forms the perimeter | Balustrade height provided = 1.2m | Yes |
| Have adequate flooring and roofing | Concrete structural floors below and above, with variation of warm floor and ceiling finishes, and lining to columns. | Yes |
| Be designed to provide adequate protection from the elements | Verandah protected by the building floor above and walls to side and rear.<br>Flooring below will be raised over structural concrete floor with integrated concealed drainage. | Yes |

This provides the children with additional experiential environmental learning and opportunity to have both covered and uncovered outdoor play.

The consolidation of outdoor areas also maximises opportunities for more distant sightlines, facilitates surveillance, and optimises air flow throughout.

The eastern part of the floor plate accommodates the enclosed dedicated play spaces which open directly to the outdoor play area and look out to Miller Street landscaping.

Play areas located on the eastern (Miller Street) edge, where they benefit from views of the planted edge within the building, and the Miller Street tree canopy. The eastern facade has fixed glazing with overhead plenums which will acoustically attenuate natural air flow to the play areas.

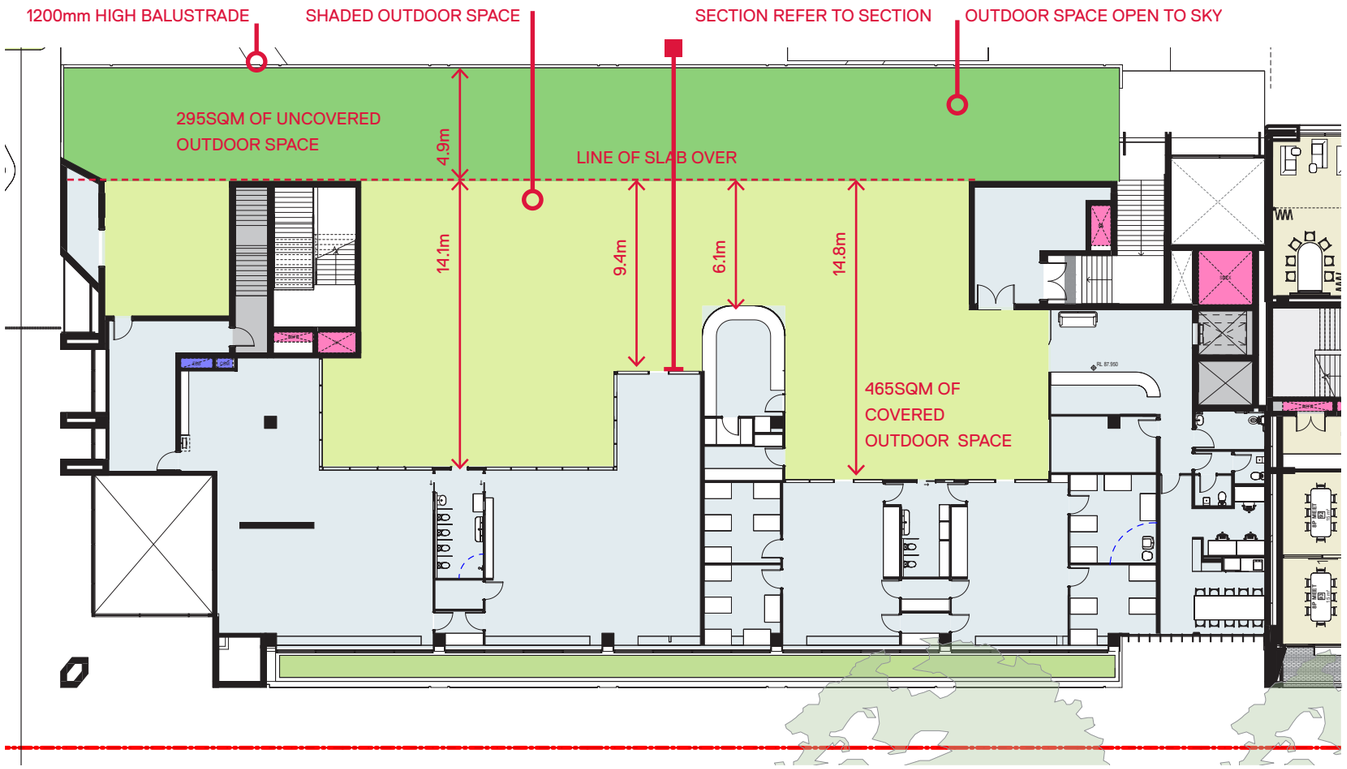
## PEDAGOGICAL RESPONSE

The playspace age groups have been arranged in a chronological order to create a spatial progression for the children within the centre. The babies are located closest to the reception, followed by the toddlers then the pre-schoolers, allowing the children to follow their journey during their time in child care.

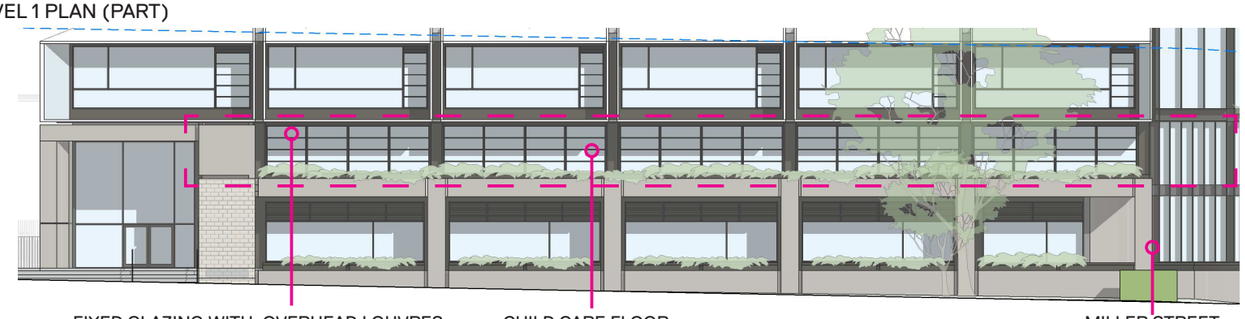
The play areas have been paired to enable sharing of toilet and ancillary facilities, and also enable an easier transition as the children progress through the various rooms. The kitchen is centrally located to enable ease of food distribution, and to create opportunities for learning through observation.

Reception, staff and director/meeting room are assembled around the lobby.

The arrangement of rooms and areas follow best-practice from the Childcare guidelines, and the operator's expertise on Childcare centres.




LEVEL 1 PLAN (PART)




MILLER STREET ELEVATION (PART)

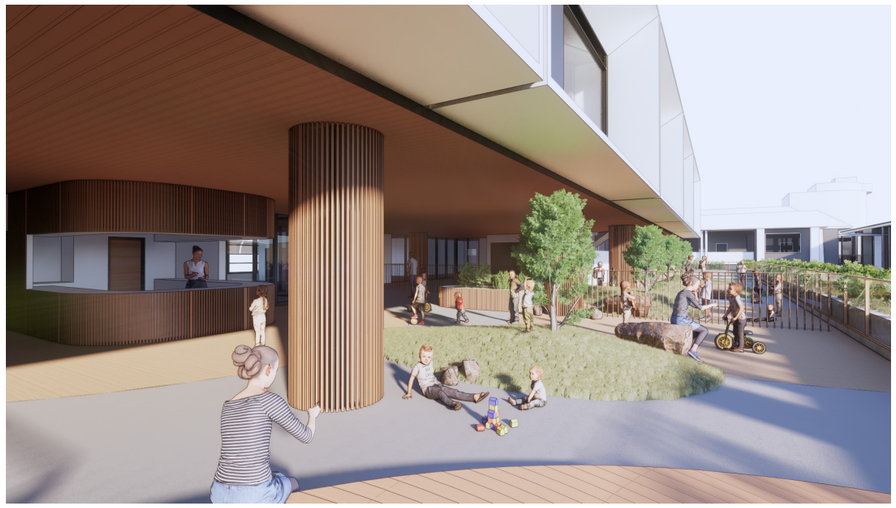
# LEVEL 1 FLOOR PLAN - MAIN CHILD CARE FLOOR

## SOLAR ACCESS - NATURAL DAYLIGHT

The childcare centre is located within the Miller Street building on Level 1 - however it has ample access to daylight available throughout the day.

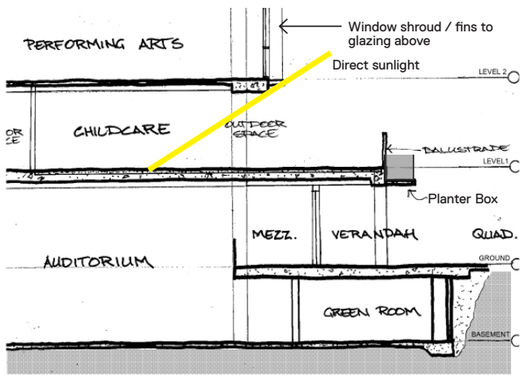
The outdoor play area is consolidated on the western side of the childcare centre to benefit from maximum access to direct uninterrupted hours of sunlight between 11am and 3pm inclusive in mid-winter. With the outdoor play areas achieving the required 30% solar access of the ground area during hours allocated to active outdoor play.

The glazed Eastern facade allows the centre to receive ambient natural daylight throughout the day, providing natural light into the playspaces.

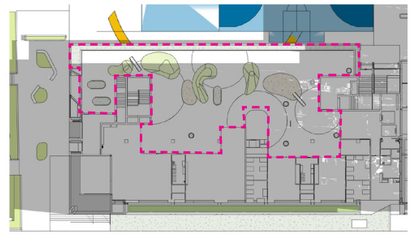


3D PERSPECTIVE - OUTDOOR PLAY
VIEW FROM NORTH

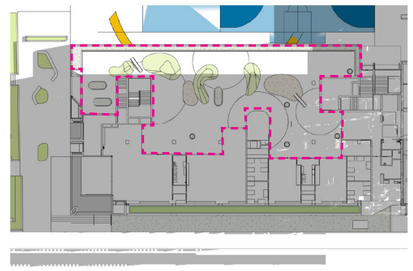
3D PERSPECTIVE - OUTDOOR PLAY
VIEW FROM WEST



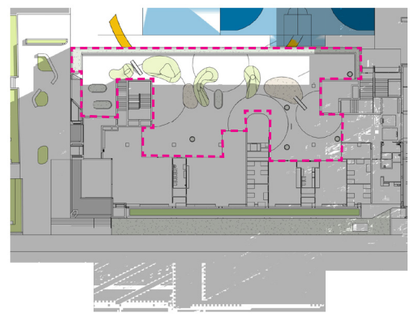

WESTERN FACADE SECTION



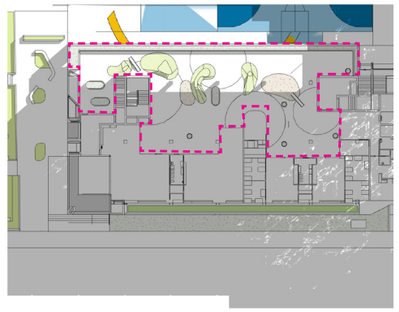
1 **CHILDCARE SOLAR WINTER - 1100**
SOLAR ACCESS 29%



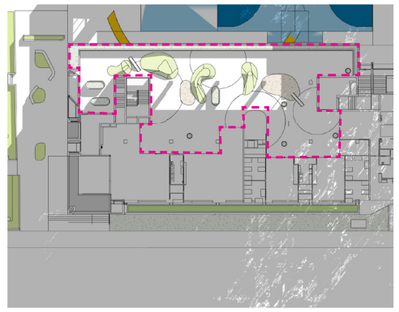
2 **CHILDCARE SOLAR WINTER - 1200**
SOLAR ACCESS 30%



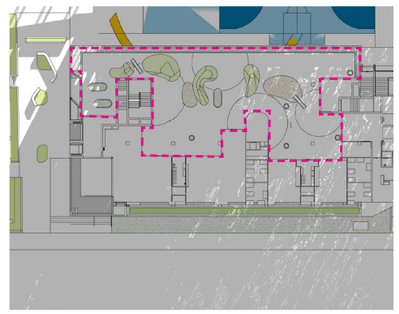
3 **CHILDCARE SOLAR WINTER - 1300**
SOLAR ACCESS 38%



4 **CHILDCARE SOLAR WINTER - 1400**
SOLAR ACCESS 44%



8 **CHILDCARE SOLAR WINTER - 1500**
SOLAR ACCESS 49%



6 **CHILDCARE SOLAR WINTER - 1600**
SOLAR ACCESS 0%

Childcare outdoor play area

# RESPONSE TO STATE ENVIRONMENTAL PLANNING POLICY (EDUCATIONAL ESTABLISHMENTS AND CHILD CARE FACILITIES) 2017


The State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 highlights key considerations and requirements for the design of a child care precinct. The Child Care Planning Guidelines provides a framework to achieve seven design quality principles for best design practice. The following pages highlight how the proposed masterplan accomplishes these requirements:

### Principle 1 - Context

Well-designed child care facilities respond to and enhance the qualities and identity of the area including adjacent sites, streetscapes and neighbourhood.

The childcare is located within the Marist Catholic College precinct to form part of a consolidated schooling experience. This allows families to enrol all children at all stages into one precinct.

The front entry is strategically located on Miller St. as major bus stops are located on this street. It also has proximity to the North Sydney Train Station and future Victoria Cross Metro Station. Adjacent to this is the North Sydney Oval.

### Principle 2 - Built Form

The child care precinct sits within the Miller St. building,

The facade articulation of the Miller St. building is sensitive to the surrounding infrastructure such as the North Sydney Hotel, Presbytery and residential buildings beyond. The material selection and detailing of the architecture is driven by the heritage of the St. Mary's Catholic Church, a significant figure in the precinct.

Glazing on the eastern and western facade maximises daylight into the child care, with the outdoor play area consolidated into a large verandah on the western facade.

### Principle 3 - Adaptive Learning Spaces

Good facility design delivers high quality learning spaces and achieves a high level of amenity for children and staff, resulting in buildings and associated infrastructure that are fit-for-purpose, enjoyable and easy to use.

The childcare facilities have been designed to suit the Sydney Catholic Early Childhood Services pedagogy. The fitout allows for interaction across age groups and creates a sense of journey within the space as the children progress through the rooms. The learning spaces have been designed to allow flexibility in program and settings, and maximises its interaction to the outdoor space.

The outdoor space is located on the western facade to maximise access to sunlight. As it is consolidated, there is opportunity for children to interact through a variety of settings through shared programs and boundaries.

### Principle 4 -Sustainability

The child care design considers sustainable design principles to reduce its reliance on mechanical solutions for lighting, heating and cooling.

The Marist school precinct is targeting 4-Star Green Star rating. To achieve this, a series of strategies are implemented in the design. The precinct has integrated solar panels and a rain water tank for energy and water harvesting. The facade design of the building incorporates louvre and awning systems to allow cross ventilation through the learning floors.

Sustainability principles have also been incorporated into the learning program. Garden beds have been included and located next to the kitchen to educate the children on the origins of food.

### Principle 5 -Landscape

The outdoor play is designed to maximise all natural resources available, ensuring interaction with the outdoor environment. The verandah design maximise the sunlight into the outdoor space whilst providing adequate shading for the children and allow views to adjacent environments and the sky above. The outdoor play area is naturally ventilated, and supplemented with mechanical systems if required. The open plan design allows for variety of programs and materiality.

### Principle 6 -Amenity

Achieving good amenity contributes to positive learning environments and the well-being of students and staff.

The facilities have been designed to allow equal access to amenity from all play spaces and outdoor learning areas. Toilet facilities have been located to have direct access from paired learning spaces and from the adjacent outdoor play space. The walls are low height with glazing above to ensure surveillance. Toilet pans and showers are partitioned to maintain the child's integrity.

Kitchen and laundry facilities have been centralised for ease of service to the whole child care precinct, as well as creating opportunity for education.

The outdoor play space can be configured to suit any program and closed off when required to promote child safety.

### Principle 7 -Safety

Good child care facility design balances safety and security with the need to create a welcoming and accessible environment.

Entry into the space is limited to the entry lobby via the dedicated child care lift or emergency staircase, with staff amenities located nearby for surveillance.

Transparency through glazing or open planning ensures natural surveillance throughout the child care, limiting hidden corners through strategic placement of program.

# RESPONSE TO CHILD CARE PLANNING GUIDELINES

## MATTERS FOR CONSIDERATION

### 3.1 SITE SELECTION

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| C1 | To ensure that appropriate zone considerations are assessed when selecting a site. | The proposed child care facility will be part of the Marist Catholic College precinct. The proposal will contribute to the holistic educational approach of the precinct.<br>It will be located within its own floor, with dedicated access from Miller street lobby and car park pickup/ dropoff. |
| C2 | Objective: To ensure that the site selected for a proposed child care facility is suitable for the use. | Currently, the Jacaranda Cottage Child Care facility exists within the site, establishing the location as suitable for a child care facility.<br>As the proposal is a new build, the floor servicing the child care has been designed to ensure it complies its requirements and is suitable for the proposed use.<br>The childcare centre will have its own dedicated and secure and safe entry within the Miller Street lobby, and will be located next to the dedicated Childcare car park and pickup/dropoff. |
| C3 | Objective: To ensure that sites for child care facilities are appropriately located. | As the child care forms part of the broader Marist Educational precinct, the surrounding program is compatible to the facility. Adjacent to the precinct is the North Sydney Oval, the public Piazza on site, and the St. Mary's Church.<br>It is located near public transport such as bus stops on Miller St, the North Sydney train station and the proposed Victoria Cross Metro Station. |
| C4 | Objective: To ensure that sites for child care facilities do not incur risks from environmental, health or safety hazards. | There are no hazardous sites within proximity of the child care. All building services are centrally located elsewhere on the rooftop of the Miller street building. |

### 3.2 LOCAL CHARACTER, STREETSCAPE AND THE PUBLIC DOMAIN INTERFACE

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|---|---|---|
| C5 | Objective: To ensure that the child care facility is compatible with the local character and surrounding streetscape. | The overall design of the precinct is sensitive to the heritage items on site, scale of the surrounding residential buildings and character of the North Sydney precinct.<br>Carparking is located in the basement and thus does not interrupt the surrounding street- and landscape. |
| C6<br>C7<br>C8 | Objective: To ensure clear delineation between the child care facility and public spaces. | The childcare's location above ground naturally delineates it from the public domain.<br>Entry into the space is dedicated to the child care. |
| C9<br>C10 | Objective: To ensure that front fences and retaining walls respond to and complement the context and character of the area and do not dominate the public domain. | The child care does not require fencing as it is on a dedicated floor above ground. Glazing is provided around. |

# RESPONSE TO CHILD CARE PLANNING GUIDELINES

## MATTERS FOR CONSIDERATION

### 3.3 BUILDING ORIENTATION, ENVELOPE AND DESIGN

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| C11 | Objective: To respond to the streetscape and site, while optimising solar access and opportunities for shade. | Glazing is provided on the eastern facade, facing Miller St. The outdoor play area is on the west in a large outdoor verandah. To mitigate noise and ensure a level of privacy from the major arterial road, the facade is setback and buffered by landscaping. The louvres are acoustically treated to further attenuate noise into the child care centre. Vegetation screening is also provided on the western facade to ensure some level of privacy from the greater school premises. |
| C12 | Objective: To ensure that the scale of the child care facility is compatible with adjoining development and the impact on adjoining buildings is minimised. | The development is sensitive to the scale of the surrounding residential buildings. The design considers the character and materiality of nearby heritage and of the North Sydney council. |
| C13<br>C14 | Objective: To ensure that setbacks from the boundary of a child care facility are consistent with the predominant development within the immediate context. | The development complies with street setbacks required for the site. However, the child care is located above ground and therefore has no direct connection to immediate public context. |
| C15 | Objective: To ensure that the built form, articulation and scale of development relates to its context and buildings are well designed to contribute to an area's character. | The overall architectural language draws from the significant heritage items on site, and inspires the materiality and articulation of the facade, particularly the St. Mary's Catholic Church and the North Sydney Oval.<br>It retains significant vegetation on site and follows advice from an arboricultural consultant. |
| C16 | Objective: To ensure that buildings are designed to create safe environments for all users. | Safety is at the forefront of the design of the child care and the entire educational precinct.<br>Entry into the child care facility is limited to one access point into the lobby and is supervised at all times. |
| C17 | Objective: To ensure that child care facilities are designed to be accessible by all potential users. | The child care has been designed to ensure equitable access to all users. The Miller St. entry allows disabled access via a ramp and dedicated lift. The child care is level and requires no further ramping.<br>Accessible bathrooms have been provided in accordance to AS1428.01 for the number of occupants within the facility. |

### 3.4 LANDSCAPING

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| C18<br>C19 | Objective: To provide landscape design that contributes to<br>the streetscape and amenity. | Not applicable; Child care facilities located above ground level and car parking located in basement. |

### 3.5 VISUAL AND ACOUSTIC PRIVACY

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| C20<br>C21 | Objective: To protect the privacy and security of children attending the facility. | The facade on Miller St. is setback and buffered with landscaping, minimising visual access from the main road and adjacent public program into the learning space. |
| C22 | Objective: To minimise impacts on privacy of adjoining properties. | Screening is integrated into the facade facing the school grounds to ensure a level of visual separation. |
| C23<br>C24 | Objective: To minimise the impact of child care facilities on the acoustic privacy of neighbouring residential developments. | The child care precinct has been designed with consideration to acoustic control. It has no adjacency to mechanical plants and is located above ground, therefore not requiring acoustic fencing.<br>For further details, refer to the **Noise and Vibration Impact Assessment** by Stantec |

### 3.6 NOISE AND AIR POLLUTION

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| C25<br>C26 | Objective: To ensure that outside noise levels on the facility are minimised to acceptable levels. | For further details, refer to the **Noise and Vibration Impact Assessment** by Stantec |
| C27<br>C28 | Objective: To ensure air quality is acceptable where child care facilities are proposed close to external sources of air pollution such as major roads and industrial development. | Openings to Miller St. are minimised and incoming air is treated mechanically through ducting before entering into the space |

# RESPONSE TO CHILD CARE PLANNING GUIDELINES

## MATTERS FOR CONSIDERATION

### 3.7 HOURS OF OPERATION

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| C29<br>C30 | Objective: To minimise the impact of the child care facility on the amenity of neighbouring residential developments. | The proposed hours of operation are 7am to 6pm Monday to Friday. The child care centre is part of the school facility and will sharing the same vehicular entry point on Carlow Street. |

### 3.8 TRAFFIC, PARKING AND PEDESTRIAN CIRCULATION

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|---|---|---|
| C31<br>C32<br>C33 | Objective: To provide parking that satisfies the needs of users and demand generated by the centre. | Refer to **Internal Traffic and Parking Assessment** by CBRK |
| C34<br>C35 | Objective: To provide vehicle access from the street in a safe environment that does not disrupt traffic flows. | The lobby space has direct access to the child care car park. It also provides a separate secure lobby for the dedicated child care lift.<br><br>For further details, refer to **Internal Traffic and Parking Assessment** by CBRK |
| C36<br>C37<br>C38 | Objective: To provide a safe and connected environment for pedestrians both on and around the site. | As above.<br><br>For further details, refer to **Internal Traffic and Parking Assessment** by CBRK and SSDA Architectural Design Statement – **Section 5.0 Child Care Facility** |

# RESPONSE TO CHILD CARE PLANNING GUIDELINES

| APPLYING THE NATIONAL REGULATIONS | | Complies Yes/No |
|---|---|---|
| **4.1**<br>**Regulation 107**<br>**Space Indoor Requirements - indoor space**<br><br>Every child being educated and cared for within a facility must have a minimum of 3.25m2 of unencumbered indoor space.<br><br>It is recommended that a child care facility provide:<br>· a minimum of 0.3m3 per child of external storage space<br>· a minimum of 0.2m3 per child of internal storage space. | **Number of childcare places: 90**<br><br>**Required indoor area: 292.5m$^2$**<br>**Provided indoor area: 337.8m$^2$**<br><br>**Recommended outdoor storage area: 27m$^3$**<br>**Provided outdoor storage area: 70.5m$^3$**<br><br>**Recommended indoor storage area: 18m$^3$**<br>**Provided indoor storage area: approx. 29.7m$^3$**<br>**(excl. additional wall storage)** | **Yes** |
| **4.2**<br>**Regulation 106**<br>**Education and Care Services National Regulations**<br><br>There must be laundry facilities or access to laundry facilities; or<br>other arrangements for dealing with soiled clothing, nappies and<br>linen, including hygienic facilities for storage prior to their disposal<br>or laundering. The laundry and hygienic facilities must be located and maintained in a way that does not pose a risk to children.<br>Child care facilities must also comply with the requirements for laundry facilities that are contained in the National Construction Code. | The centre includes on site laundry facilities (located next to kitchen).<br><br>Refer to SSDA Architectural Design Statement – **Section 5.0 Child Care Facility** | **Yes** |
| **4.3**<br>**Regulation 109**<br>**Education and Care Services National Regulations**<br><br>A service must ensure that adequate, developmentally and age appropriate<br>toilet, washing and drying facilities are provided for<br>use by children being educated and cared for by the service; and the location and design of the toilet, washing and drying facilities enable safe use and convenient access by the children.<br>Child care facilities must comply with the requirements for sanitary facilities that are contained in the National Construction Code. | Provided. Toilet facilities adequate following BCA requirements<br><br>Refer to SSDA Architectural Design Statement – **Section 5.0 Child Care Facility floor plans** | **Yes** |
| **4.4**<br>**Regulation 110**<br>**Education and Care Services National Regulations**<br><br>Services must be well ventilated, have adequate natural light, and be maintained at a temperature that ensures the safety and wellbeing of children.<br>Child care facilities must comply with the light and ventilation and minimum ceiling height requirements of the National Construction Code. Ceiling height requirements may be affected by the capacity of the facility. | The proposed areas will have ample access to daylight and natural ventilation through the operable glazing and natural ventilation louvres. Mechanical heating and cooling will also be available when required to maintain thermal comfort.<br><br>Refer to SSDA Architectural Design Statement – **Section 5.0 Child Care Facility floor plans & elevations** | **Yes** |
| **4.5**<br>**Regulation 111**<br>**Education and Care Services National Regulations**<br><br>A service must provide adequate area or areas for the purposes of conducting the administrative functions of the service, consulting with parents of children and conducting private conversations. | Provided.<br>Administrative areas (reception, director's office and meeting room, and staff room and workspace are located next to the childcare lobby.<br><br>Refer to SSDA Architectural Design Statement – **Section 5.0 Child Care Facility floor plans** | **Yes** |
| **4.6**<br>**Regulation 112**<br>**Education and Care Services National Regulations**<br><br>Child care facilities must provide for children who wear nappies, including appropriate hygienic facilities for nappy changing and bathing. All nappy changing facilities should be designed and located in an area that prevents unsupervised access by children. | Provided.<br><br>Refer to SSDA Architectural Design Statement – **Section 5.0 Child Care Facility floor plans** | **Yes** |
| **4.7**<br>**Regulation 115**<br>**Education and Care Services National Regulations**<br>A centre-based service must ensure that the rooms and facilities<br>within the premises (including toilets, nappy change facilities, indoor and outdoor activity rooms and play spaces) are designed to facilitate supervision of children at all times, having regard to the need to maintain their rights and dignity.<br>Child care facilities must also comply with any requirements regarding the ability to facilitate supervision that are contained in the National Construction Code. | Toilets/nappy change areas are shared between pairs of rooms to facilitate shared surveillance from either room. Low wall and part glazing from toilets to the rooms and outdoor areas will also enable passive sightlines and surveillance while providing a level of privacy to the toilet areas.<br><br>Refer to SSDA Architectural Design Statement – **Section 5.0 Child Care Facility floor plans** | **Yes** |

# RESPONSE TO CHILD CARE PLANNING GUIDELINES

| APPLYING THE NATIONAL REGULATIONS | | Complies Yes/No |
|---|---|---|
| 4.8<br>**Regulations 97 and 168**<br>**Education and Care Services National Regulations**<br>Regulation 168 sets out the list of procedures that a care service must have, including procedures for emergency and evacuation.<br>Regulation 97 sets out the detail for what those procedures must cover including:<br>· instructions for what must be done in the event of an emergency<br>· an emergency and evacuation floor plan, a copy of which is displayed in a prominent position near each exit<br>· a risk assessment to identify potential emergencies that are relevant to the service. | Provided. Refuge areas provided in plan to cater to all students/staff in event of emergency.<br><br>Refer to SSDA Architectural Design Statement – **Section 5.0 Child Care Facility floor plans** and<br>**Emergency Management Plan from SCECS** | **Yes** |
| 4.9<br>**Regulation 108**<br>**Education and Care Services National Regulations**<br>An education and care service premises must provide for every child being educated and cared for within the facility to have a minimum of 7.0m2 of unencumbered outdoor space.<br>Simulated outdoor environments<br>should have:<br>· more access to natural light and ventilation than required for an internal space through large windows, glass doors and panels to enable views of trees, views of the sky and clouds and movement outside the facility<br>· skylights to give a sense of the external climate<br>· a combination of different floor types and textures, including wooden decking, pebbles, mounds, ridges, grass, bark and artificial grass, to mimic the uneven surfaces of an outdoor environment<br>· sand pits and water play areas<br>· furniture made of logs and stepping logs<br>· dense indoor planting and green vegetated walls<br>· climbing frames, walking and/or bike tracks<br>· vegetable gardens and gardening tubs. | **Number of childcare places: 90**<br>**Required area: 630m$^2$**<br>**Provided Area: 674.6m2**<br><br>Refer to SSDA Architectural Design Statement – **Section 5.0 Child Care Facility**<br><br>Proposed outdoor play verandah contains:<br>· Views (screened with planters) to adjacent high school playground<br>· Opening to sky for 40% of the outdoor area, and covered for remaining area.<br>· Plan allows for opportunity to have combination of floor types and materiality<br>· Indicative areas for sand pits per age group<br>· Indicative area for garden beds<br><br>Further natural features and elements are incorporated into the verandah area of the outdoor play space to further enhance the area. This is achieved by adding a variety of floor type and textures, ridges, mounds and pebbles to mimic the uneven surfaces of an outdoor environment. Other natural elements also include furniture made of logs, stepping logs and dense indoor planting and green vegetated walls. | **Yes** |
| **Regulation 113**<br>**Education and Care Services National Regulations**<br>The approved provider of a centre-based service must ensure that the outdoor spaces allow children to explore and experience the natural environment. | The proposed development will include a outdoor area that will benefit from ample direct and indirect sunlight, and natural ventilation. The proposed outdoor area will feature warm and natural material palette and textures, sandpits, veggie gardens, and green areas.<br><br>Refer to SSDA Architectural Design Statement – **Section 5.0 Child Care Facility** | **Yes** |
| **Regulation 114**<br>**Education and Care Services National Regulations**<br>The approved provider of a centre-based service must ensure that outdoor spaces include adequate shaded areas to protect children from overexposure to ultraviolet radiation from the sun. | **Childcare outdoor space will benefit from ample access to sunlight predominantly on the western edge. There will be large areas of shaded and unshaded areas. Additional shading will be provided as required.** | **Yes** |
| **Regulation 104**<br>**Education and Care Services National Regulations**<br>Any outdoor space used by children must be enclosed by a fence or barrier that is of a height and design that children preschool age or under cannot go through, over or under it. This regulation does not apply to a centre-based service that primarily provides education and care to children over preschool age, including a family day care venue where all children are over preschool age.<br>Child care facilities must also comply with the requirements for fencing and protection of outdoor play spaces that are contained in the National Construction Code. | Child care facility is situated above ground level and will have a simulated outdoor space which will be secure and separate from other areas of the school. The age-appropriate outdoor areas will be separated by low permeable and non-climbable fence. | **Yes** |
| **Regulation 25**<br>**Education and Care Services National Regulations**<br>Subclause (d) of regulation 25 requires an assessment of soil at a proposed site, and in some cases, sites already in use for such purposes as part of an application for service approval. With every service application one of the following is required:<br>· a soil assessment for the site of the proposed education and care service premises<br>· if a soil assessment for the site of the proposed child care facility has previously been undertaken, a statement to that effect specifying when the soil assessment was undertaken<br>· a statement made by the applicant that states, to the best of the applicant's knowledge, the site history does not indicate that the site is likely to be contaminated in a way that poses an unacceptable risk to the health of children. | Refer to **Detail Site Investigation (DSI) Report by Alliance Geotechnical** | **Yes** |

# RESPONSE TO CHILD CARE PLANNING GUIDELINES

## NATIONAL QUALITY FRAMEWORK ASSESSMENT CHECKLIST

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| 104 | **Fencing or barrier that encloses outdoor spaces.**<br>Outdoor space that will be used by children will be enclosed by a fence or barrier that is of a height and design that children preschool age or under cannot go through, over or under it.<br>Note: This clause does not apply to a centre-based service primarily for children over preschool age or a family day care residence or venue for over preschool age children. | Child care facility is situated above ground level and will have an outdoor space which will be secure and separate from other areas of the school. The age-appropriate outdoor areas will be separated by low permeable and non-climbable fence. |
| 106 | **Laundry and hygiene facilities**<br>The proposed development includes laundry facilities or access to laundry facilities OR explain the other arrangements for dealing with soiled clothing, nappies and linen, including hygienic facilities for storage of soiled clothing, nappies and linen prior to their disposal or laundering.<br>Laundry/hygienic facilities are located where they do not pose a risk to children | The centre includes on site laundry facilities (located next to kitchen).<br><br>Refer to SSDA Architectural Design Statement – **Section 5.0 Child Care Facility** |
| 107 | **Unencumbered indoor space**<br>The proposed development includes at least 3.25 square metres of unencumbered indoor space for each child. Refer to regulation 107 of the Education and Care Services National Regulation for further information on calculating indoor space. | **Number of children: 90**<br>**Required area: 292.5m²**<br>**Provided Area: 337.8m²**<br><br>Refer to SSDA Architectural Design Statement – **Section 5.0 Child Care Facility** |
| 108 | **Unencumbered outdoor space**<br>The proposed development includes at least 7.0 square metres of unencumbered outdoor space for each child.<br>Refer to regulation 108 of the Education and Care Services National Regulation for further information on calculating outdoor space, and for different requirements for out-of-school-hours care services. | **Number of children: 90**<br>**Required area: 630m²**<br>**Provided Area: 674.6m²**<br><br>Refer to SSDA Architectural Design Statement – **Section 5.0 Child Care Facility** |
| 109 | **Toilet and hygiene facilities**<br>The proposed development includes adequate, developmentally and age appropriate toilet, washing and drying facilities for use by children being educated and cared for by the service.<br>The location and design of the toilet, washing and drying facilities enable safe and convenient use by the children. | Provided.<br><br>Refer to SSDA Architectural Design Statement – **Section 5.0 Child Care Facility floor plans** |
| 110 | **Ventilation and natural light**<br>The proposed development includes indoor spaces to be used by children that —<br>· will be well ventilated; and<br>· will have adequate natural light; and<br>· can be maintained at a temperature that ensures the safety and well-being of children. | The proposed areas will have ample access to daylight and natural ventilation through the operable glazing and natural ventilation louvres. Mechanical heating and cooling will also be available when required to maintain thermal comfort.<br><br>Refer to SSDA Architectural Design Statement – **Section 5.0 Child Care Facility floor plans & elevations** |
| 111 | **Administrative space**<br>The proposed development includes an adequate area or areas for the purposes of conducting the administrative functions of the service; and consulting with parents of children; and conducting private conversations.<br>Note: This space cannot be included in the calculation of unencumbered indoor space – see regulation 107 | Provided.<br>Administrative areas (reception, director's office and meeting room, and staff room and workspace are located next to the childcare lobby.<br><br>Refer to SSDA Architectural Design Statement – **Section 5.0 Child Care Facility floor plans** |
| 112 | **Nappy change facilities**<br>(To be completed only if the proposed development is for a service that will care for children who wear nappies).<br>The proposed development includes an adequate area for construction of appropriate hygienic facilities for nappy changing including at least one properly constructed nappy changing bench and hand cleansing facilities for adults in the immediate vicinity of the nappy change area.<br>The proposed nappy change facilities can be designed and located in a way that prevents unsupervised access by children. | Provided.<br><br>Refer to SSDA Architectural Design Statement – **Section 5.0 Child Care Facility floor plans** |
| 113 | **Outdoor space—natural environment**<br>The proposed development includes outdoor spaces that will allow children to explore and experience the natural environment. | The proposed development will include an outdoor playspace that will benefit from ample direct and indirect sunlight, and natural and mechanical ventilation. The proposed outdoor space will feature warm and natural material palette and textures, sandpits, veggie gardens, and green areas.<br><br>Refer to SSDA Architectural Design Statement – **Section 5.0 Child Care Facility** |
| 114 | **Outdoor space—shade**<br>The proposed development includes adequate shaded areas to protect children from overexposure to ultraviolet radiation from the sun. | **Childcare outdoor space will benefit from ample access to sunlight predominantly on the western edge. There will be large areas of shaded and unshaded areas. Additional shading will be provided as required.** |
| 115 | **Premises designed to facilitate supervision**<br>The proposed development (including toilets and nappy change facilities) are designed in a way that facilitates supervision of children at all times, having regard to the need to maintain the rights and dignity of the children. | Toilets/nappy change areas are shared between pairs of rooms to facilitate shared surveillance from either room. Low wall and part glazing from toilets to the rooms and outdoor areas will also enable passive sightlines and surveillance while providing a level of privacy to the toilet areas. |

# MARIST COLLEGE

# APPENDIX

# 6.0

# RESPONSE TO GANSW SDRP 01 COMMENTS

## SDRP 01 ADVICE
21/07/20

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| 01 | The combined result of a significant increase in school population and the creation of extensive new open spaces within the site is the demonstrated pressure to concentrate and increase built form and scale in certain parts of the site. The resultant significant exceedance of the 12m height limit is not supported by Council. While we acknowledge Council's concerns, the proposal is under consideration by the panel, from a design and spatial quality point of view. | Refer to:<br>**SSDA Architectural Design Statement – Section 2.0 Architectural response**<br><br>**Section 4.0 Pedagogical response-Internal views – covered outdoor learning area & atrium** |
| 02 | The arrangement of proposed additional height and bulk towards the north-eastern and eastern edges of the site is understood as a strategy to contain impacts within the school boundaries. Further work is, however, required to explain the proposed excess height within a broader, built form analysis. A long elevational streetscape study from the east (Miller St) is requested to clarify the relationship of proposed built form within the site to current neighbourhood conditions extending from Stanton Library in the south up to Falcon Street in the north. | Refer to **Section 2.0 Architectural response, and drawing DA-200 Streetscape Elevations**<br>These describe the considered massing and articulation strategy that responds sensitively to the neighbouring conditions.<br><br>CGIs also show how the building sits in relation to the streetscape. It is worth noting the CGIs have been prepared with some of the street trees hidden to show the façade response to streetscape – existing street trees in reality will provide a screened view of the proposed building. |
| 03 | In addition to neighbourhood context, an investigation is needed into how the height, massing and façade treatments can be developed to mitigate impacts and respond sensitively to adjacencies with built form and open spaces within the subject site. | Refer to **Section 2.0 Architectural Response** |
| 04 | The architectural language of the proposed buildings appears to be developing well in the pencil renders but CAD elevations presented lack articulation or any sense of civic identity. The proposed scheme should contribute to a strong streetscape identity for the school, in particular where addressing the eastern boundary and the corner of Miller and Carlow Street. | Refer to Section **2.0 Architectural Response** and **DA-210 – Building Elevations** |
| 05 | The visual and formal identity of the architecture should respond to and, where possible, enhance the key organising principles of the masterplan: the spine, the piazza and the open spaces forming the public domain within the school. The relationship between these spaces and the architecture is key to the success of this project. | Refer to **Section 1.0 Vision and Strategy** |
| 06 | It is understood the design is in its preliminary stage; design development detailing the materiality, developed massing and edge conditions of the buildings should be undertaken, as far as possible, before the next SDRP session. | Refer to **Section 2.0 Architectural Response** |
| 07 | It is acknowledged the overall campus design is still in development but indicative floor plans, sections and elevations explaining the built form, internal uses, circulation, active learning areas and other uses within the new blocks and surrounding buildings should be presented at the next SDRP. Key sections explaining the spatial quality of the buildings will assist the panel in understanding the proposal. | Refer to **SSDA Architectural Set - Architectural Plans and Sections** |
| 08 | There is currently a lack of clarity around entry points and circulation – please provide more detail in SDRP 02.<br><br>The relation of proposed building volumes to existing buildings on site also requires further consideration and development. A spatial analysis of the proposed new 'in between' spaces, especially the forecourt between the Presbytery and the Miller Street Education Building (B10) should be undertaken to inform the massing and edge conditions of B10 and the design of the open space. The need for open to sky play space for the Childcare Centre in B10 may inform this development of the B10 massing. | Refer to **Landscape Design Report** |
| 09 | Sustainability<br><br>Any school project warrants a rigorous and innovative response to ESD. Opportunities for renewable energy, water and waste recycling, WSUD measures and passive building performance should all be explored and presented as part of the next SDRP session. Extensive use of accessible green roofs, sunlight penetration to deep floor plates, natural ventilation, cross<br><br>ventilation for thermal comfort and the treatment of façade openings for high, year-round thermal performance should be part of design development and presented at the next SDRP. | Sustainability starts at the core of the building design principles. The building design is targeting the equivalent of 4-star Greenstar.<br><br>Refer to **'Section 2.0 Architectural Response – ESD Strategy'** to see how ESD initiatives have been implemented through the building design and used as opportunity for learning by display where possible. |

# RESPONSE TO GANSW SDRP 02 COMMENTS

## SDRP 02 ADVICE
09/09/20

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| 01 | The arrangement of the outdoor covered spaces, the connection between these and into the proposed buildings is developing positively. Keeping the basketball court open will further strengthen these connections and promote their role as multi-use spaces for the students across the day. | Noted. Interface between outdoor covered spaces and the quadrangle has been kept open. The landscape design further reinforces that connection visually and blurring the line between outdoor and covered outdoor by playing on the design of the sports court line markings, and applying as a unifying and playful pattern throughout the school outdoor areas. This responds directly to the idea that the recreational space is multi-layered and multi-functional, one of the spaces which happens to be able to be used as a sports court. |
| 02 | The provided long elevations along Miller St were useful in explaining how the building sits within the streetscape and its context. Further development of the façades is required. The proposed corner building on Carlow and Miller street is voluminous presents long facades both north and east. Further investigation into developing its formal language is required to mitigate this bulk. Articulating the façade, material choices, vertically proportioned subdivisions (in response to context) and the treatment of openings should all be considered. The scale and articulation of the existing church and presbytery may also provide useful cues for the design of the façade of this building. | Refer to SSDA Architectural Design Statement – **Section 2.0 Architectural response.** |
| 03 | For the next SDRP, please provide further developed facades, including updating the long Miller Street elevations. | Refer to **DA-200 Streetscape Elevations** |
| 04 | The provision for outdoor learning spaces on all levels of the proposed building will benefit the school and bring the spatial and formal language of the piazza and adjacent open spaces into the built form. Careful consideration of these spaces and their connections, visual and physical, should be undertaken during design development. Ensure the under croft spaces are hospitable and pleasant spaces for students throughout the year. For the next SDRP, please provide sketch perspectives and sections of these outdoor learning spaces and under croft areas, and views to and from these spaces that clearly explain their proposed character. | Careful consideration has been made to rationalise the large outdoor learning areas to the ground level quadrangle / covered learning areas and existing COLA, and the Level 4 roof recreation where it can benefit most from landscaping, access to daylight, direct sightlines and passive surveillance. In addition educational gardens are available on Level 3 of Stage 2a, and adjacent to the science labs to be used for agriculture plot and science outdoor garden.<br><br>The General learning areas benefit from access to the atrium space with 'pop-out' terraces providing informal learning area as an extension to the adjacent learning space. In the eastern end of the Carlow-street building, large flexible space benefit from Northerly and Easterly views to both street frontages, and provide learning spaces that are informal, adaptable and future-focused.<br><br>Refer to:<br>**- Section 2.0 Architectural response – Outdoor recreation spaces**<br>**- Section 4.0 Pedagogical response-Internal views – covered outdoor learning area & atrium** |
| 05 | The landscaping, amenity and open play spaces to the rooftops of the buildings are supported, however, it is unclear how these areas will be fenced and the impact of fencing on perceived bulk (and its relationship to height controls). | **Refer to Landscape Design.**<br><br>Design has been refined to avoid active play areas which require fencing on the roof, instead opting for more passive recreation, utilising low barriers integrated with the landscape design. |
| 06 | For the next SDRP, please clearly explain the relationship of the proposed building to the LEP height controls. | Refer to **DA-210 – Building Elevations** |

# RESPONSE TO GANSW SDRP 03 COMMENTS

## SDRP 03 ADVICE
20/04/22

| | | |
|---|---|---|
| 01 | Reorganise the planning and built form to provide a greater sense of height, increase solar access to the covered outdoor spaces in winter and provide outlook to the sky from the COLA; For example, the Student Support Area at the northern end of the campus could be relocated to enable a double-height termination to the north/south axis, improving solar access to the COLA. | Please see **Appendix I - Undercroft Solar Studies**<br><br>A solar study has been performed reviewing the requested scenario of the relocation of the student services on the northern end. Although additional direct daylight is achieved, it is fairly minor and represents no substantial solar benefit to the undercroft and quadrangle area in terms of the solar access benefits as outlined above. |
| 02 | Provide sun studies illustrating the area of solar access to the ground plane (as a percentage of the total covered area) from 9am to 3pm in mid-winter. | Please see **Appendix I - Undercroft Solar Studies** |
| 03 | Demonstrate that the Early Learning Centre outdoor area will perform in accordance with the NSW Child Care Planning Guideline which states that outdoor play areas should have year-round solar access to at least 30% of the ground area, with no more than 60% of the outdoor space covered. | Please see **5.0 Child Care Facility - Main Child Care Floor** |
| 04 | Implement acoustic design solutions and provide an acoustic report that demonstrates acoustic comfort in the undercroft areas during times of high activity. Consider acoustic absorption and attenuation through:<br>a. The introduction of soft planting<br>b. The geometry of the walls and columns<br>c. The floor and ceiling surfaces<br>d. The surface treatment of walls and columns, such as:<br>i. Textured or perforated surfaces<br>ii. Recessed graphics and artwork<br>iii. Surface depth | Acoustic design solutions that have been implement include:<br>• Acoustic lining to the underside of the soffits proposed will dampen the noise and reverberation within the space<br>• Soft planting has been proposed as a barrier between the undercroft area and the traffic noise from Carlow street.<br>• Textured finishes and soft surfaces are proposed on the loose furniture<br>Successful precedents of similar undercroft areas have been studied and acoustic solutions implement have been adopted.<br>Please see **Appendix J - Acoustic Precedent Studies** |
| 05 | Provide a secure lobby space between the lifts and the entrance to the child care centre in order to enable controlled access. | Refer to **DA-101 -GA PLAN - BASEMENT ZONE 2 and DA1-5 - GA PLAN - LEVEL 1 ZONE 2**<br><br>A dedicated lift to the childcare has been provided to control the access to the learning floor. This lift cannot access any other floor apart from the Child Care and the Miller St. entry and vice versa.<br><br>Furthermore, a secured, dedicated lobby has been provided for this lift as an additional secured line for children exiting the lift. |
| 06 | Deliver a safe and effective pedestrian and vehicular traffic strategy and demonstrate how the shared zone will be used at drop-off/pick-up times and during school hours. There is a conflict between students using the proposed shared zone and vehicles entering and exiting the Ron Dyer Centre basement carpark. | Please see **Appendix F - Traffic** and refer to **Transport Impact Assessment (by others)** |

# RESPONSE TO SUBMISSIONS - DEPT. OF PLANNING

## RTS (29/03/2021) - ARCHITECTURAL CONSIDERATIONS

### BUILT FORM AND KEY VIEWS

| | | |
|---|---|---|
| 01 | Further consideration should be given to the potential to provide natural screening for the site in order to reduce the bulk and scale of the proposed building. This may require consideration of street tree planting, if there is not sufficient space within the site. | Refer to **Section 2.0 Architectural response - pg 21-22**<br><br>The CGI visual images show how the building sits in relation to the streetscape. As shown in the CGIs, existing street trees provide a natural screening to both Miller St and Carlow St elevation. Landscaping treatment is provided along both Miller St and Carlow Street, with additional planting and trees provided at the corner to soften the edge and reduce the bulk of the brick base. |
| 02 | Consideration to further articulate the façade on Miller Street and stepping the building down following the slope of the land should also be considered. | Refer to **Section 2.0 Architectural response, drawing DA-200 Streetscape Elevations, DA-210 Building Elevations**<br><br>The Miller St building has been reduced by one floor and further articulation of the facade has been provided. This assists in reducing the scale of the building. Further reduction of floors cannot be achieved as the floor space is required to facilitate the projected growth of the school. |

### PLANS AND ELEVATIONS

| | | |
|---|---|---|
| 01 | The plan must show the details of the Sydney Metro tunnel depth at this location which should be obtained in consultation with the public authority. | Refer to **drawing DA-021 Site Plan**<br><br>Location of Sydney Metro Tunnel is shown indicatively |
| 02 | The Architectural plans provided should be updated to highlight the drop off and pick up location that has been allocated to students in the Carlow Street Building basement car park. | Refer to **drawing DA-101 GA Plan - Basement Zone 2**<br><br>Drop off and pick up location for students has been highlighted within the Carlow Street Building basement carpark.<br><br>Refer to additional diagram at Appendix F |

### STUDENT SAFETY AND AMENITY

| | | |
|---|---|---|
| 01 | The EIS states “the piazza will be accessible 24 hours a day” for the school and the public. Further detail is required relating to how the use of this space by the school and the public would be scheduled in order to ensure the safety and amenity of students. | The Piazza is an extension of the Church and Parish for community use, similar to St Mary's garden to the front of St Mary's Church on Ridge Street.<br>The Piazza is a welcoming point and entry to the site and facilities of the Masterplan. The Piazza leads to the Ron Dyer Centre which is the main reception point for the Site. The School grounds are secure from the public areas of the site ensuring student safety. |

### END OF TRIP FACILITIES

| | | |
|---|---|---|
| 01 | The EIS should be updated to provide details relating to where the end of trip facilities would be located to support the student and staff bicycle spaces that have been proposed. | Refer to **drawing DA-101 GA Plan Basement Zone 2, DA-103 GA Plan Ground Zone 2, DA-105 GA Plan Level 1 Zone 2**<br><br>Bicycle parking has been provided for Staff and Students around the site. There are 20 bicycle spaces available for staff in a locked bike storage room (located in the basement) and 89 bike spaces throughout the ground floor undercroft and School grounds for students. End of Trip facilities are available for both staff and students within the existing Hall/ Gym building on Level 1 adjacent to the new staff room and facilities<br><br>Refer to additional diagram at Appendix H - Bike Parking Locations |

# RESPONSE TO SUBMISSIONS - DEPT. OF PLANNING

## RTS (20/12/2021) - ARCHITECTURAL CONSIDERATIONS

### HERITAGE

| | | |
|---|---|---|
| 01 | The bulk and scale of the building at the corner of Miller and Carlow Street has not been assessed. The Department has raised this concern earlier and considers that the scale of the proposal at this corner should be reduced. The design should be revisited with the goal of being able to provide a proposed corner building of a form, that more sympathetically responds to the heritage aspects of the surrounding context. | Refer to **Section 2.0 Architectural response, drawing DA-200 Streetscape Elevations, DA-210 Building Elevations**<br><br>The scale of the building has been reduced by revisiting the design of top floor of the Miller Carlow building. The lightweight metal portal framing around the upper windows has been removed and the glazing line setback from the facade. This has reduced the visual bulk of the top floor. This also emphasises the double storey window frame elements in the brick facade similar to the language of the adjacent North Sydney Hotel. Additional curved brickwork detailing has been added to soften the facade. The main bulk of the facade is maintained within the LEP height plane and is sympathetic to the surrounding context. |

### DROP OFF/PICK UP AREA and CAR/BICYCLE PARKING

| | | |
|---|---|---|
| 01 | Clarification of the design and use of the pick-up/drop-off (PUDO) zone for kindergarten to year 1 students on the north-south access, including:<br>• updated architectural / landscape plans to show the surface PUDO zone.<br>• confirmation of the number of PUDO spaces and vehicle queuing capacity as well as the ability of vehicles to pass in the event the PUDO spaces are occupied. | Refer to **5.0 APPENDIX F - Student Drop off/Pick up** for existing and proposed Drop off/Pick up zones for kindergarten and year 1 students.<br>Architectural and Landscape drawings show the North/South access and PUDO zone arrangement.<br><br>Refer to traffic engineering report for further information. |
| 02 | Clarification of the adequacy of PUDO facilities including:<br>• whether the existing PUDO facility is capable of accommodating existing peak demand, whether it results in queuing onto Ridge Street and if so the extent of queuing.<br>• an assessment of the proposed PUDO spaces (12 spaces for Years 2-12, three spaces for Kinder to Year 1 and nine spaces for childcare) to demonstrate that this is sufficient to meet demand during peak periods.<br>• confirm the predicted maximum vehicle queue length for each proposed PUDO during peak periods.<br>• confirm whether the PUDO times for Years 2-12 and the childcare overlap, and whether this cumulative demand results in any adverse queuing. | Refer to **5.0 APPENDIX F - Student Drop off/Pick up** for proposed Drop off/Pick up zone for year 2-12 students.<br><br>Refer to traffic engineering report for further information. |

### RESIDENTIAL AMENITY

| | | |
|---|---|---|
| 01 | Provide an assessment of the impact from the Carlow Street building on the residential amenity of the adjoining Marist Brothers residences fronting Carlow Street (located on the site). The assessment should include:<br>• confirmation of the internal layout of existing residential habitable rooms and location of windows.<br>• consideration of Apartment Design Guide (ADG) standards and the predicted amenity impacts, including:<br>• overshadowing of habitable rooms windows and garden space.<br>• impacts on the outlook from existing windows.<br>• any reduction of privacy, with particular reference to proposed windows, the first-floor staff outdoor area and science courtyard. | Refer to **Section 2.0 Architectural response** and Architectural plans and elevations for details.<br><br>The existing Marist Brothers residences are located to the east of the proposed Carlow Street building. The existing school building and rooftop outdoor recreation already pose a situation of overlooking.<br><br>Additional site survey was undertaken to locate the existing windows on the western facade facing the School building. It was noted there are three ground floor windows and one upper floor window were all covered to mitigate current overlooking.<br><br>Following receipt of the additional survey of the adjacent Marist Brothers Residence, the facade articulation of the Western facade has been amended to mitigate views from the first floor staff outdoor area towards the residence. The upper level courtyard has been removed. |

# RESPONSE TO SUBMISSIONS - DEPT. OF PLANNING

## ARCHITECTURAL PLANS

**01** The architectural plans are required to be updated as follows:

- correctly show the 6 parking spaces adjacent to St Mary's Church as accessible spaces (currently shown as 7 standard parking spaces).
- include elevational / sectional drawings showing the amendments to the Ron Dyer Centre and Presbytery and the proposed 2 storey pavilion building.
- include new and updated computer generate imagery (CGIs) including:
- new CGI imagery taken from within the site to demonstrate the proposed changes - particularly showing the new courtyard north of the Church,
- changes and extension of the Presbytery, the revised Ron Dyer Centre and of the Carlow / Miller Street buildings from within the northern quadrangle.
- updated DA-802 (CGI) to reflect the RtS amended Miller Street building.
- include a temporary building plan and elevation(s) for the proposed portables / temporary classroom(s) etc during construction. In addition, confirm the predicted life-span of the temporary buildings and the trigger/timing for their removal.
- include the entire site in the updated drawings. Currently the drawings do not show school buildings / structures at the western extent of the site adjacent to Cassini Avenue or the proposed internal changes to Block F.
- provide a roof plan for all buildings shown on drawing DA-104.
- delete all details of potential future buildings from the drawings and replace with the proposed or retained arrangement. This would be required to be consistent with the statement that “Stage 02A Building + Walkway” is “Subject to Separate Approval”.
- delete the Ron Dyer Centre connection to that future walkway from this application and including it with the Stage 02A future application.

- Plans have been updated to show 6 parking spaces adjacent to St. Mary's Church
  Refer to **DA-102 GA Plan - Ground Zone 1**
- New drawings have been included with the submission to show plan, elevational and sectional views of the Ron Dyer Centre and Presbytery
  Refer to **DA-220 to DA-233 (St. Mary's Church, Presbytery and Ron Dyer Centre drawings)**
- CGI imagery has been updated
  Refer to **Section 2.0 Architectural response Public Recreation - Piazza** for internal site view perspectives and **DA-802 - Perspectives** for Miller Street building
- New temporary buildings plan has been included
  Refer to **DA-112 - Temporary Buildings Plan**
- Extend of works towards the western portion of site has been clarified. There are no works in this zone
  Refer to **DA-021 - Site (Roof) Plan**
- Roof plan has been included
  Refer to **DA-110 and DA-111 - Roof Plan Zone 1 & 2**
- Floor plans have been updated to reflect existing arrangement including Stage 2A works and removal of terraces and Jacaranda Cottage.

## DEMOLITION PLANS

**01** The demolition drawings continue to show the two terraces, Jacaranda Cottage and other site preparation demolition works for which separate Council DA approval has been granted (DA100/21) and no longer form part of this application. Either remove these works or include a clear annotation with colour change confirming separate approval has been granted for these works and they do not form part of this application. The demolition drawings include an annotation that demolition of Block C Annex “Note: Proposed development subject to separate approval”. This being the case, remove the demolition of this building from the demolition drawings.

Refer to **DA-010 and DA-011 - Demolition Plans**

Demolition plan has been updated to reflect existing conditions on site - the terraces and Jacaranda cottage have been removed. Block C annex demolition has been removed and Stage 02A is now shown as existing.

# RESPONSE TO SUBMISSIONS - NORTH SYDNEY COUNCIL

## ARCHITECTURAL / URBAN DESIGN CONSIDERATIONS

### HEIGHT

| | | |
|---|---|---|
| 01 | Having regard to the (Civic Precinct Planning Study) design principle the proposed four storey height along Miller Street and Carlow Street might not be considered to respond appropriately to the surrounding low-scale context, particularly as the height is concentrated around the perimeter of the site rather than in the centre. There is no stepping down of height towards at the edges of the site, which reinforces the monolithic form of the development.<br><br>Consideration should be given to providing a variation in building height to provide a transition between the proposal and surrounding lower scale development. | Refer to **Section 2.0 Architectural response, drawing DA-200 Streetscape Elevations, DA-210 Building Elevations**<br><br>The strategy for proposed additional height and bulk towards the north-eastern and eastern edges of the site is to contain impacts within the school boundaries. This strategy was discussed with the Government Architect NSW and not objected to.<br><br>The building height was focussed towards the Miller Street and Carlow Street corner, away from the adjacent Presbytery building on Miller Street and the three storey terrace houses on Carlow Street. The Carlow Street building is similar in height to the existing Hall/Gym off Cassins Avenue, and respects the existing Marist Brothers two storey terraces on the site fronting Carlow Street.<br><br>The Miller St building has been reduced by one floor in consideration of the Presbytery building and height and scale of St Mary's Church. The Miller Street building also considers the height, scale and articulation of the North Sydney Oval stand buildings.<br><br>Urban space and precinct development was considered with the redevelopment of the existing ongrade carpark in providing the open Piazza and main entry gateway to the whole site. The open space of the Piazza balances both St Mary's Garden on Ridge Street and public open space opposite adjacent to North Sydney Oval. |

### FORTRESS LIKE APPEARANCE

| | | |
|---|---|---|
| 01 | The proposal is designed to focus into the site rather than out. There may be some secondary interaction/glimpses into the under croft play area from the intersection at Miller and Carlow Streets. A setback above the first or second floor is needed to break down the ‘fence like’ appearance of four storeys around that corner. | Refer to **drawing DA-200 Streetscape Elevations, DA-210 Building Elevations**<br><br>The design of the Miller Street and Carlow Street Buildings provide a civic front to the street providing protection and privacy for the School, students and staff.<br><br>This perceived "fence like" appearance is broken down by the banked landscape treatment within the setback zone and the open undercroft area which is slightly raised from the street. This provides a defined break in the building at the first floor with the two storey glazed fenestration above. |

### BULK AND SCALE

| | | |
|---|---|---|
| 01 | The façade provides no substantial architectural breaks or articulation, resulting in a consistent building mass along the two street frontages. The building does not relate to the low scale residential further north along Miller Street and east along Carlow Street. | Refer to **Section 2.0 Architectural response, drawing DA-200 Streetscape Elevations, DA-210 Building Elevations**<br><br>The materiality of the Miller Street and Carlow Street building facade has been articulated to break up the height of the building as well as along the length. A series of framed brick elements, two storey window fenestration and light-weight metal cladding, breaks up and modulates the facade.<br><br>The brick base along Miller Street relates to the height and scale of the North Sydney Hotel brick and render building and the adjacent four-storey brick apartment building.<br><br>The Carlow Street building is similar in height to the existing Hall/Gym off Cassins Avenue, and respects the existing Marist Brothers two storey terraces on the site fronting Carlow Street, and neighbouring three-storey terraces adjacent. |
| 02 | The length of the development on the corner of Miller Street and Carlow Street should be broken up through physical breaks in the building façade. | Refer to **Section 2.0 Architectural response, drawing DA-200 Streetscape Elevations, DA-210 Building Elevations**<br><br>The Miller Street and Carlow Street buildings have been articulated to have defined vertical beaks at entry points. Articulated glazed facades provide a break between the framed brick elements defining the points of entry to the School, Childcare and Auditorium entries. |
| 03 | The proposal provides up to 3 meters setbacks from Carlow and Miller Streets. This provides deep soil planting opportunities. However, greater setbacks would enhance planting that would reduce the perceived bulk and scale of the development. | Refer to **drawing DA-021 Site (Roof) Plan** and Landscape Architects drawings<br><br>The setback from Carlow Street varies from 4.4 metres to 6.3 metres at the corner of Miller Street. The setback to Miller Street is 3 metres.<br><br>The proposed landscape treatment within these setbacks at the corner of Miller and Carlow Street provide significant contribution to the streetscape and public domain in comparison to the existing timber boundary fence. The landscaping is banked within the setback zone to the building to reduce the scale and perceived height of the building along Carlow Street. |

# RESPONSE TO SUBMISSIONS - OTHER SUBMISSIONS

## RTS - ARCHITECTURAL CONSIDERATIONS

### BUILT FORM, BULK AND SCALE

| | | |
|---|---|---|
| 01 | 4-storey height of Carlow St, elevation not fitting with streetscape and character | Refer to **Section 2.0 Architectural response, and drawing DA-200 Streetscape Elevations**<br>These describe the considered massing and articulation strategy that responds sensitively to the neighbouring conditions.<br><br>CGI imagery show how the building sits in relation to the streetscape. As shown in the CGIs, existing street trees provide a natural screening to both Miller St and Carlow St elevation. Landscaping treatment is provided along both Miller St and Carlow Street, with additional planting and trees provided at the corner to soften the edge and reduce the bulk of the brick base. |

### NOISE AND PRIVACY

| | | |
|---|---|---|
| 01 | Lack of consideration to protect the surrounding residence<br>The western elevation is likely to result in overlooking into private residences | Refer to **Section 2.0 Architectural response**<br>This describes the building articulation and screening. The Carlow Building has a public face to Carlow street however is inward looking to provide protection and privacy for the School. The considered massing and articulation strategy that responds sensitively to the neighbouring conditions. Window fenestrations are recessed to provide articulation as well as privacy and screened views from the site. |

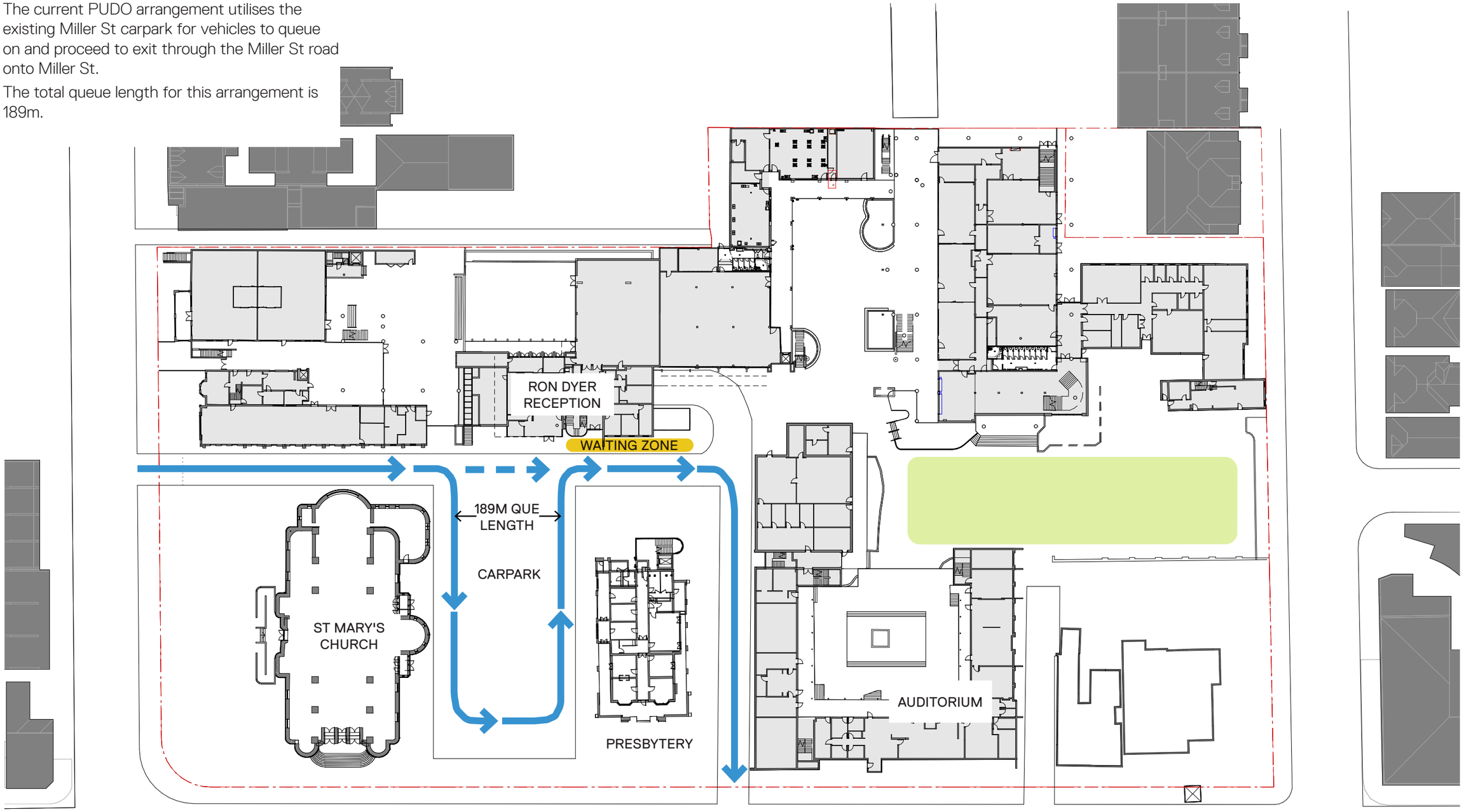
### OTHER

| | | |
|---|---|---|
| 01 | Lack of consideration to increased pedestrian use of Carlow Street and Miller Street, thus requiring wider footpaths | Refer to **drawing DA-101 GA Plan - Basement Zone 2**<br><br>The proposal has taken into consideration North Sydney Council footpath and public domain guidelines.<br><br>The landscaping and planter design to the street boundary has been changed to increase the width of pedestrian pathway, especially behind the Heritage bus shelter which occupies the majority of the Miller Street footpath at this point. The proposed landscape treatment within the setback zone to the buildings facade along both Miller and Carlow Street provide significant contribution to the streetscape and public domain in comparison to the existing timber boundary fence. |

# STUDENT DROP OFF/PICK UP

The current PUDO arrangement utilises the existing Miller St carpark for vehicles to queue on and proceed to exit through the Miller St road onto Miller St.

The total queue length for this arrangement is 189m.



# TRAFFIC FLOWS THROUGH SITE

## PROPOSED K - YR1 PICK-UP / DROP OFF

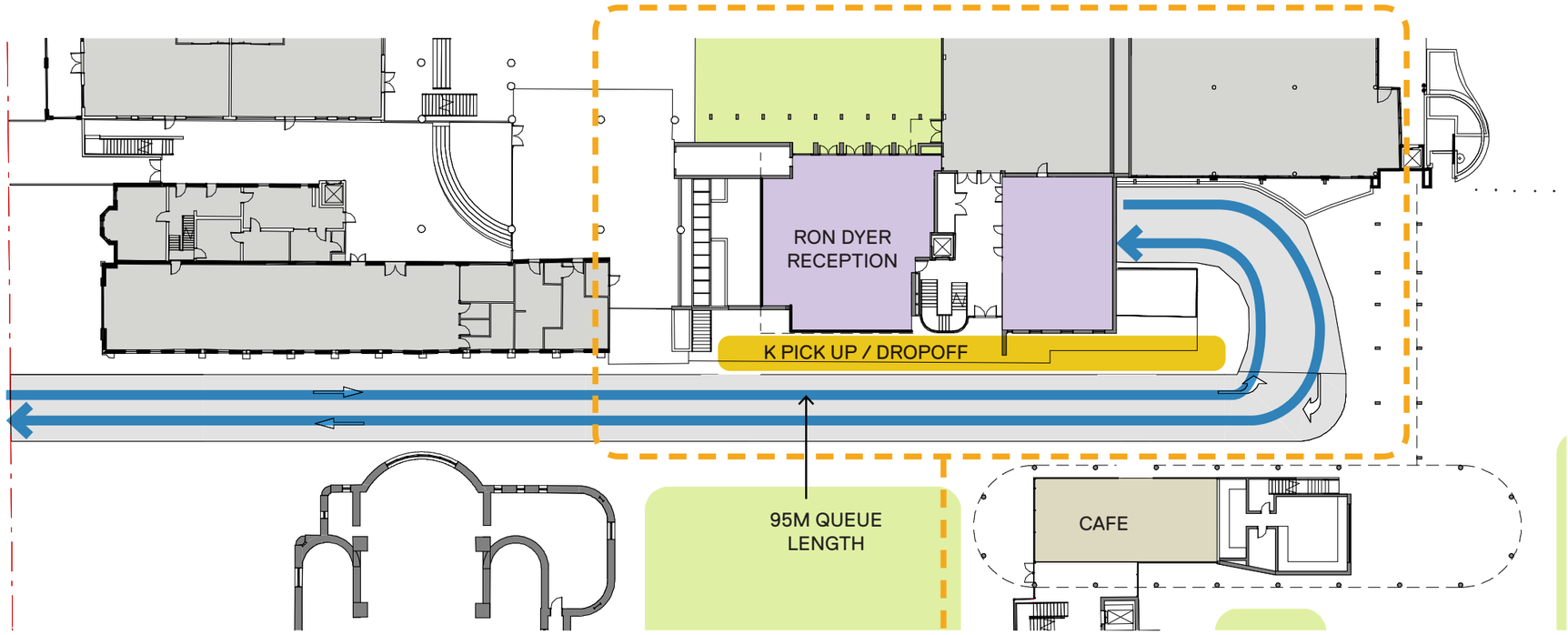
The proposed PUDO arrangement goes through the Ridge St shared road where there is a PUDO aisle for K-1 students. Vehicles then travel down into the Ron Dyer Centre basement, where they can loop and exit via the shared road.

This PUDO is reserved for years K-1 students.

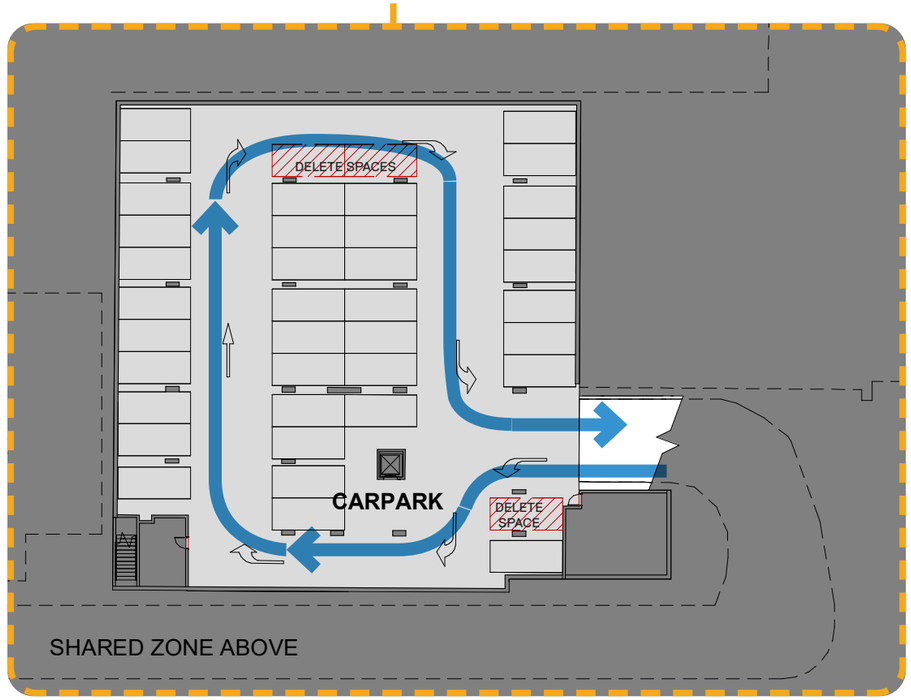
The 95m queue length accommodates approximately 15 cars, with an additional overflow queue length of 160m on Ridge Street.

This PUDO has also increased the pickup/drop off zone from 20m to 40m accommodating approximately 6 cars.

The proposed design splits the K-YR1 from the YR2-12 student's PUDO and rationalises the pick up and drop off procedure across the site. This allows for a more efficient and safer traffic movement .Refer to Transport & Accessibility Impact Assessment prepared by TTPP




GROUND FLOOR K - YR1 PUDO QUEUING




RON DYER BASEMENT PARKING

# TRAFFIC FLOWS THROUGH SITE

## PROPOSED 2 - 12 PICK-UP / DROP OFF

The second PUDO arrangement caters for year 2-12 students and the childcare. Vehicles enter via Carlow St and into the Carlow Building basement where they can loop and exit via the same Carlow St entrance.

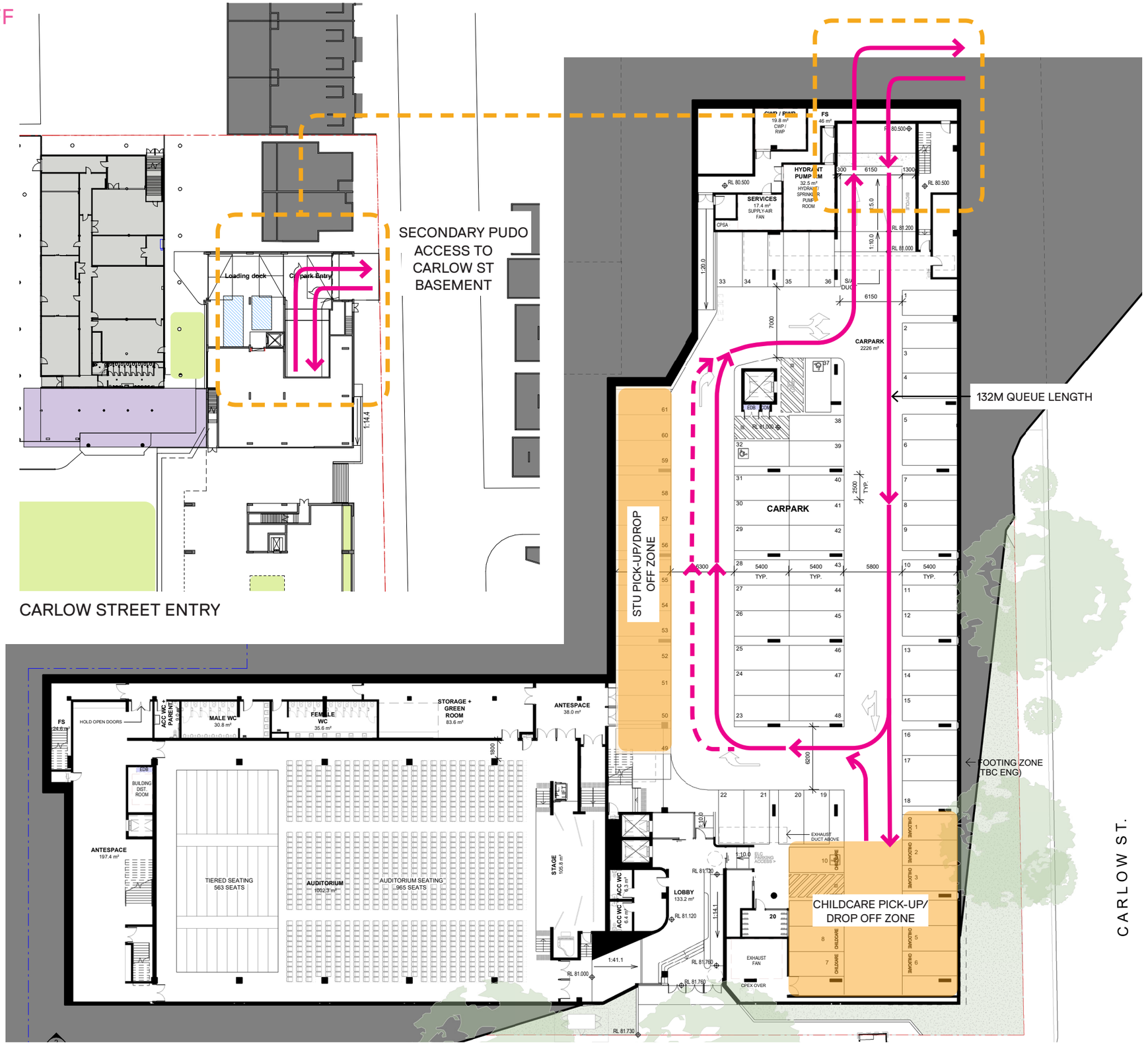
Year 2-12 students can queue along the student pick up/drop off zone and access the school through the ground level.

Families dropping children off to the childcare have a dedicated childcare PUDO area which has close proximity to the dedicated ELC lobby.

The two student groups have different start times and therefore PUDO will not occur simultaneously.

The 132m queue length accommodates approximately 22 cars with a pick up/drop off zone of 30m accommodating approximately 4 cars.

The proposed design of the basement car park and PUDO zone maximise the usage of the available space on site and allows for a rationalisation of the PUDO procedure across the site. Refer to K-Yr1 PUDO proposed design and Transport & Accessibility Imapact Assessment prepared by TTPP for further details



# STAFF - END OF TRIP / CHANGE FACILITY

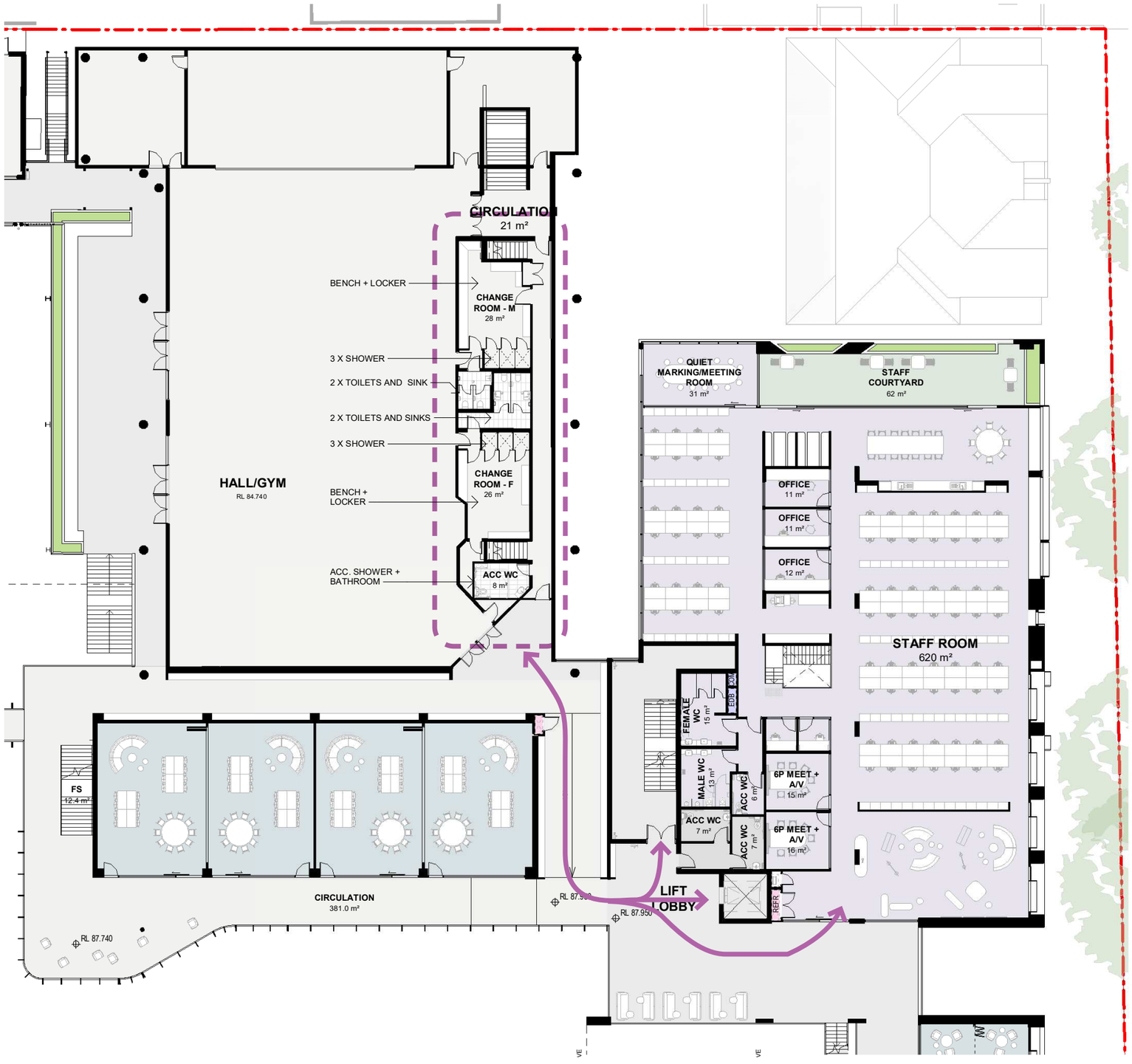
There are existing change facilities at the back of the Hall/Gym on Level 1.

The masterplan will enable a direct access from Staff admin areas and stair/lift core to the back of the Hall.

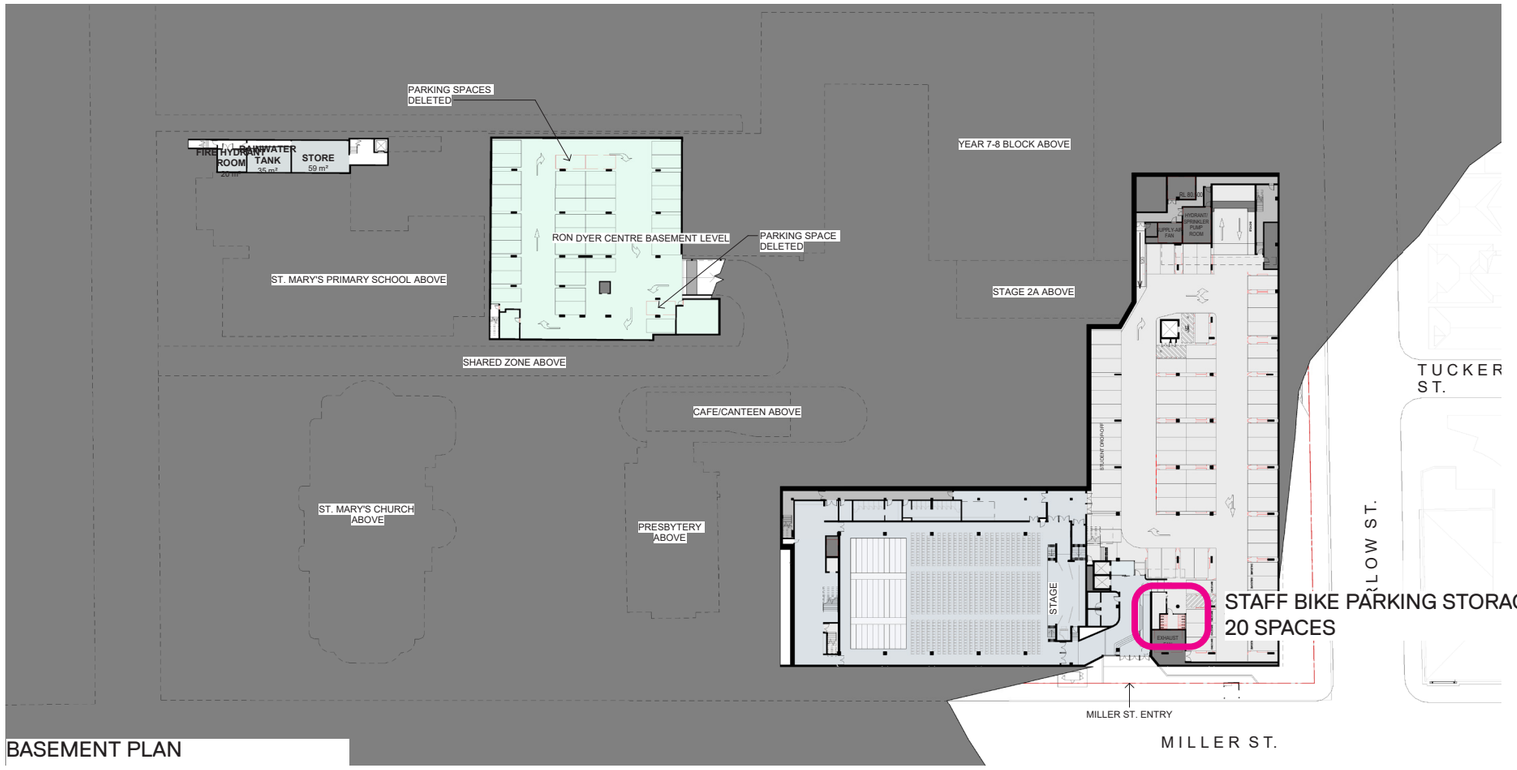
Staff arriving by bicycle in the mornings will be able to take the lift or stair and quickly get access to the change facility and/or staff areas prior to start of school hours.

The layout of the EOT Facility with the separated change/shower rooms, toilets/sink and accessible toilet/shower is effective as it allows several individuals to use the facility concurrently.

The same facilities can then be used by students during school hours - this ensures an efficient use of school resources and enables space to be allocated elsewhere for learning and informal areas.



# BIKE PARKING LOCATIONS




**Bicycle Parking Allocation:**

Student = 89

Staff = 20

Total bicycles accommodated on site = 109

# UNDERCROFT SOLAR STUDIES

## UNDERCROFT - MID-WINTER SOLAR STUDY

The undercroft is a Covered Outdoor Learning Area. It is designed to maximise comfort in both summer and winter months.

During winter, the sun penetrates through the northern facade to allow for warmth within the space. Solar access is available during all school hours.

In studying the solar access provided to the undercroft, spaces achieve direct and ambient/ indirect sunlight allowing for flexibility and a range of uses. The benefits are as follows:

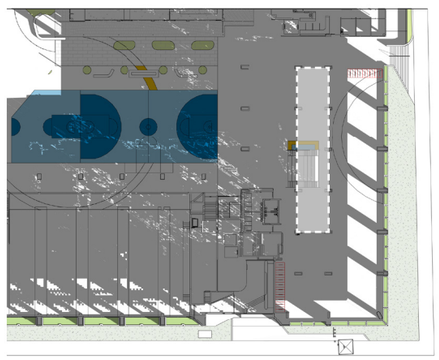
Direct Sunlight -

> Provides warmth to the space
> Generally preferred for recreation spaces and relaxation activities
> Provides areas/options for students and staff who generally spend time indoors with indirect sunlight

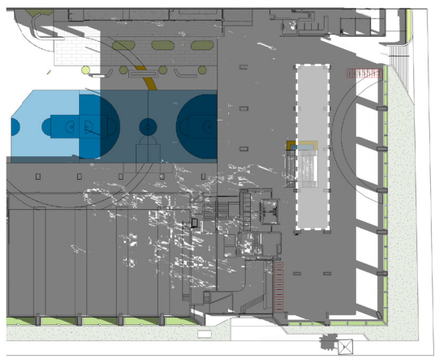
Ambient/indirect Sunlight -

> Provides even lighting, reducing glare and dark spots
> Achieves preferred comfort levels for working and holding classes and/or flexible learning workshops
> Allow options to outdoor recreations spaces out of direct sunlight.
> Indirect and shaded areas increase in the summer months responding to and balancing the differing cooling and heating requirements in the undercroft area from winter to summer.
> During the peak of summer the undercroft area provides non air conditioned shaded outdoor areas for play and informal learning as part of the proposal's ESD strategy

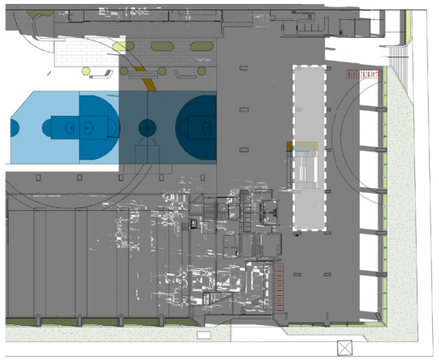
A solar study has been performed reviewing the requested scenario of the relocation of the student services on the northern end. Although additional direct daylight is achieved, it is fairly minor and represents no substantial solar benefit to the undercroft and quadrangle area in terms of the solar access benefits as outlined above.



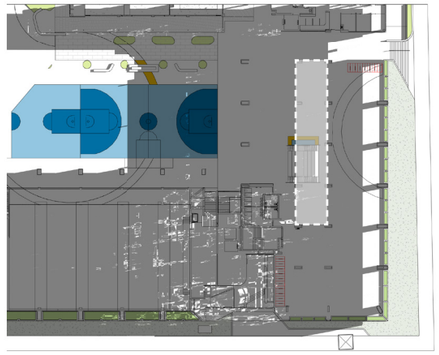
1 UNDERCROFT SOLAR WINTER - 0900



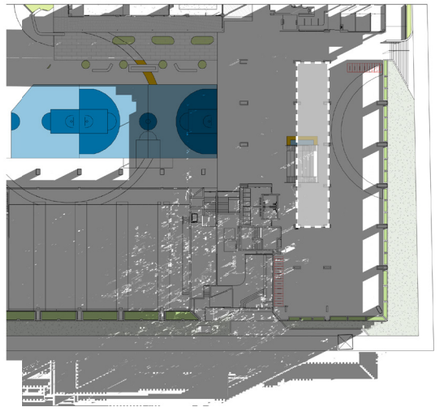
2 UNDERCROFT SOLAR WINTER - 1000



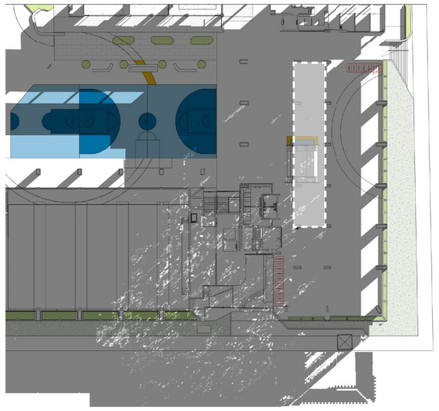
3 UNDERCROFT SOLAR WINTER - 1100



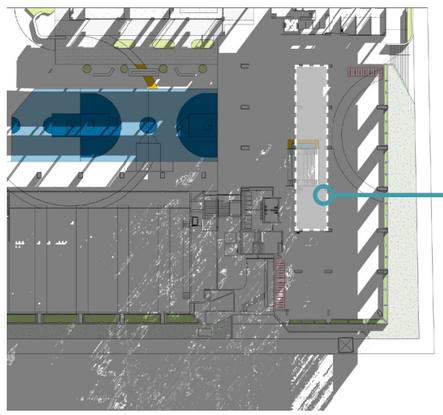
4 UNDERCROFT SOLAR WINTER - 1200



5 UNDERCROFT SOLAR WINTER - 1300



6 UNDERCROFT SOLAR WINTER - 1400



7 UNDERCROFT SOLAR WINTER - 1500

Ambient light will filter into undercroft area from atrium skylight above, extent of atrium shown dotted for clarity

| SOLAR ACCESS - WINTER SOLSTICE | |
|---|---|
| TIME OF DAY | PERCENTAGE |
| 9am | 26% |
| 12pm | 13.3% |
| 3pm | 11.8% |

# UNDERCROFT ACOUSTIC PRECEDENT STUDY

## UNDERCROFT - ACOUSTIC PRECEDENT STUDY

Northern Beaches Christian School, completed by WMK is a successful precedent studied and acoustic solution implement have been adopted.

Acoustic design solutions that have been implement include:

- Acoustic lining to the underside of the soffits diminish the noise and reverberation within the space
- Soft planting used to create a barrier between the differing areas to and assist in dampening noise/ sound
- Textured finishes and soft surfaces used on the loose furniture

TEXTURED LOOSE FURNITURE


PLANTING TO DAMPEN NOISE

ACOUSTIC TREATMENT TO SOFFITS

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