

DOCUMENT ISSUE HISTORY			
Date of Issue	Version	Status	Issued
26/04/2018	V1	CDR - Preliminary	SV
05/06/2018	V2	CDR-GANSW Issue	SV
06/06/2018	V2	CDR-GANSW Revised	SV
14/06/2018	V3	CDR-TSG Issue	SV
29/06/2018	V4	CDR-TSG Issue Revised	SV
12/07/2018	V5	CDR-SEARS	SV

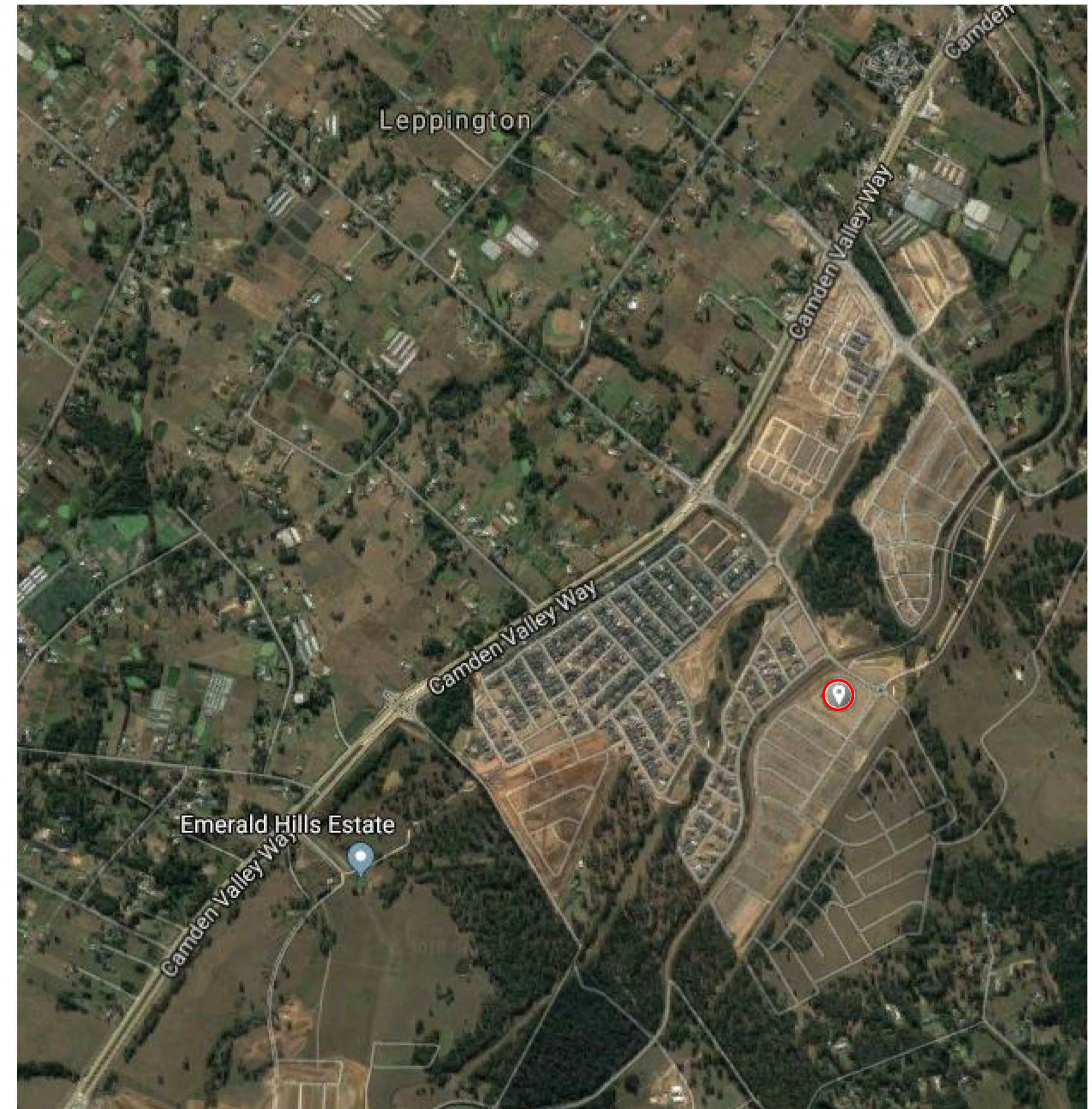


Drawing No	Drawing Name	Scale
CDR 000	COVER SHEET	NTS
CDR 001	DRAWING LIST	NTS
CDR 002	EXECUTIVE SUMMARY AND SCOPE OF WORK	NTS
CDR 003	PROJECT BACKGROUND AND DESCRIPTION	NTS
CDR 004	SITE DESCRIPTION AND ANALYSIS - PRECINCT MASTERPLAN	NTS
CDR 005	SITE DESCRIPTION AND ANALYSIS – SITE MASTERPLAN	NTS
CDR 006	STANDARD DoE EFSG EDUCATION PRINCIPLES	NTS
CDR 007	STANDARD DoE EFSG EDUCATION PRINCIPLES – DESIGN RESPONSE	NTS
CDR 008	STANDARD DoE EFSG EDUCATION PRINCIPLES – DESIGN RESPONSE	NTS
CDR 009	PROJECT SPECIFIC EDUCATION PRINCIPLES DIAGRAM	NTS
CDR 010	EXAMPLES OF BEST PRACTICE AND PRECEDENCE - LOCAL	NTS
CDR 011	EXAMPLES OF BEST PRACTICE AND PRECEDENCE – OVERSEAS	NTS
CDR 012	DESIGN STATEMENT & SITE LOCATION PLAN	NTS
CDR 013	SITE CONTEXT AND ANALYSIS	NTS
CDR 016	L1 - LEARNING MODULE DIAGRAM	AS SHOW
CDR 017	L2 - LEARNING MODULE DIAGRAM	AS SHOW
CDR 101	SITE OPPORTUNITIES AND SITE INTENT	1:500
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CDR 401	3D VIEWS – SITE MASSING	NTS
CRD 402	3D VIEWS – BLOCK MASSING	NTS

The Concept Design Report identifies functional requirements of the Design for the new Leppington Primary School, as outlined in DoE Project Scoping Document, functional requirements obtained through consultation with DoE Technical Stakeholders, PRG workshops and school representatives, and EFSG standards.

The CDR report for the proposed East Leppington New Primary School is a revision of findings from FDB while incorporating Consultant's findings, complete with further recommendations.

- > **SITE STREET ADDRESS**
East Leppington, NSW 2567
Cm Commissioner Drive and Elkhorn Street, Willowdale
- > **SITE AREA** 3.0 Ha
- > **LAND USE AND ZONING** R2 Low Density Residential
Camden LEP 2010
- > **PROJECT DESCRIPTION**
Single stage of new East Leppington Primary School.
The project will provide 44 new permanent teaching spaces for 1012 students and core facilities to accommodate up to 1300 future students.
- > **PROPOSED SCHOOL CAPACITY** 1012 students
- > **PROPOSED PROJECT SCOPE OF WORK**
Teaching Spaces
44 new permanent teaching spaces for 1000 students in accordance with EFSG standards.
Core Facilities
Core facilities – Library, Administration, Canteen, staffing and pupil facilities to Core 35 Standards to and shared Community Hall
Parking
Additional Parking spaces - EFSG standards



PROJECT BACKGROUND

The new Leppington Primary School will be built within Stockland's Willowdale development and falls within the Raby Road Primary Schools Community Group, and falls under Western City District Plan. The Raby Road Primary schools cluster is identified in Sydney Metropolitan plan "A Plan for Growing Sydney" with a significant focus for intensive growth and infrastructure investment over next 20 years.

The Cluster falls within the Camden and Campbelltown Local Government area (LGA) and includes 7 new schools, one of which is New Leppington Primary School.

The projections for the Raby Road Primary School Community Group are for an increase in numbers of primary school age children, and demand for teaching space, and facilities to at least 2031. The expansions of existing and building of new schools are required to cater for the population growth.

PROJECT DESCRIPTION

The new primary school will be located on 3.0 Ha vacant lot, Crn Willowdale Dr and Commissioner Drive in Willowdale, within Stockland development, that is expected to generate substantial population and school aged population growth.

Single stage construction will include:

- 44 new teaching spaces to accommodate 1012 students.
- Core Facilities, Staff Facilities and Administration to Core 35 Standard
- Infrastructure
- Parking facilities
- Site will undergo substantial landscape treatment to provide contemporary educational and recreational facility.



WILLOWDALE COMMUNITY IMAGE



WILLOWDALE COMMUNITY IMAGE



WILLOWDALE COMMUNITY IMAGE

The new primary school will be located in the area of East Leppington, in the suburb of Willowdale, Crn Willowdale Drive and Commissioner Drive.

Willowdale offers two district and five local parks. The new Willowdale Park, almost 3 hectares in size, includes multiple kick about areas, bbq's and picnic shelters, flying foxes, a large children's playground, a water play area, bike and scooter tracks and a small amphitheatre

ROADS AND TRANSPORT

The Sydney CBD, Liverpool and Campbelltown are all within easy access to Willowdale. Leppington train station is a short five minute drive or bus trip. Willowdale is also close to major road links such as the M5 and the M7. There is also a bus service throughout Willowdale, linking residents to Leppington train station or Narellan Town Centre.

SW BUS SERVICE PLAN

TfNSW is currently reviewing the long term bus network for the SWGC and the Precinct.

SCHOOL LOCATION

Willowdale is surrounded by existing quality public and private schools, giving a wide range of choice. It is also making way for a proposed State Primary School, a future child-care centre and the new Willowdale Community Place, which is now open. The site has a slope towards North/West boundary and will provide generous views and cooling breezes.



SITE LOCATION ARIAL VIEW - NTS



BRIEF DESCRIPTION

The site for the proposed school is currently a vacant lot, measuring approximately 3.0Ha. There is no existing trees or vegetation. The site is sloping to North/Western boundary and will provide views and breezes to the new facility.

Proposed school's Open Play Zone and Free Play Zone will occupy large portion of the centre area along Elkhorn Street boundary. The boundary along the Canal has 10 M easement and will be joining proposed car park and site water detention. Site will be secured with 2.1M palisade fence combined with landscaping, to provide privacy and enhance the site security.

Proposed new shaded Community Hall will be located on the North corner of the site, and will be accessible from Willowdale Drive. This is a main road which joining Camden Valley Way and Willowdale Shopping Centre.

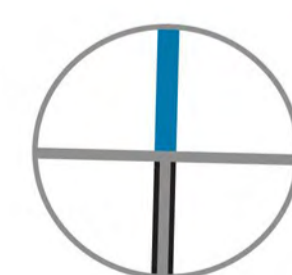
Main pedestrian entry to school will be from Commissioner Drive, which has a set-back for kiss-n-drop zone. There will be two additional 'secondary' pedestrian entries to school, one from Elkhorn Street and another from Willowdale drive. The staff carpark entry is from Elkhorne Street.

There is a proposed site for new childcare centre along Willowdale Drive. All other adjoining lots are currently vacant, and ready for future medium and low density residential.



LEGEND

--- Subject Site Boundary



The NSW DoE Educational Facilities will:

- Principle 1:** First and foremost, focus on the needs of learners and learning.
- Education Principle 2:** Build community and identity and create a culture of welcome, inclusion and belonging that reflects and respects diversity within the school's community.
- Education Principle 3:** Be aesthetically pleasing.
- Education Principle 4:** Provide **contemporary, sustainable learning environments** that:
- > Promote learning for students and teachers through collaboration, social interaction and active investigation
 - > Encourage learner self-management and self-direction
 - > Support a full range of teaching strategies from direct explicit instruction to facilitation of inquiry and authentic project and problem based learning
 - > Facilitate learning and connection anywhere, anytime by providing seamless access to ICT and integration of learning resources throughout the learning spaces
 - > Be integrated into, and maximise the use of the natural environment
 - > Enable aspects of the buildings, building design and outdoor spaces to be learning tools in themselves—for example, learning from the ecologically sustainable features of the design and associated energy management systems
 - > Are age and stage appropriate
- Education Principle 5:** Embed the potential for **re-configurability**, both in the present for multi-purpose use and over time for changing needs.



BELLEVUE HILL PUBLIC SCHOOL NSW - LEARNING HUB/LIBRARY by Group GSA



SEYMOUR COLLEGE, YURREBILLA CENTRE SA, by Swasnbury Penglese

Education Principle 1:**First and foremost, focus on the needs of learners and learning**

- Provide stimulating learning environments through the use space and furniture
- Provide multi-use spaces with connections to the outdoors
- Provide variety of learning spaces that can respond to the future focus learning teaching methods with flexible spatial design within larger open plan spaces
- Personalised – learning is shaped with individuals in mind
- Action orientated – enabling group collaboration
- Just in time – learning can be adapted to a rapidly changing world
- Learning as a social exchange – mixing the formal & informal
- Reaching all learners – especially engaging the whole student group
- Effective pedagogy through flexible and specific curricula learning spaces that also support assembly and physical activities
- Offer an engaging and supportive student experience suited to range of learning styles.
- Offer flexible and well connected teaching and learning spaces.
- Have the capacity to support comprehensive curriculum delivery

Education Principle 2:**Build community and identity and create a culture of welcome, inclusion and belonging that reflects and respects diversity within the school's community**

- Provide a safe and secure environment for students, staff and visitors
- Where appropriate create partnerships between the school and the community
- Share facilities in the form of halls, courts and libraries where appropriate
- A welcoming and central location readily accessible from the town centre
- Take into consideration shared access to local facilities
- Allow response to significant changes in student numbers
- Offer a safe and secure learning and working environment that invites community participation and engagement
- Support teachers in their roles as student mentors and members of a professional community
- Be mindful of the needs of learners at different learning stages
- A school environment which inspires community beliefs and identity
- Equitable access throughout the school
- Welcoming environment that respects the history of the local area
- Relationships first – every person matters; and
- Reputation – to be known positively as a school meeting the aims of the vision and mission
- Safe – where people look out for each other a duty of care is met
- Enhancing health, well-being and mental health



HOME BASE UNIT & ENCLOSED PRACTICAL ACTIVITY- HARBORD PS HARBORD NSW
by NSW Government Architects Office



HOME BASE UNIT & PRACTICAL ACTIVITY - CAMBERWELL HIGH SCHOOL VIC
by Hayball Architects

Education Principle 3:

Be aesthetically pleasing.

- Create inviting, pleasant spaces connected to the natural environment
- Fun imaginative and safe environment using colours and textures
- Landscaping with variety of materials and areas to create natural learning and gathering spaces
- Empathetic to the range of users
- Sense of belonging for all users

Education Principle 4:

Provide contemporary, sustainable learning environments

- Maximise natural lighting and acoustic solutions as key objectives
- Passive design and maximum use of natural light and ventilation
- Outdoor spaces used as learning tools maximising technology
- Seamless access to ICT and integrated learning
- Encouraging self-management and educating through responsibility
- Supporting teaching strategies, project collaboration, social interaction and active investigation
- Being well known – each person feels that they are known by those around them
- Dynamic – where appropriate the building is considered a learning tool
- Be flexible and allow customisation to suit different community contexts by providing both core and optional space types
- Treat the entire school as a library by offering a central resource hub supported by distributed resource nodes as required
- Maximise outdoor learning opportunities
- Create a healthy and environmentally sustainable environment that serves as a tool for learning
- Offer technology-enabled settings with an emphasis on mobility
- Be configured to maximise meaningful and functional relationships and links between people, disciplines and resources

Education Principle 5:

Embed the potential for re-configurability, both in the present for multi-purpose use and over time for changing needs.

- Maximise use of the site for teaching
- Multi-purpose spaces with efficient user movement around the school
- Provision of buildings and services that can adapt to future learning requirements
- Focus on varying skills for learning
- Respond to varied access and usage patterns.
- Learner agency – supporting student voice and engagement



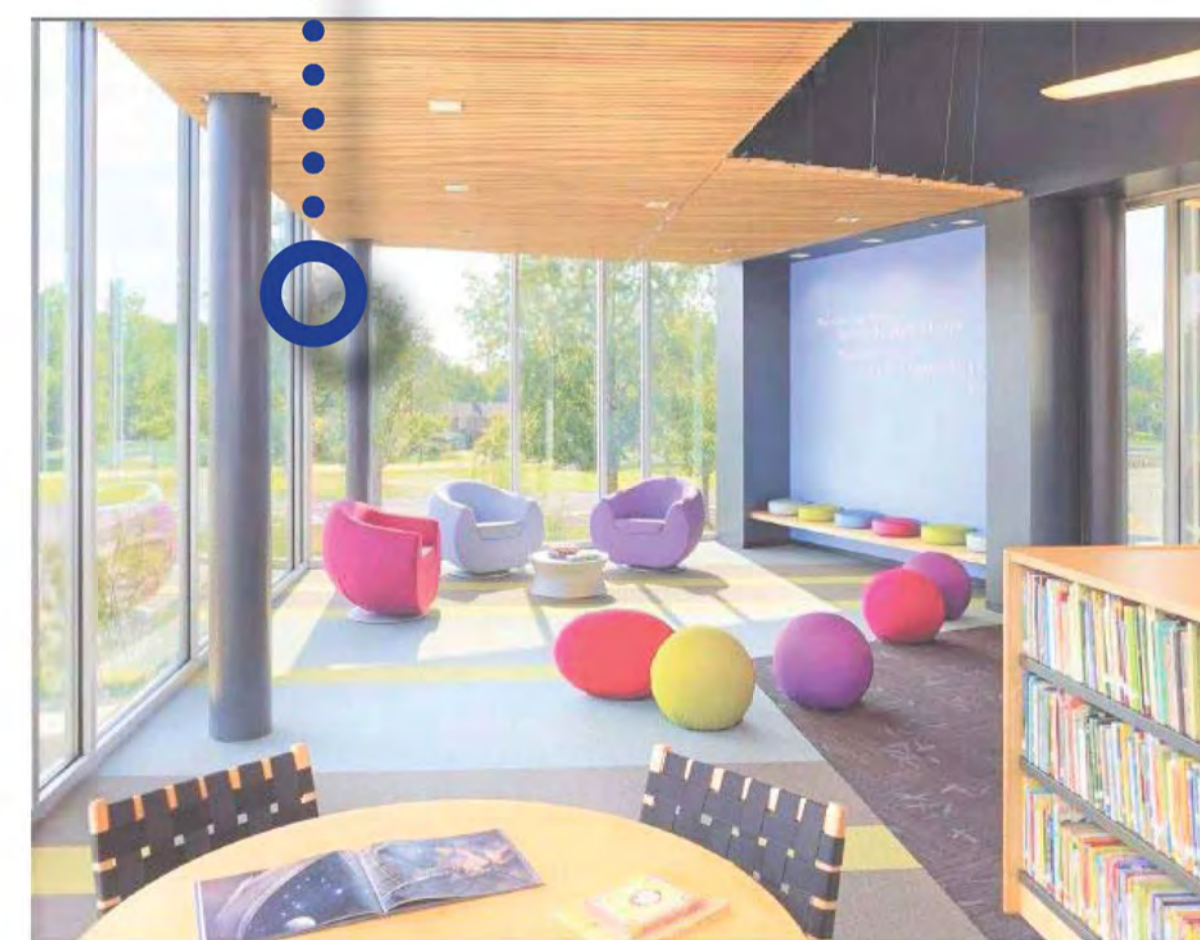
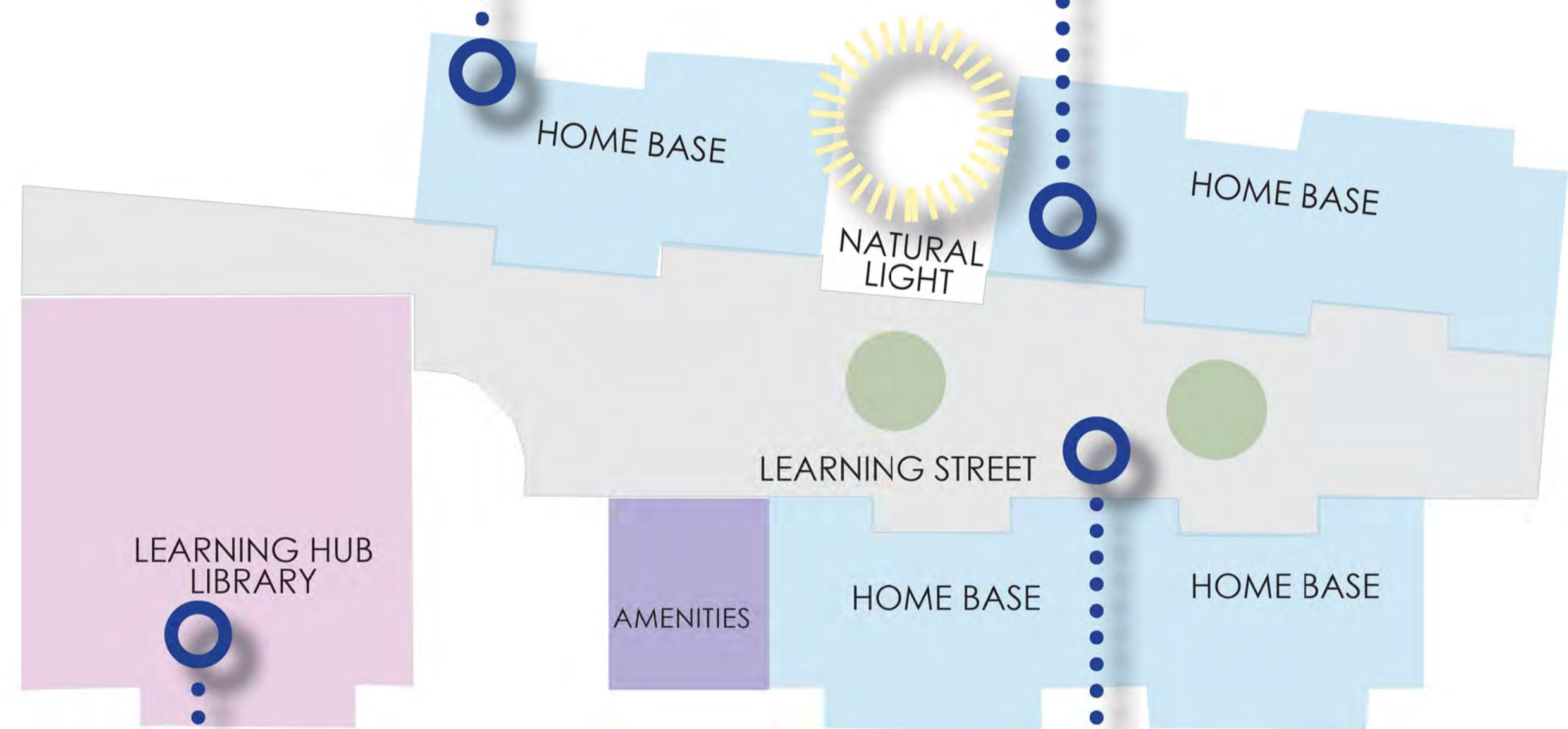
ENCLOSED LEARNING STREET - HARBORD PUBLIC SCHOOL HARBORD NSW
by NSW Government Architects Office



ENCLOSED LERNING STREET - ANZAC PARK PUBLIC SCHOOL CAMMERAY NSW
by NSW Government Architects Office



LIBRARY - HARBORD PUBLIC SCHOOL NSW - PRECEDENCE



ENCLOSED LEARNING STREET - GOODSTART EARLY LEARNING QLD- PRECEDENCE

LEARNING MADULE PRINCIPLES



building entry + administration

Coatesville Primary School, Victoria

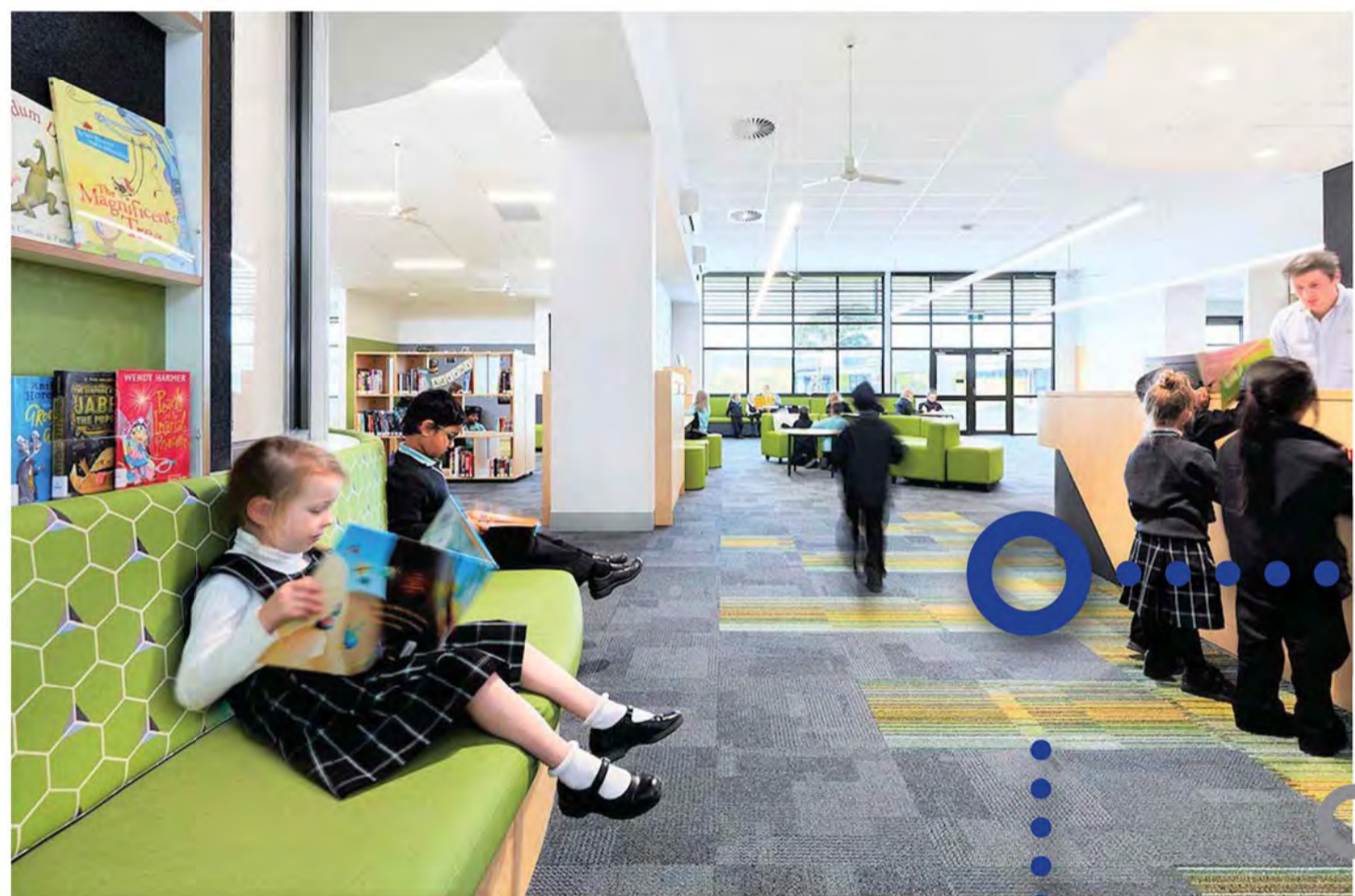


presentation + display + withdrawal space

Mernda Central College, Victoria



break out space + outdoor learning street



library - learning hub

Coatesville Primary School, Victoria



HOME BASE + LARGE GROUP LEARNING

Goodstart Early Learning Queensland



shared practical activity area + covered learning



library - learning hub

Coatesville Primary School, Victoria



quiet learning space

Mernda Central College, Victoria

Mernda Central College, Victoria



school hall - community shared



group learning



presentation + display + withdrawal space



break out space + outdoor learning



library - learning hub



HOME BASE + LARGE GROUP LEARNING



open play area + covered learning



school hall - community shared

DESIGN STATEMENT

THE BRIEF

- Develop whole of school facilities to meet the Education Facility Standard Guidelines (EFSG) Core 35 requirements.
- Masterplan the works to best capture site opportunities for specific educational and environmental sustainable outcomes.
- Provide future learning environments that offer flexibility and options that accommodate various teaching models and future focus learn principles.
- Maximize open space and define a community realm to the onsite environment.
- Provide a front of school entry to express public address and access.
- Develop a 1250 sqm shared hall facility on the site with Campbell Town City Council.

SCOPE

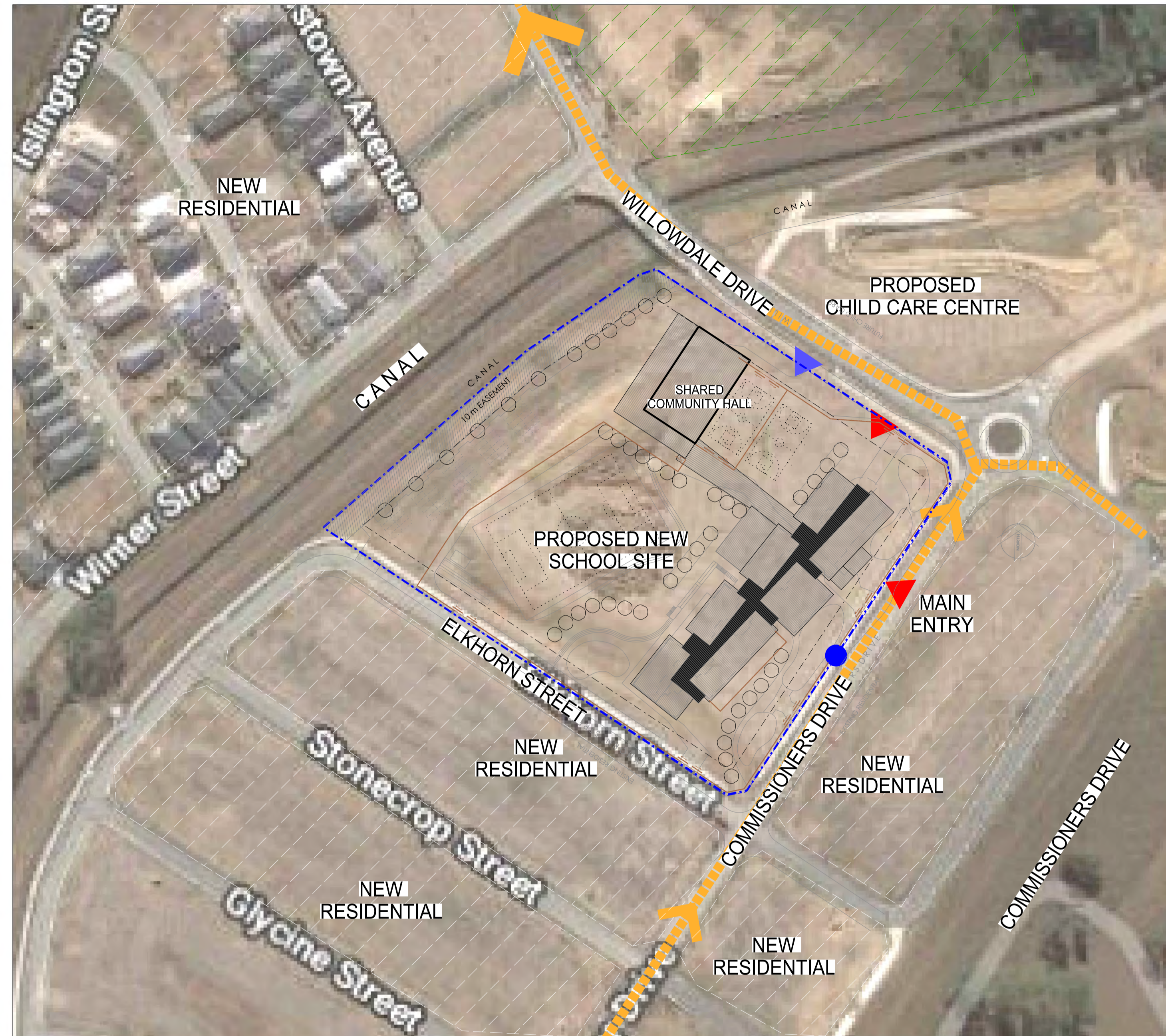
- Provide 44 new teaching spaces to accommodate 1040 students.
- Integrate the core facilities sized to service whole of school capacity.
- Manage site accessibility and circulation specific to the sites opportunities.
- Provide onsite staff parking and community parking for the hall.
- Provide infrastructure services as required.

OPPORTUNITIES

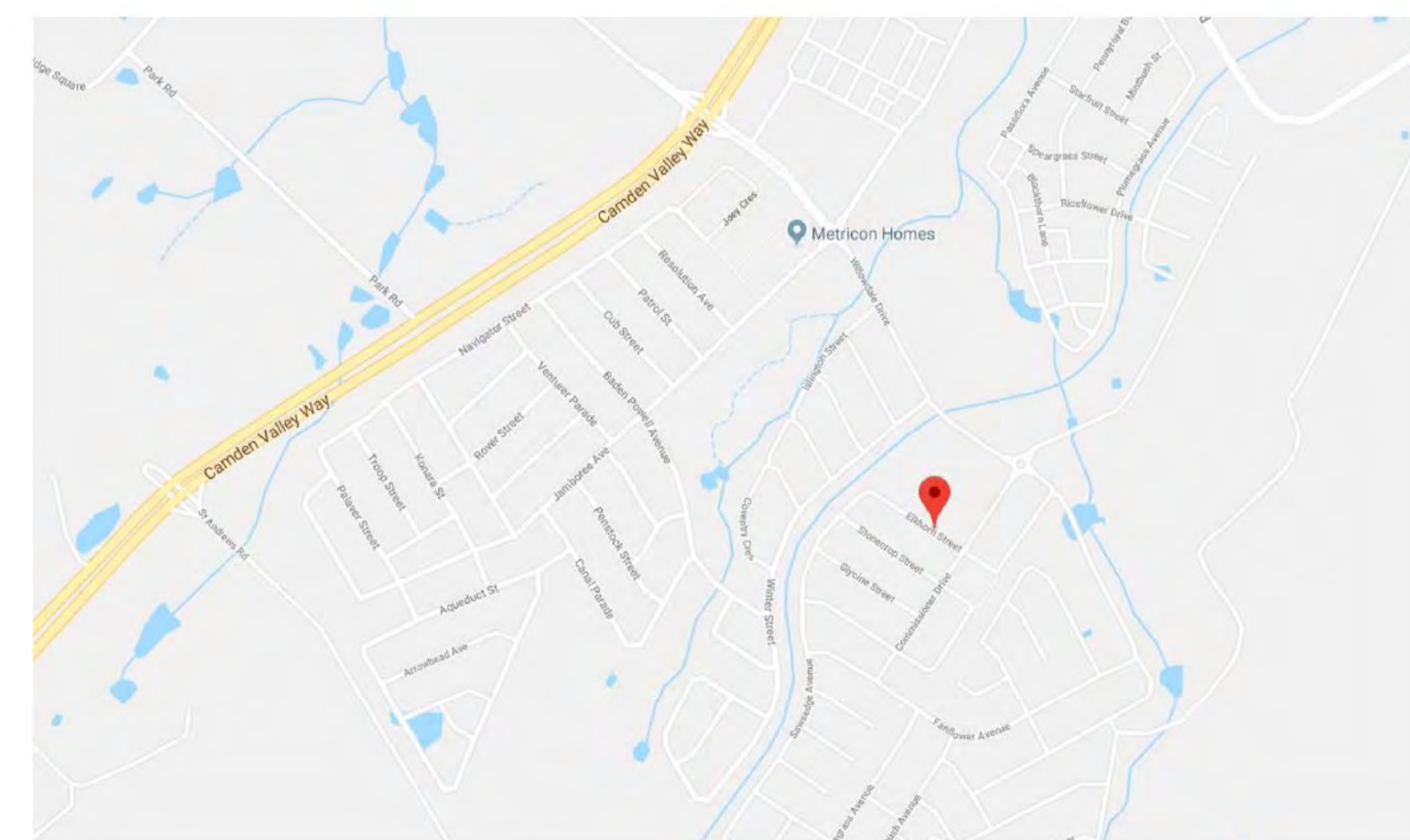
- Consideration to physical and visual connectivity to and from the site.
- Ensure efficient site access and building connectivity.
- Define site entries to give the school and the community hall independent identifications.
- Utilize the sites natural ground gradient to assist in the approach to building scale and mass.
- Position the new buildings to take advantage of climatic conditions and orientation.
- Adopt a part 3 storey design approach to preserve and maximum open space amenity.
- Create a community use focus to the planning strategies.
- Provide environments that engage with the current and future learning strategies.
- Develop an assembly realm suitable for all of school population integrated with modern free play landscaped areas.

DESIGN INTENT

- Design new facilities that offer transparent learning spaces and provide visual and physical connections between spaces, people and resources.
- Create connectivity with the learning spaces to the hall, library and outdoor gathering and play spaces.
- Develop a central realm to the sites building configuration and open space relationships.
- Express the physical presence of the school's arrival and entry.
- Establish various typographies to offer better activity choices.
- Improve and encourage community integration and inclusion within the site.
- Build aesthetically pleasing vernacular and modern architecture that responds meaningfully within the existing sites context, environment and climatic conditions.
- Provide large covered areas for learning and whole of school community gathering which can integrate with the community hall facility.
- Rationalize site pedestrian access and on site vehicular accommodation.
- Include environmental sustainability measures into the design of the building fabric, its consumption of energy and its response to passive climatic control.



2 PROPOSED SCHOOL SITE
NTS



1 SITE LOCATION PLAN
NTS

SITE CONTEXT

The new primary school at East Leppington will be located on a site within a green-field development that is expected to generate substantial population and school age population growth. The site allocated for the school is approximately 3.0 Ha.

The main road address to the site is Willowdale Drive which is to its north-east boundary that connects from the town centre. Commissioners Drive is parallel to the south-east boundary and the other secondary road, Elkhorn Street is along the south-west boundary. To the north-west boundary there is a storm water easement and Sydney water supply canal.

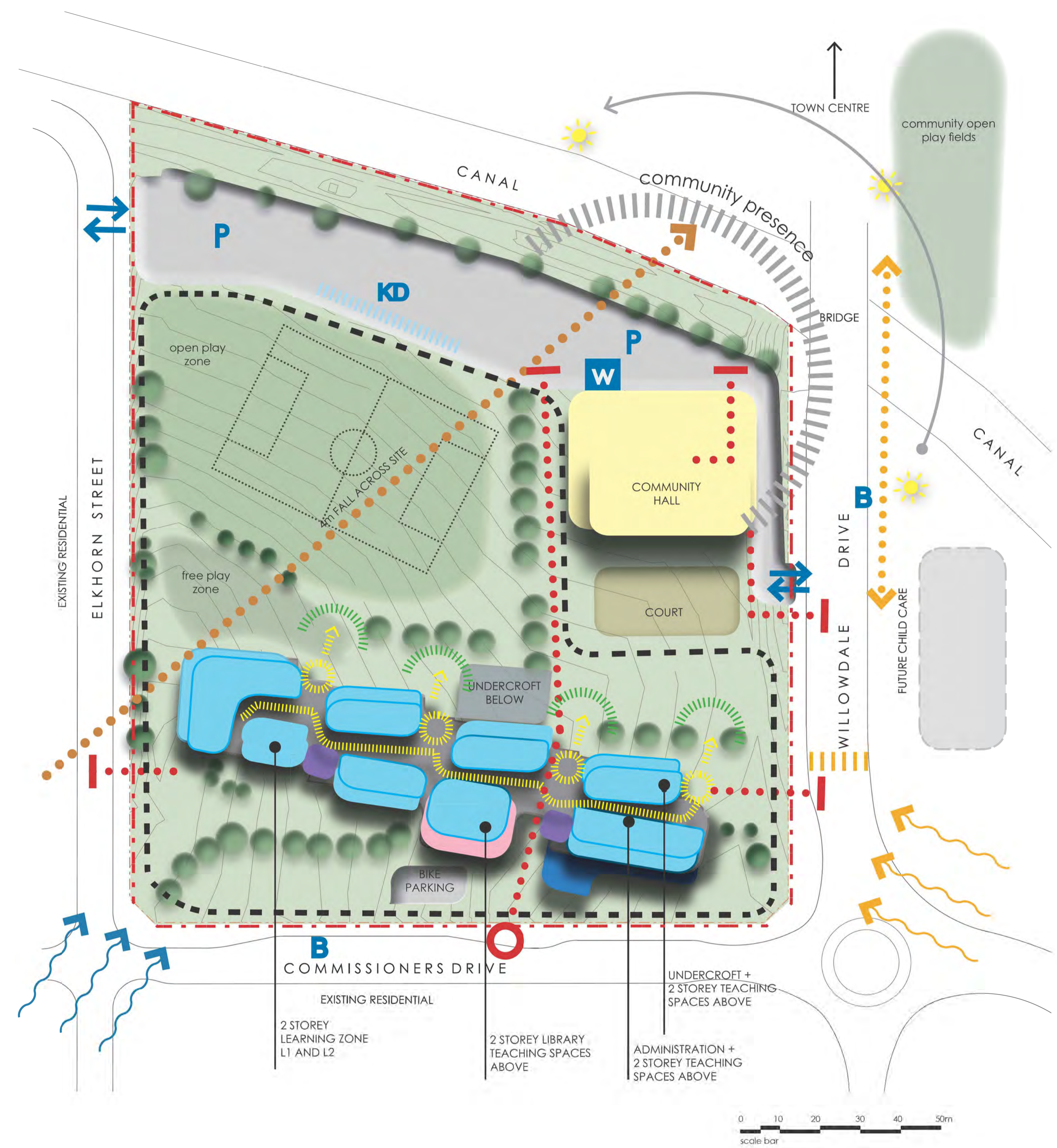
The site falls from south to north consistently 1 in every 45m resulting in 4m overall across the site. The site is void of any existing vegetation. There is a traffic roundabout at the junction of Willowdale Drive and Commissioners Drive to the east corner of the site. Commissioner Drive is widened enable road side stopping. Low density residential housing development has occurred along Commissioners Drive and Elkhorn Street. Across Willowdale Drive there will be a future child care centre development and council open space recreation and sport fields to the north of the canal and its bridge.

ACCESS

Because of the Community Hall component of the project, site access is defined for cross purposes. The car parking component is positioned to the west of the site adjacent to the canal, and as such the main vehicular access is proposed from Willowdale Drive. This two-way access point will provide secure entry to the community hall and to the staff car park. During out of school hours, the staff park can be utilised by the community.

In addition, a secondary vehicular site access point is proposed from the western end of Elkhorn Street to the carpark for school staff use. A small visitors parking area is proposed from Commissioners Drive adjacent to the school administration centre.

Pedestrians accessing the site is from all three boundaries with roads. The main entry to the community hall is off Willowdale Drive where a proposed crossing and public bus stops will be. Commissioners Drive is widened to afford a kiss and drop zone and is where the main entry is to the School. Secondary pedestrian access to the school from Willowdale Drive and Elkhorn street is also proposed to ease congestion during bell times.

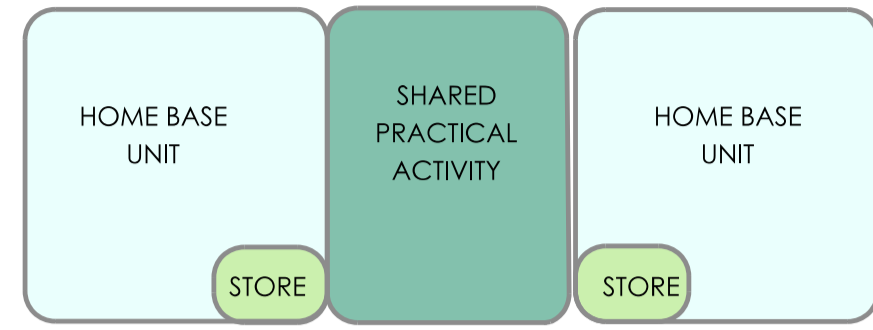


LEGEND

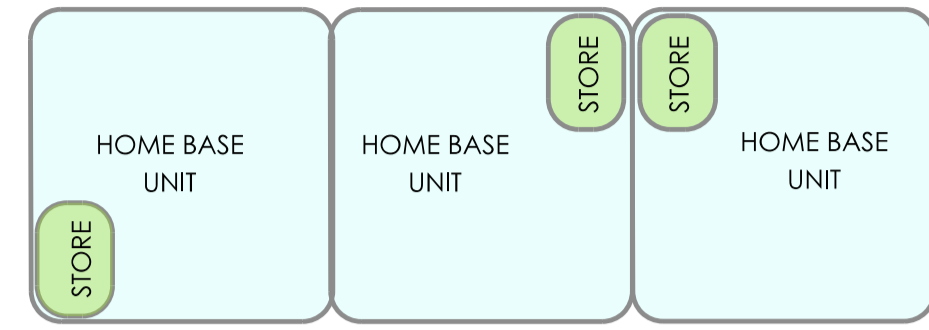
■ Security Fence	▨ Ground level connectivity	○ Practical Activities	➔ Fall across Site	■ Parking	▨ Pedestrian Crossing
- - Site Boundary	■ Amenities	○ Canteen	○ Main Access	■ Kiss and Drop	▨ Building Connectivity
■ Site	■ Library	■ Hall	○ Secondary Access	■ Bus Bay	▨ S/E Wind Harsh
■ Parking	■ Canteen	■ Administration	○ Pedestrian	▨ N/E Wind Favourable	
■ COLA	■ Hall				

1 SITE CONTEXT ANALYSIS NTS

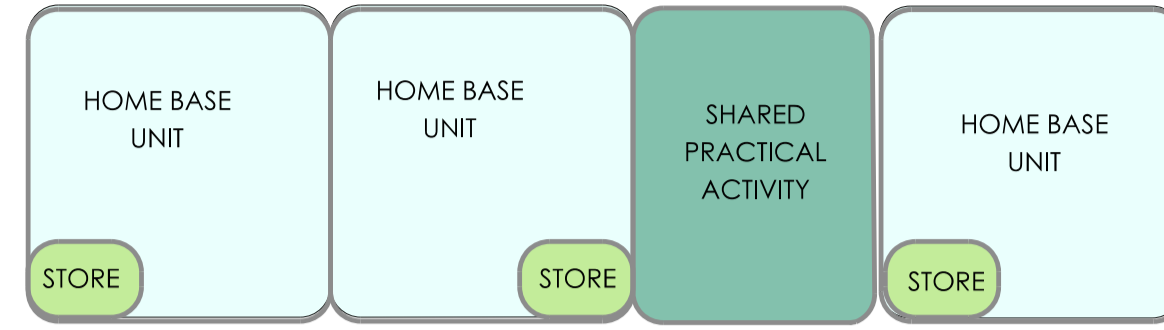
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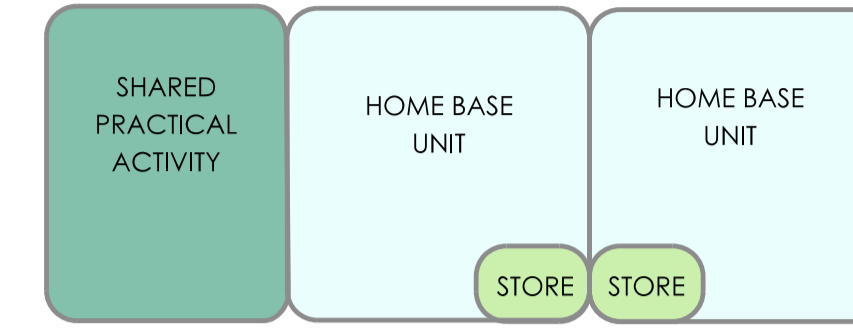
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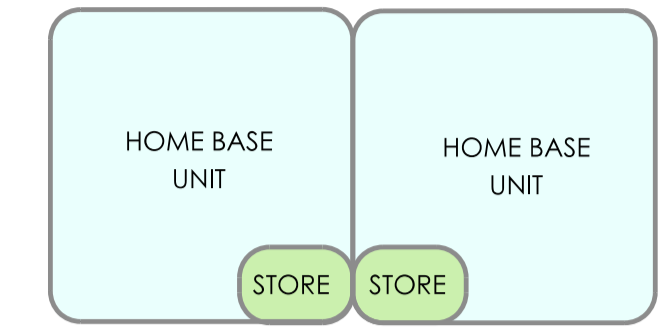
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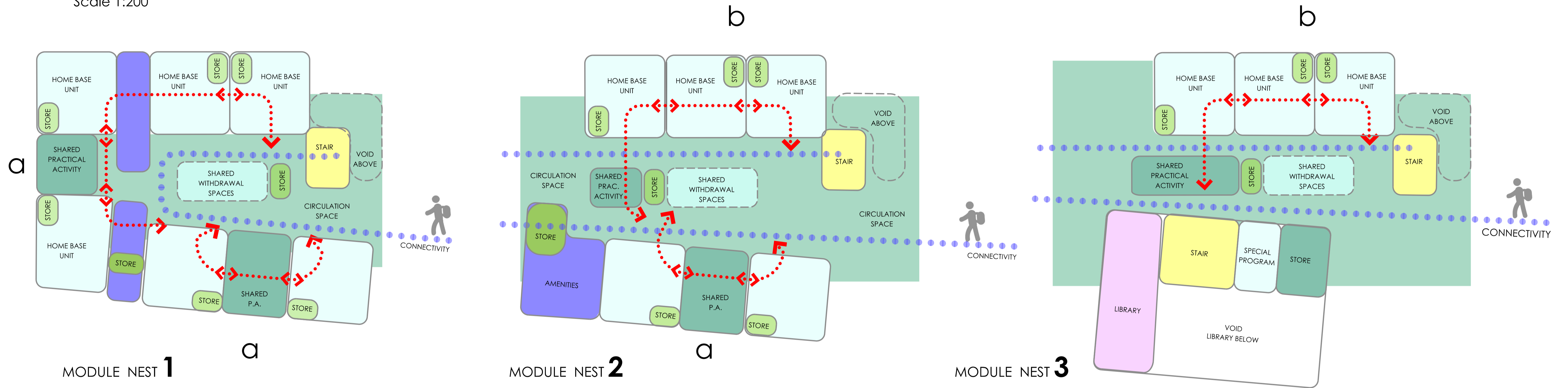
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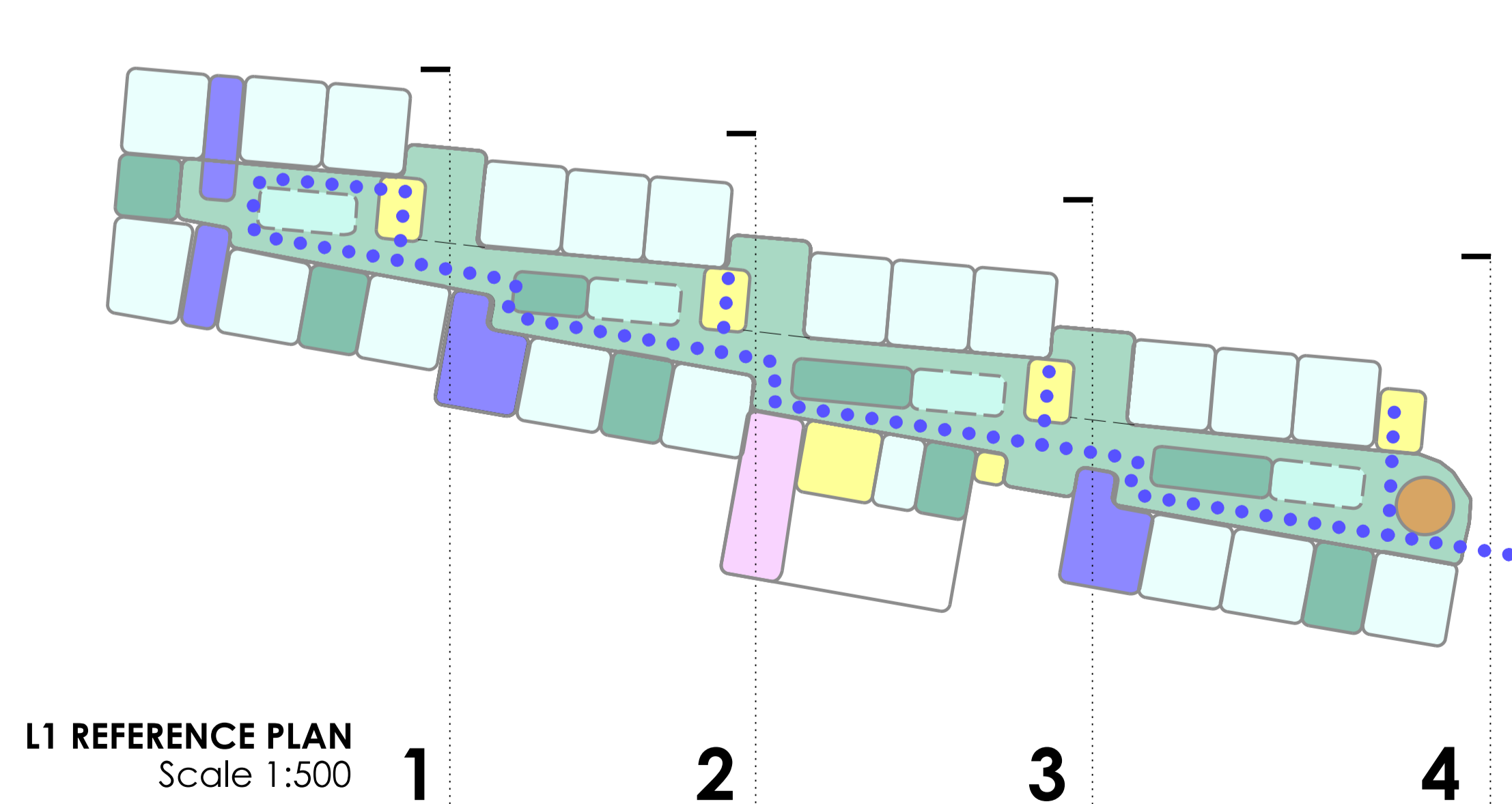
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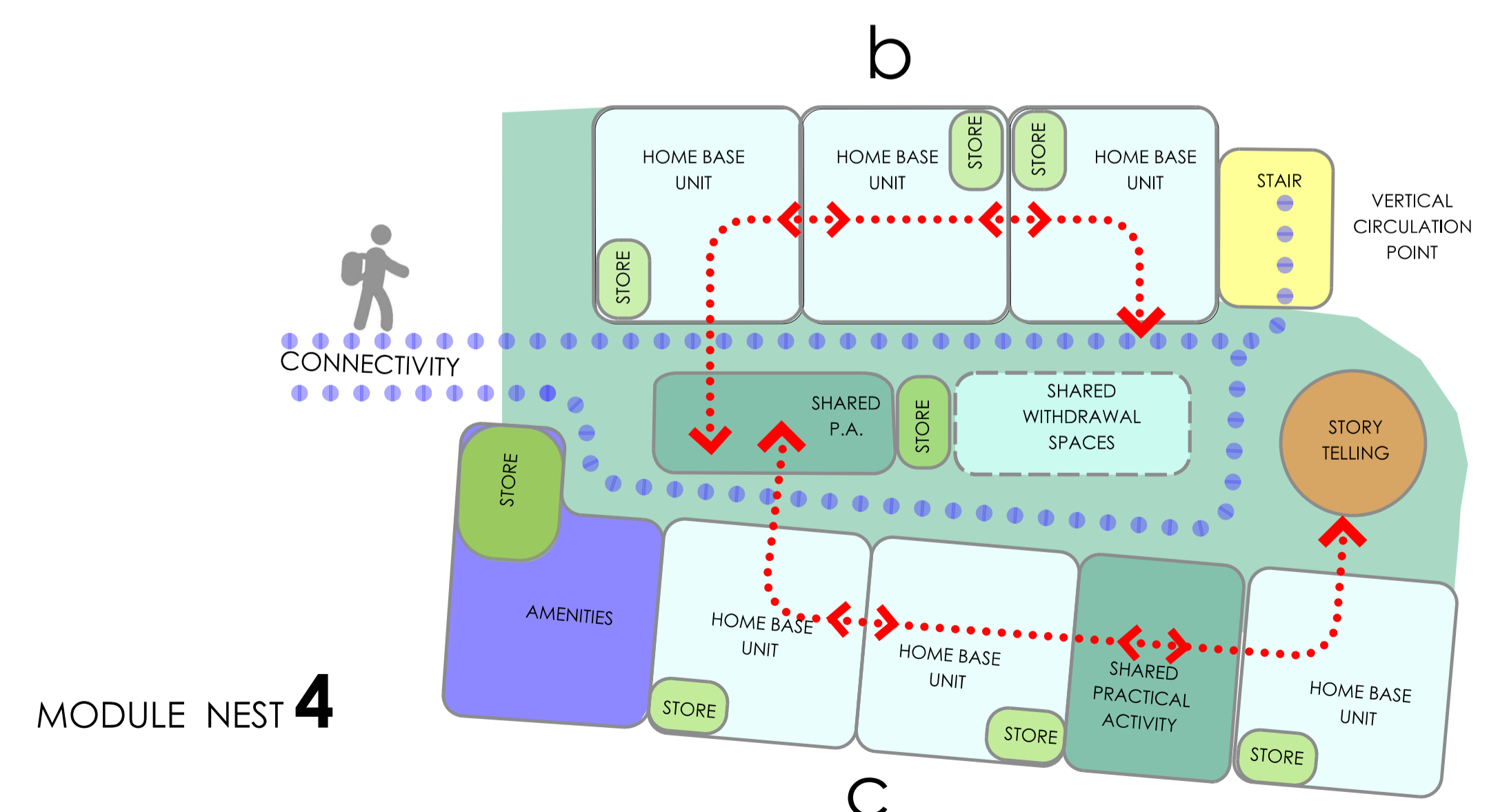
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MODULE NESTS
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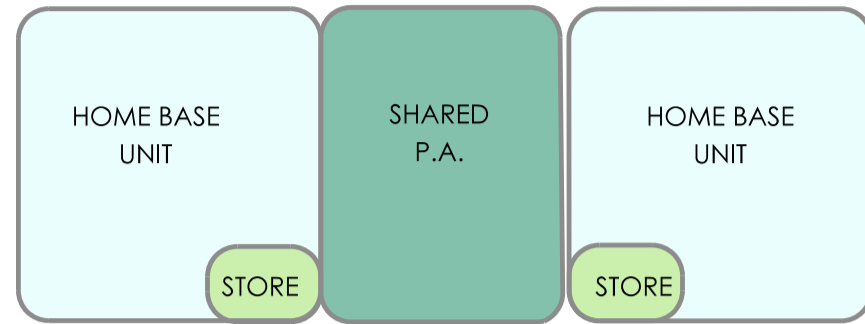


L1 REFERENCE PLAN
Scale 1:500

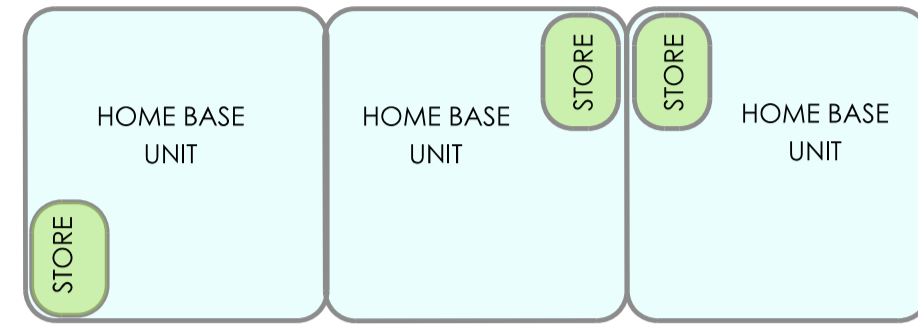


MODULE NEST 4

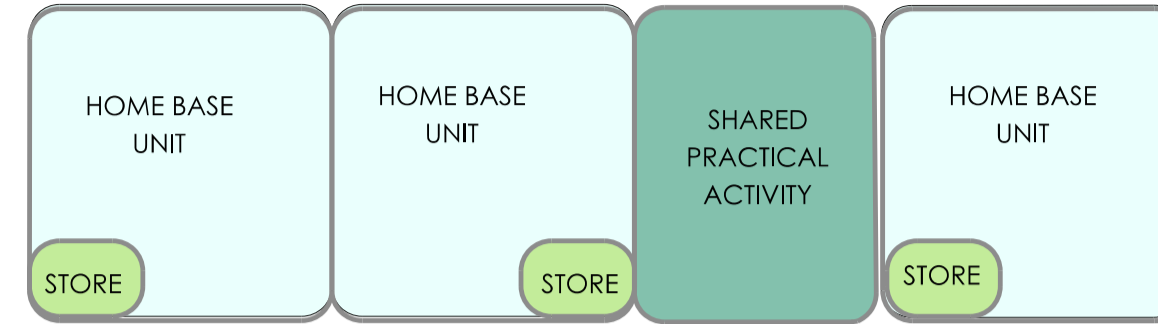
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MODULE TYPE b



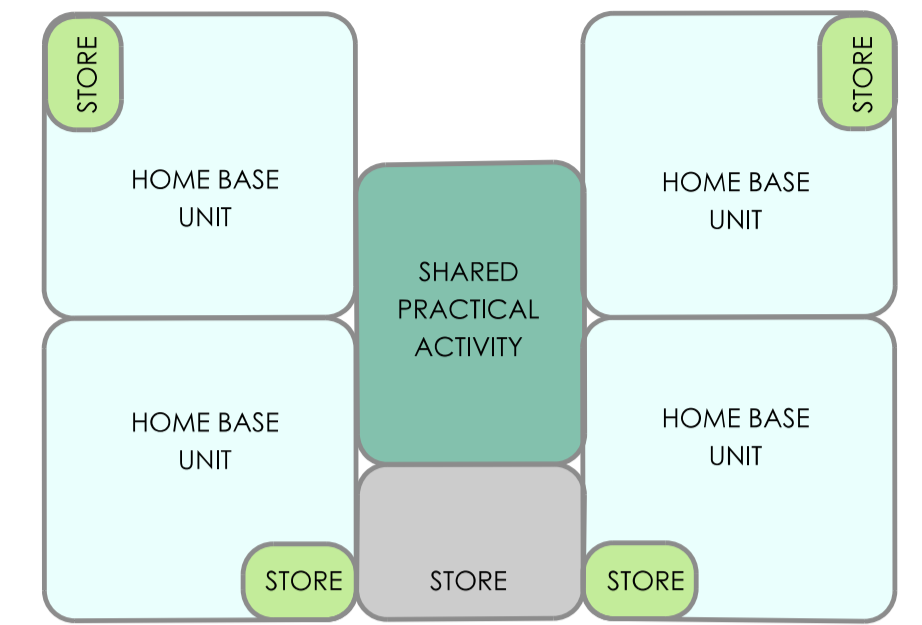
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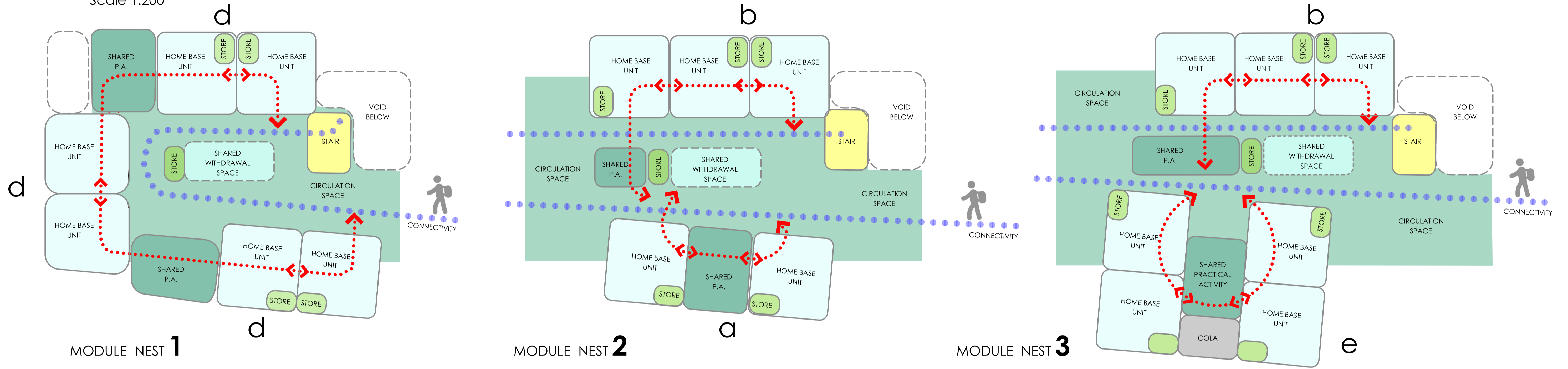
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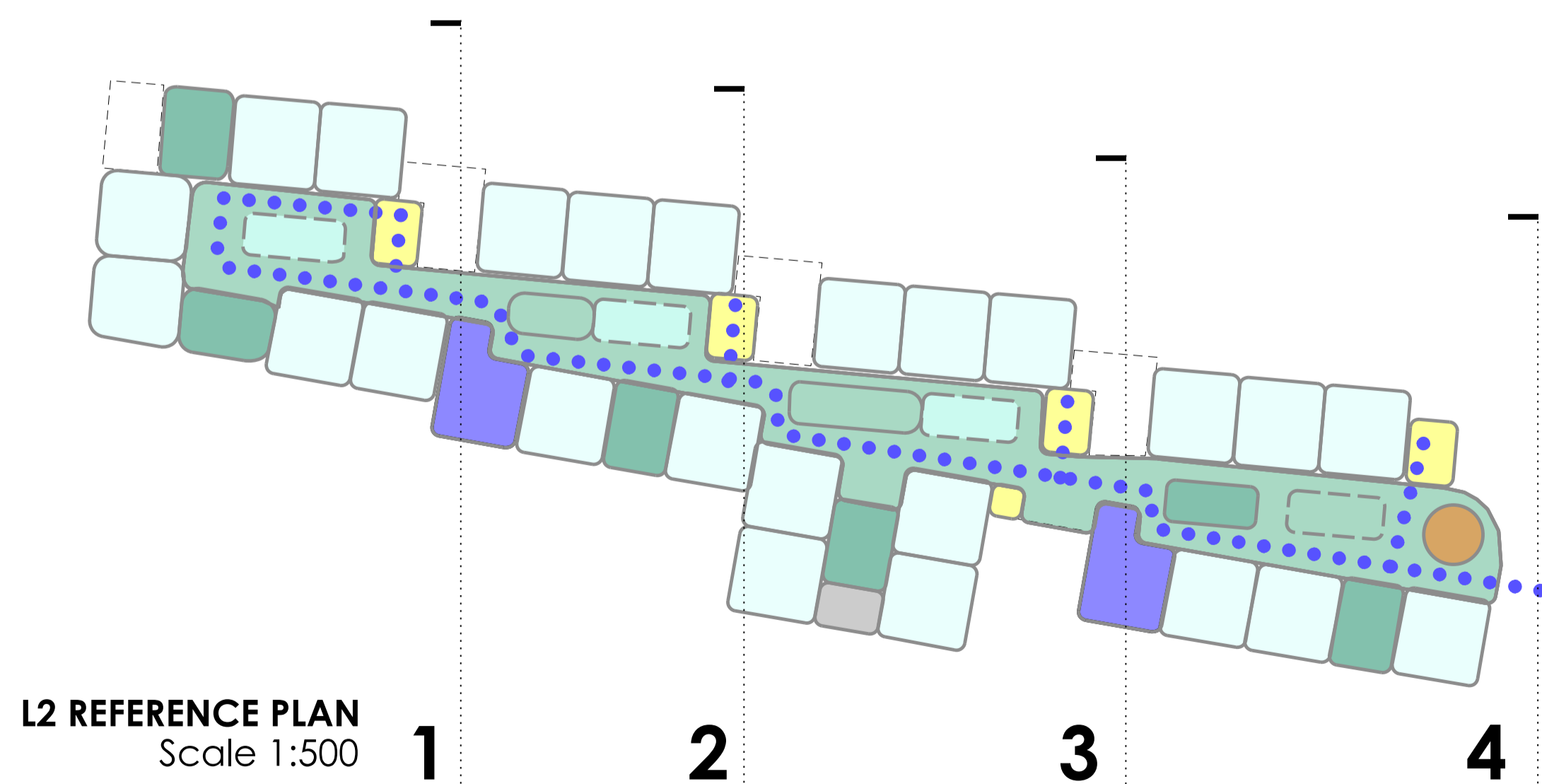
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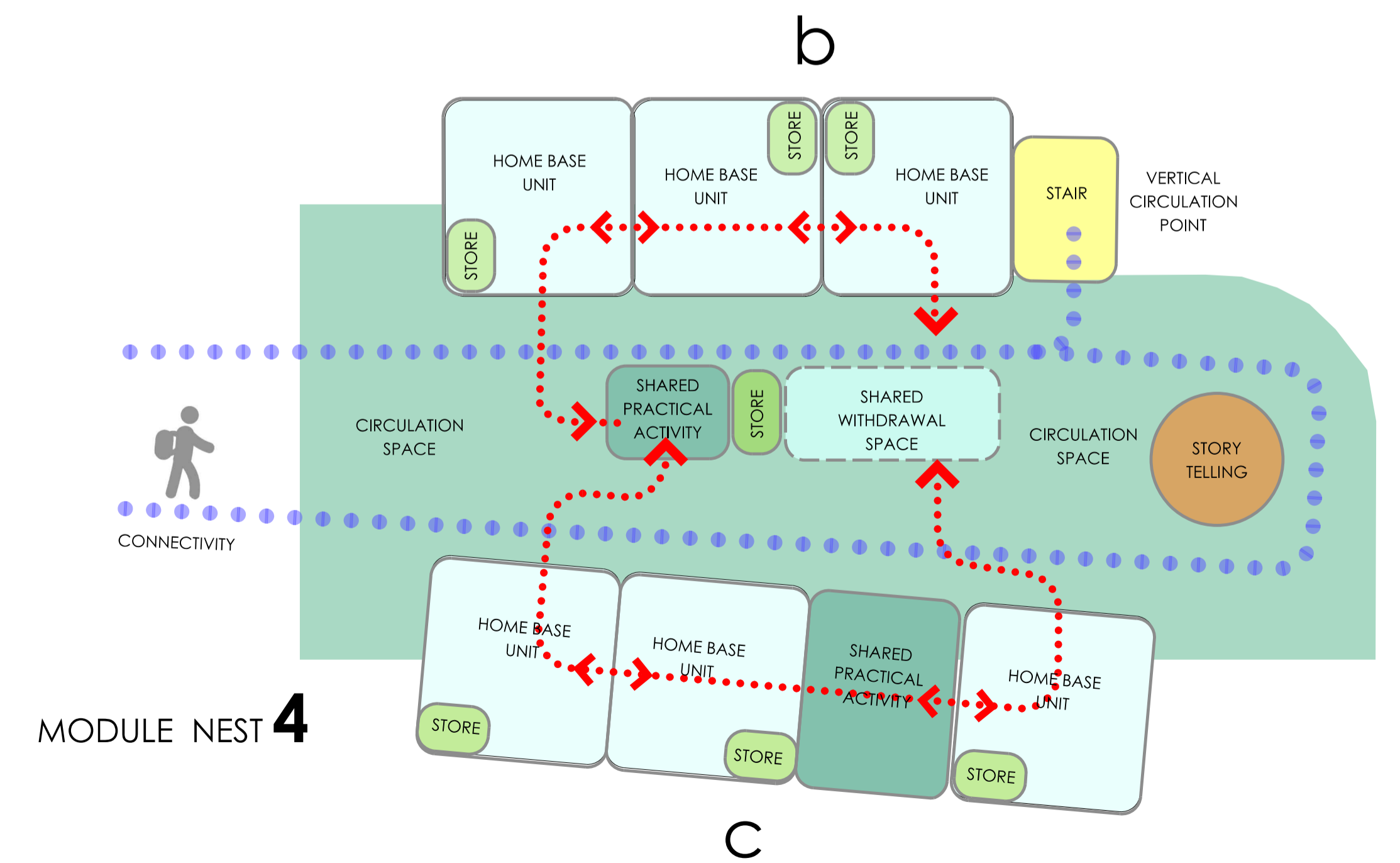
MODULE TYPES
Scale 1:200



MODULE NESTS
Scale 1:200



L2 REFERENCE PLAN
Scale 1:500



MODULE NEST 4

BUILT FORM

The site has no existing buildings. The proposed built form is a mixture of building mass consistent with single storey, two storey and three storeys. The varied building mass will accommodate the storeys in keeping with the sites gradient.

The proposed new built forms will incorporate modern materials and finishes, and reflect a vernacular architecture of contemporary learning facilities. A mixed palette of durable light weight prefinished cladding materials, glazing and a varied play of skillion roofs is adopted to integrate and emulate the residential character of the immediate built environment and its context.

SUSTAINABILITY

Passive climatic control measures are intrinsic to the design approach. Siting and orientation of the new buildings will afford good solar amenity from the north and capture prevailing breezes to provide crossflow ventilation.

Proposed large building openings will offer flexibility to enclose and open up the learning and working environments to encourage active control of the climatic opportunities.

Extensive undercroft areas are designed to provide shaded areas that are adjacent to internal building voids allowing for air movement to draw throughout the internal spaces. The pergola style translucent roof at high level will amplify natural light filtration from above and throughout the middle of the buildings.

In accordance with the EFSG requirements, building fabric insulation, shaded glazing, solar panel energy, grey water capture and reuse, recycled locally sourced materials and finishes, BMS including energy efficient lighting will all form elements of the development to ensure a high quality of environment sustainable outcomes.














PUBLIC REALM

The school community realm is central to the development. The undercroft, and assemble area aim to provide a congregation space that physically and visually connects with the site access points, learning areas, administration, covered outdoor learning areas, open play areas and the hall.

The canteen area and its position is designed as the hub of this space to encourage user interaction, creating a common ground to the school site which is adjacent to the front entry area.

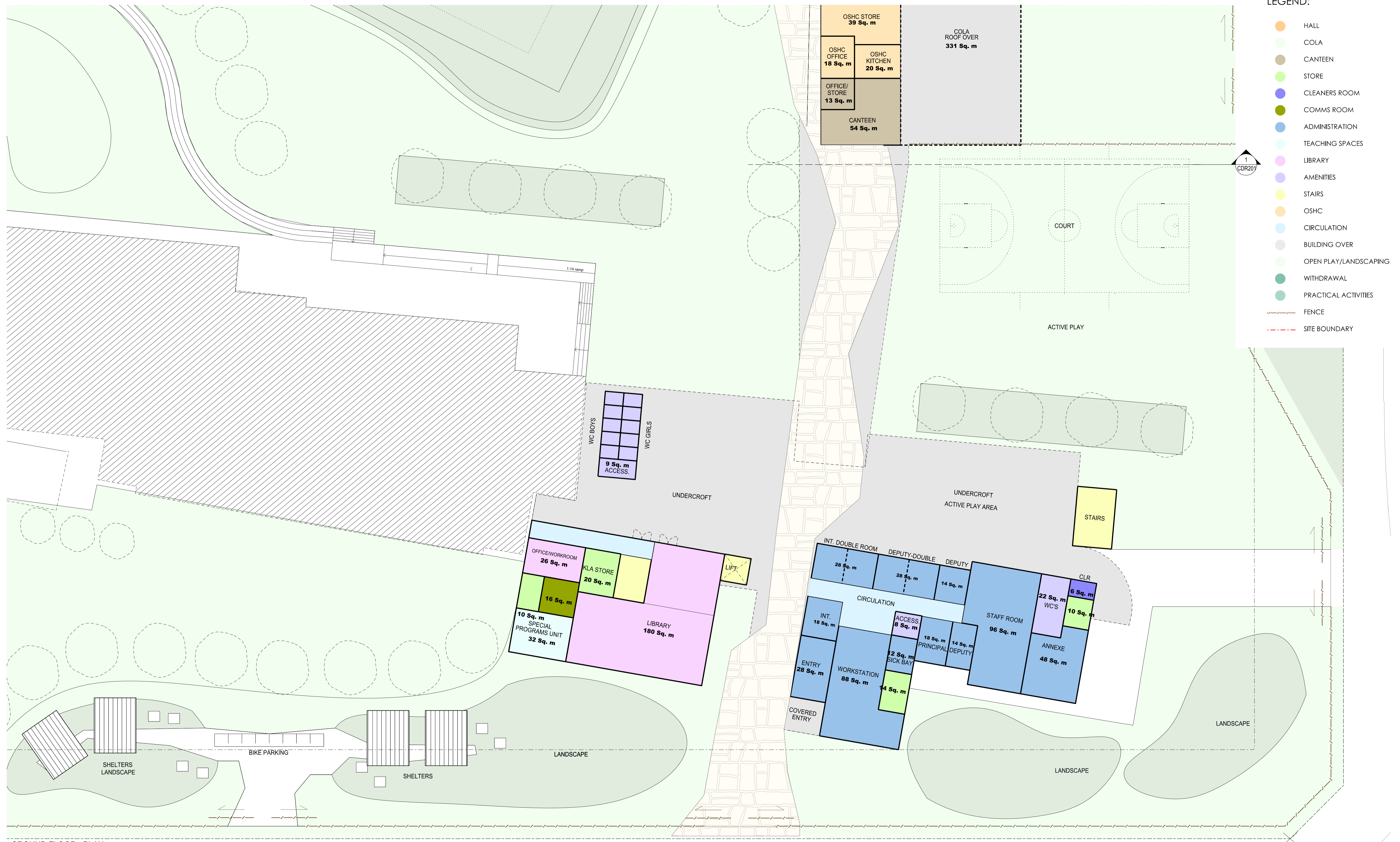
It is visualised that this area will provide a 'heart' to the site and its facilities where the school community at large will gather, play and socialise.

SITE LEGEND:

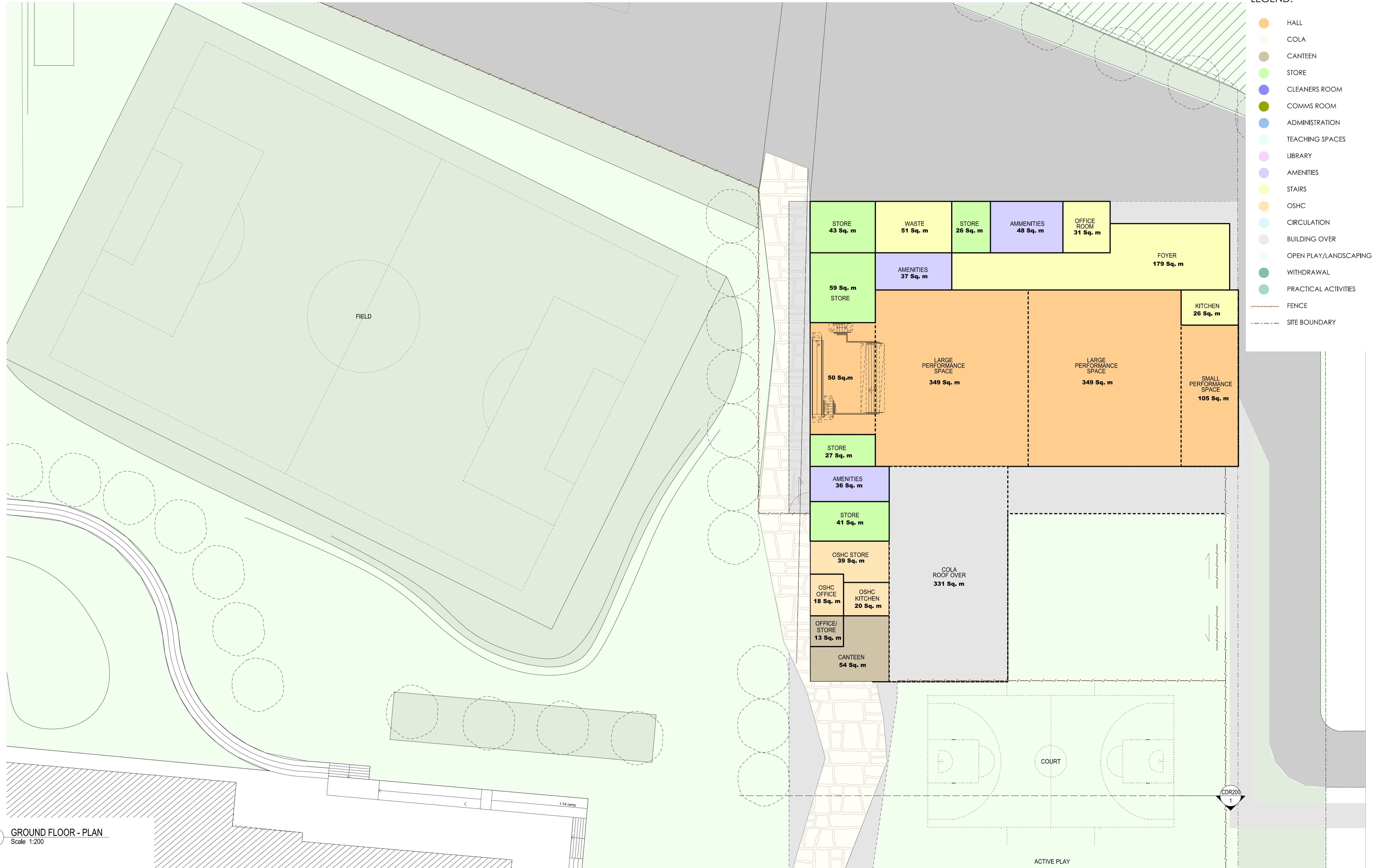
-  KISS AND DROP
-  WASTE COLLECTION, DISPOSAL AND DELIVERY
-  VEHICULAR ACCESS
-  PEDESTRIAN ACCESS/ CONNECTIVITY
-  SITE BOUNDARY
-  FENCE
-  SUGGESTED CROSSING
-  SCHOOL COMMUNITY REALM
-  PHYSICAL & PHYSICAL CONNECTIONS
-  BUILDING HEIGHTS
-  SOLAR AMENITY
-  VOID ALLOWING AIR MOVEMENT
-  CROSS SITE VENTILATION



1 SITE PLAN - GROUND FLOOR
Scale 1:500



1 GROUND FLOOR - PLAN
Scale 1:200



1 GROUND FLOOR - PLAN
Scale 1:200



- LEGEND:**
- HALL
 - COLA
 - CANTEEN
 - STORE
 - CLEANERS ROOM
 - COMMS ROOM
 - ADMINISTRATION
 - TEACHING SPACES
 - LIBRARY
 - AMENITIES
 - STAIRS
 - OSHC
 - CIRCULATION
 - BUILDING OVER
 - OPEN PLAY/LANDSCAPING
 - WITHDRAWAL
 - PRACTICAL ACTIVITIES
 - FENCE
 - SITE BOUNDARY

1 LEVEL 1 - PLAN
Scale 1:200



- LEGEND:
- HALL
 - COLA
 - CANTEEN
 - STORE
 - CLEANERS ROOM
 - COMMS ROOM
 - ADMINISTRATION
 - TEACHING SPACES
 - LIBRARY
 - AMENITIES
 - STAIRS
 - OSHC
 - CIRCULATION
 - BUILDING OVER
 - OPEN PLAY/LANDSCAPING
 - WITHDRAWAL
 - PRACTICAL ACTIVITIES
 - FENCE
 - SITE BOUNDARY

1 LEVEL 1 - PLAN
Scale 1:200



2 AERIAL VIEW
WILLOWDALE DRIVE



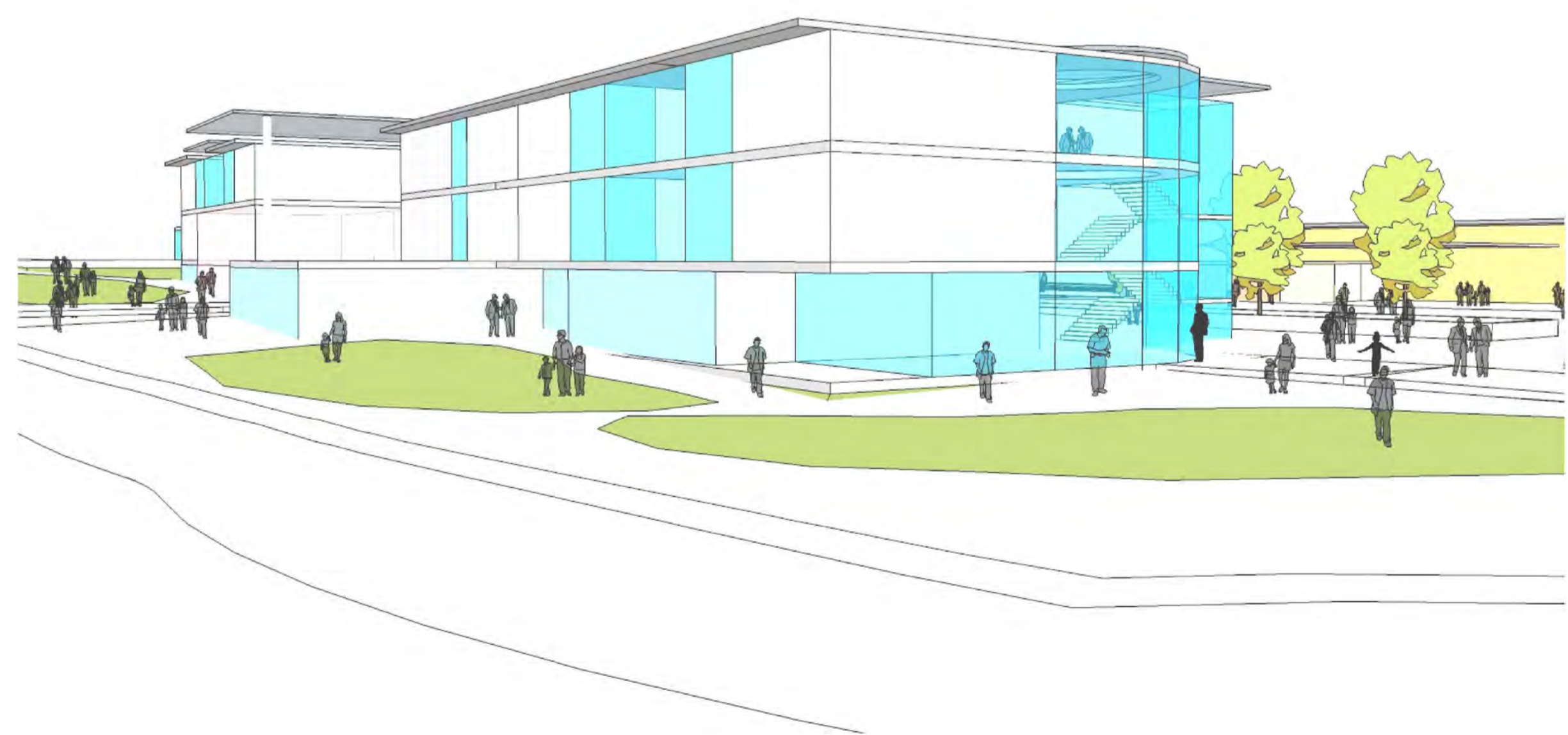
1 AERIAL VIEW
COMMISSIONERS DRIVE



1 SCHOOL MAIN ENTRY
VIEW 1



2 NORTH WEST ELEVATION
VIEW 2



3 AT ROUNDABOUT
VIEW 3



4 FROM WILLOWDALE DRIVE
VIEW 4