Roseville College SWELL Centre SSDA - Architectural Report

04 Nov 2019





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1. INTRODUCTION

The Roseville College is bounded by leafy Victoria Street, Bancroft Avenue and Recreation Avenue. The principal students' main entry into the College campus is located on Victoria Street. Majority of the College's administration buildings are located on Bancroft Avenue. The College's surrounding area is generally residential in single storey or two storeys cottages. They are new medium density residential apartment buildings on the Victoria Street.

The College is within the public transport routes. It is within 6 minutes walk to and from the Roseville Train Station and services by public buses that run between Wahringah, Chatswood and Belrose.

Since the first beginning in 1908, Roseville College has grown through their progressive programs of redevelopment and refurbishment. In 111 years, the college has constructed additions of two major buildings on their campus, their Multi Purpose hall and the Joy Yeo Performing Arts Centre.

As the College's existing outdoor pool which was opened in 1973, has reached the end of its life and cannot be used during winter. It also is now costing the College a considerable amount to maintain its operation, there is a need for a new improved facility for the students.

Roseville College has always been known to strive hard in sports. Constructing the new Sport and Wellbeing Centre facility will replace the aging existing pool and outdoor multipurpose courts. The School also has a vision for this new facility to be able to offer their students a contemporary learning environment for health and wellbeing where they can develop their personal, team and leadership skills in all aspects of living well.

The design proposal will replace the existing outdoor courts and a house at 37 Bancroft Avenue. The proposed new Sport and Wellbeing Centre facility will consist of:

- An indoor swimming pool to allow year round, all weather learn to swim activities and elite squad training.
- · An outdoor court area to replace existing courts.
- · A strength and conditioning gymnasium.
- Nutrition and food technology space
- Flexible general learning spaces
- Two levels of underground carparks for staff and students.

The two new carparks are an existing DA which will soon lapse, however the similar design is maintained in this proposal.



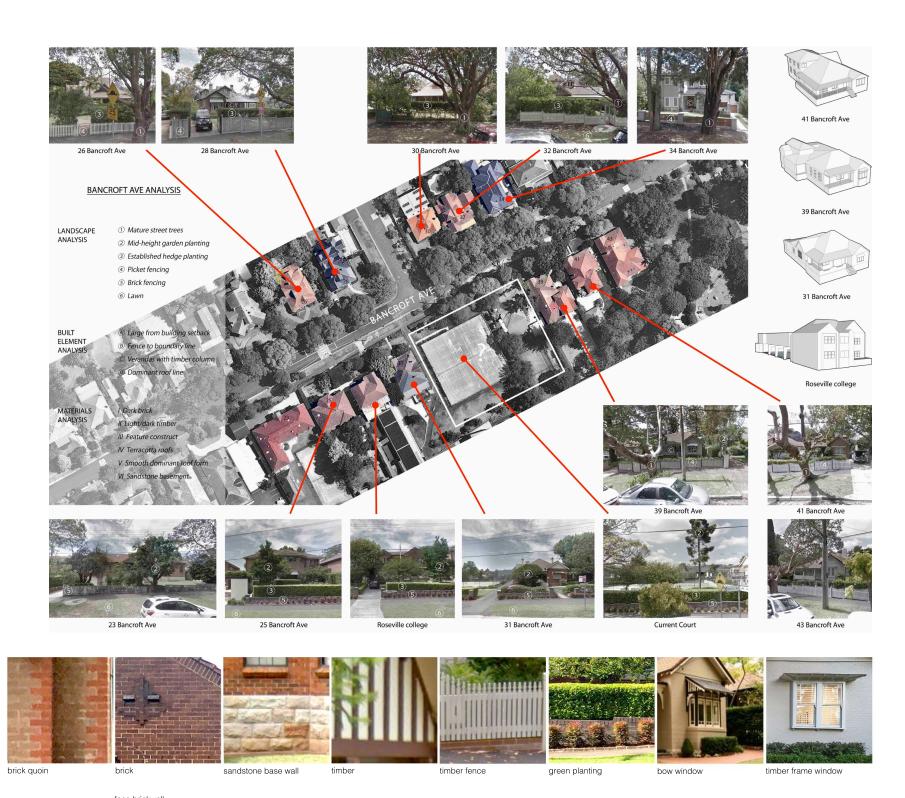


2.1. CONTEXT & NEIGHBOURHOOD CHARACTER

Roseville College is situated in area that has a strong contextual and neigbourhood character. The streets are lined with large trees and buildings in the old styles of Inter War, Federation bungalow or Art Deco especially the Bancroft Avenue.

- Inter-war featuring verandah,barrel vaulted ceiling double hung stained glass windows style,
- Red face brick Federation Bungalow set on sandstone foundations, gables roof end, a wrap-around verandah with timber detailing, timber framed lead light windows.
- · Art Deco style
- · Modern medium density apartment building on Victoria Street.

The proposed student Sport and Wellbeing Centre is sited in the north eastern corner of the campus facing the Bancroft Avenue and adjacent to the heritage conservation zone to the east and north of Bancroft.



face brickwall painted brickwall rendered & painted brickwall bagged brickwall and painted



2.2. CONSTRAINTS AND OPPORTUNITIES

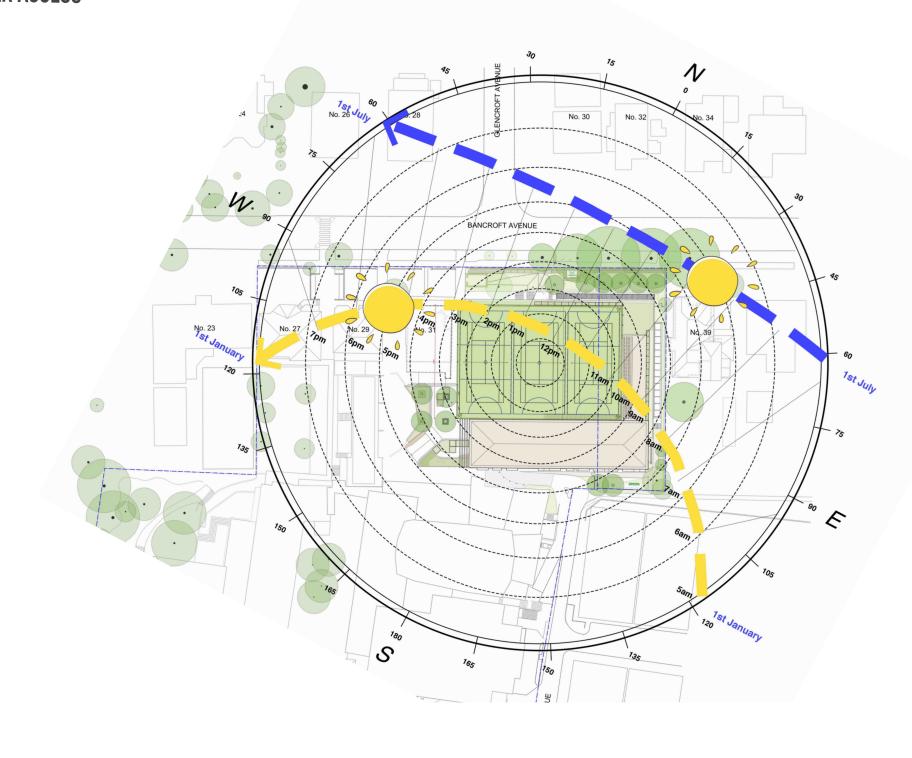


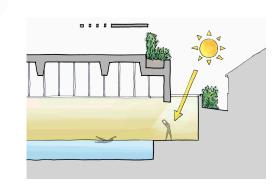






2.3. SOLAR ACCESS





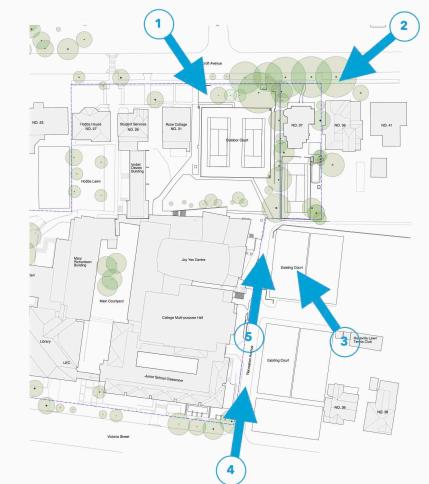


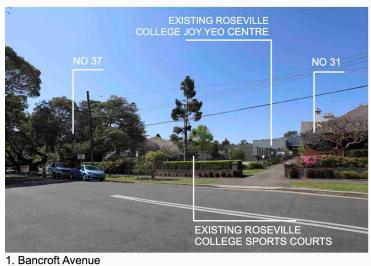
2.4. PUBLIC TRANSPORTS





2.5. EXISTING SITE PHOTOS









3. Roseville Lawn Tennis Club



4. Intersection between Victoria Street and Recreation Avenue



Recreation Avenue



3. ARCHITECTURAL STATEMENT

The school's new SWELL (Sport and Wellbeing) Centre is a necessary addition to the college's campus of high quality teaching buildings. The Centre replaces some important but ageing and outdated facilities, the existing narrow 25m undercover swimming pool, and the old synthetic courts to Bancroft Avenue. The new project also provides some much needed on-site carparking.

These existing facilities suffer from a lack of integration with complimentary teaching facilities, which could extend their educational value from teaching spaces directed solely to coaching students physical performance, to a more integrated learning environment which links theoretical conceptual learning to physical outcomes.

The school wishes to create a Learning Centre directed towards teaching/learning total wellness through physical exercise and associated technical and conceptual subjects. It is important that the quality of the internal spaces promote this concept. To accomplish this outcome it is important to create a mix of light- filled, healthy and inspiring spaces for flexible learning, linked with physical exercise (aquatic and non aquatic) areas.

These important aspects of the project have been achieved by the proposed design through:

The sense of volume and open-ness in the Pool Hall combined with natural timber finishes where possible.

Maximising the natural light in the Pool Hall and creating views out from the Swimming Centre to areas of open sky and trees, promoting natural inside/outside linkages to an otherwise underground facility.

Grouping the learning areas in a wing of new flexible spaces whose layout and design creates a range of possible methods of utilisation with flexible, moveable and adjustable partitions, as well as connected smaller areas which encourage students to interact with each other in a range of modalities.

Creating direct connections between the new internal learning spaces and the physical exercise sports areas (courts, gymnasium, and pool hall) to encourage operational and pedagogical links between all the facilities which join to make the SWELL facility.

The Program of the Proposed Building

The new building will accommodate 4 main zones with linked usages.

A new underground carpark for 56 cars, on 2 levels located below the western end of the new sports courts.

A new Swimming Centre with an 8 lane, 25.0 metre pool with supporting change rooms and amenities located to the side of the pool area. The Swimming Centre is largely underground, cut up to approximately 4.7 metres into the natural ground below the sports courts.

A wing of 9 teaching/learning spaces linking closely to the outdoor sports courts on Level 3 (upper ground) and to the new gymnasium/physiological learning space on Level 2 (lower ground).









3. ARCHITECTURAL STATEMENT

The new sports outdoor courts. A multipurpose outdoor sports area which can be used for a range of court based sports surrounded by covered and internal learning spaces that are linked to the teaching/learning rooms.

Relationship to the site

The proposed new SWELL project is located primarily below ground on a site which combines the existing school sports courts fronting Bancroft Avenue and the neighbouring residential property at 37 Bancroft Avenue. The existing cottage located at No 37 will be removed and the site properties amalgamated into the school campus. The amalgamated site will be the location for the new sports courts which will extend further east than the current playing areas, they are set at a level which is at about current ground level at their western end. The new Carpark and Swimming Centre will be constructed below the Courts, and the new Teaching Wing will be constructed to the South.

The new open deck of the sports courts, which forms the roof of the underground facilities below will accommodate 3 multipurpose courts, the playing area is to be located well away from the existing neighbouring cottage at 39 Bancroft Avenue with an approximate 14 metre horizontal separation between them.

This separation zone contains a stepped, landscaped, visual and acoustic buffer between the courts and the residential property.

The site slopes down west to east along Bancroft Avenue by just over 3 metres and also slopes away from Bancroft Avenue towards the South so that there is a natural cross fall of about 5 metres from the NW to the SE corner.

The design takes advantage of this cross fall to locate the southern wing of the teaching rooms/areas to face the southern boundary along Recreation Avenue and the pedestrian path linking it to the nearby Bancroft park.

The southern wing has a 2 storey height along the boundary when viewed from the South, but appears to be only single storey above the playing fields when viewed from Bancroft Avenue to the north. This places the main entry to the new Building at the western end of the wing at the level of the main school courtyard which allows the upper level of teaching areas to open up and connect directly with the sports courts to promote the pedagogical connection discussed earlier.

The interface with the Neighbouring Property at 39 Bancroft Avenue

Much effort has been given to ensuring that the design of the new building creates a minimal impact on the amenity of the neighbouring property at No. 39 Bancroft Avenue, by presenting them with an attractive, stepped facade which minimises the apparent height of the new project, with a large setback to the new active areas, and prevents overlooking through the angling and positioning of skylights to the Pool Hall and windows to the Southern teaching wing.

The relationships can be seen on Section 03 and Section 04 on drawing DA 09.

The stepped building form to the eastern facing facade along the boundary hides the skylights to the Pool Hall behind hedge planting which is about 1.5-2.0 metres high and creates a large 14.0 metre horizontal buffer zone between the sports courts and the boundary to number 39 Bancroft Avenue with stepped landscaping and a large 3.0 metre high hedge.

The skylights incorporated in this stepped form are necessary to provide natural daylight to the Pool Hall in line with the building concept and the requirements of the NCC Section J for natural light, although they cannot be seen from the neighbouring property and have minimal impact on the amenity of the neighbours.







3. ARCHITECTURAL STATEMENT

Architectural Built Form

The proposed building is designed in a simple linear arrangement with a long rectangular form above ground fronting to a large open multipurpose sports court area which itself faces the front sheet. The sport courts are on one level built on a stepped landscaped platform which rises from a naturally sloping site.

The form of the building base is further broken into smaller built forms to the north and east by changes in materials and the insertion of linear planting beds and hedges as the building steps up from ground level. These devices were selected to minimise the appearance of the height of the building and to increase its apparent setback from the side and front boundaries.

The decision to place the proposed car parking and the new Pool Hall largely below ground has resulted in a built form for the project which appears to be much smaller than the actual size of the building.

The visible portions of the project are largely limited to the sports courts (which are at ground level (in the NW corner of the site) and the linear form of the Southern Teaching Wing which has a 2 storey facade facing south and a single storey facing the open sports courts to north.

Although the sports courts are at ground level, the street falls away to the east creating a facade of about 3 metres height at the eastern end. This facade is largely hidden from view behind a mix of existing street trees and new advanced planting of 6 native trees in the front setback. The facade is glazed with full height windows which allow natural light and controlled views out from the Pool Hall below. The windows are protected along their upper edge by a continuous horizontal sunscreen/sunshade element which allows views up through it from inside, but protects the windows from north-easterly and north-westerly angled direct sun.

The Southern portion of the site is occupied by the 2 storey form of the Southern Teaching Wing. This part of the building is faced with dark chocolate coloured brickwork matching those which are used extensively through the existing campus and which appears often in the heritage fences and residential houses in the surrounding suburb.

The Southern facade of this wing is punctuated by a series of large bay windows of various sizes. The bay windows form a delightful regular asymmetrical pattern on the facade but also create a series of different seating and usage zones in the teaching rooms/spaces they help to enclose. The bay windows reflect and extend the use of similar spaces in other important buildings on the campus.

The Eastern facade of the project is a composition formed by the end of the linear Southern Teaching Wing and the stepped base below the playing courts described earlier. The Southern Wing is clad in the chocolate brown brickwork, while the base below the sports courts is clad with light-grey glazed bricks to help differentiate the visual forms and relate to the mixed colour palette of the precinct.



Level 3 Roof Courts & Classrooms



Level 2 Classrooms, Strength & Conditioning room, Plants & Carpark



Level 1 Swimming Pool. Change Rooms. Amenities. Plants & Carpark

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4.1. SITE PLANNING AND STRATEGIES

The proposed Roseville College refurbishment and extension is located on 29 & 37 Bancroft Avenue Roseville.

The site is subject to the provisions of Ku-ring-gai LEP 2015, under which it is zoned SP2- Infrastructure: Educational Establishment.

We note the Council has already provided Development Application approval for:

DA0261/16 – Progressive increase of number of students from 830 to a maximum of 1250 from the year 2016 to 2030. with a Development consent issued by Ku-ring-gai Council on 12 April 2017.

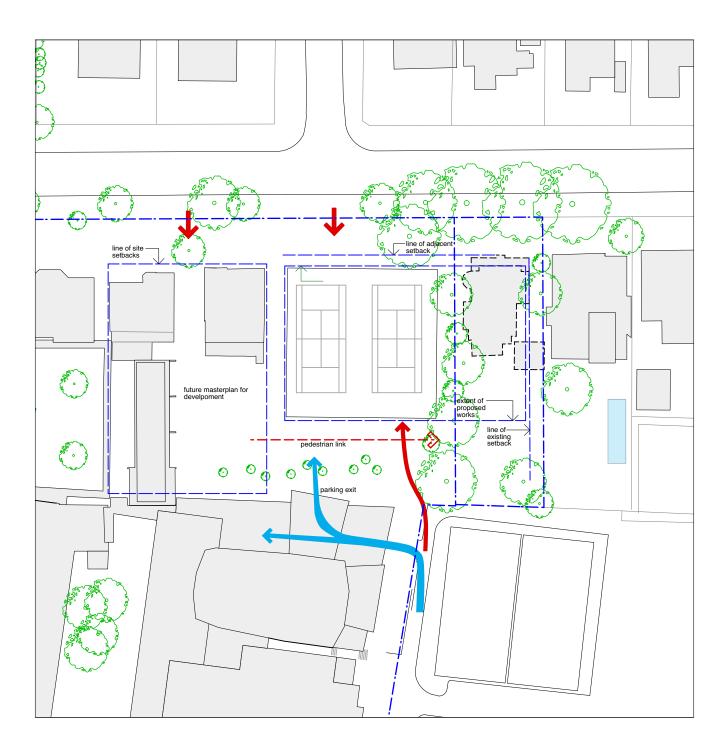
DA0262/16 – Demolish existing multi-purpose hardcourts, construct a building with one level of basement parking, one level of semi-basement parking, roof level multi-purpose hardcourts, access and driveways and associated landscaping. With a Development Consent issued by Ku-ring-gai Council on 3 February 2017.

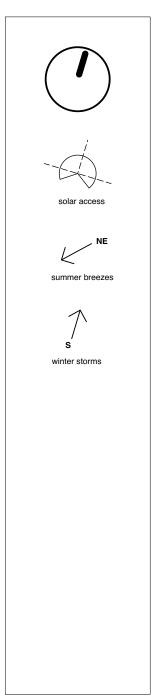
The College now currently occupies 29 Bancroft Avenue and proposes to construct the two story carpark, along with two multipurpose rooftop hardcourt with associated storage, amenities and complimentary; landscaping.

The newly acquired 37 Bancroft Avenue will allow for the amalgamation of sites and construction of a new swimming pool, strengthening and conditioning room, general learning areas, food technology teaching space and a third rooftop hardcourt, with associated storage, amenities and complimentary; landscaping.

The site presents several elements for consideration:

- · Sloping topography.
- Bound to the south with the Victoria Street.
- · Bound to the north by Bancroft Avenue.
- Bound to the east with existing Low Density Residential Areas.
- · Pedestrian links.
- Subconscious way-finding
- · Landscaping and breakout spaces







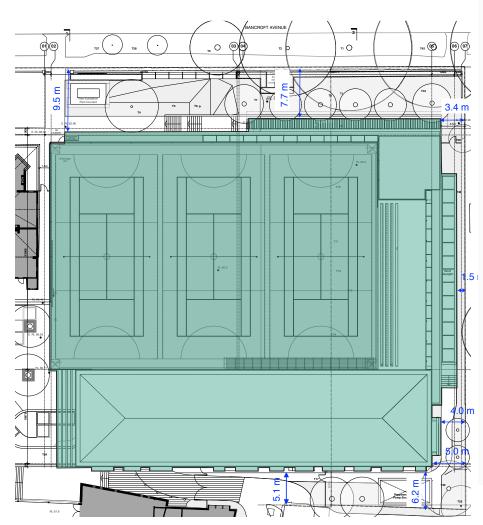
4.2. SCALE, TOPOGRAPHY, SETBACKS AND LEVELS

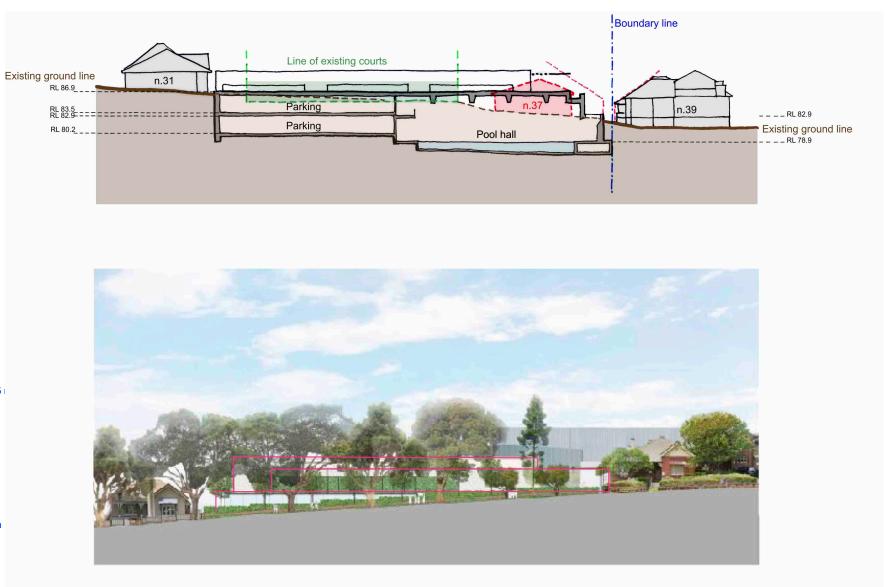
Scale of the proposed facility is stepped away from the side boundary is it rises in height.

Topographically the site rakes from west to east, with a gentle downward slope in a north-southerly direction toward Victoria Street.

The construction of the proposed buildings and carpark compliments the existing built forms and will enhance the visual built form of the area.

The subject site due to the location and setback from the eastern boundary of site 37 Bancroft Avenue will not overshadow the adjacent residences for a significant portion of the day sunrise through to 3pm nor will it have any significant adverse impact on views from a public place to the coastal foreshore.







4.3. RESPONSE TO CONTEXT

The subject sites, one of which is already part of the college and the adjacent newly acquired site easily lend themselves to the required additional carparking and new learning and teaching spaces.

The proposal will service the local Roseville community and suburbs permitting. The mix of land uses nearby the site ensures a mix of residents, shoppers and employees will utilise and be allowed to use the sporting and teaching facilities when available.

The surrounding developments, residents, customers and employees will not be impacted by the introduction of this facility renovation and extension to the adjacent acquired residential property to be demolished and incorporated to the adjacent college site, providing much needed expansion and new teaching facilities for the ever growing college requirements.

The proposal adopted separates the college uses allowing linked connections within the built form for pedestrian access.

Each form faces its environment with a separate axis which relates specifically to that 'building' and its form as well as to the particular parts of the college realm which it addresses.

The design of the buildings are proactive in creating entries and external spaces flowing from and relating to the individual circumstances of that form.







4.4. DESIGN OPTIONS

The design of the extension of the college faculties reflects the following design principles:

An importance and openness to the community as a whole.

Intimately connecting the design of teaching spaces with the quality of education received

Collaborative resolution of pedagogic and design issues with the client and architect

The College renovations and new buildings will be commence in mid 2020 to complete in end of 2021. It will actively engage with the adjoining streets on all of its external facades.

The design will provide prominent entries to a combined entry foyer that serves both the teaching and community for Learn to Swim classes at Level 1 Swimming Pool and Level 2 carpark.

The use of break out areas from the teaching spaces and sporting areas should be considered and adopted where appropriate.

In developing the current proposal, three primary optional approaches were reviewed, bringing together the:

- · Pedestrian approach / entry.
- Building form engaging with the existing streetscapes.
- · Maintaining entry's connecting the building to the existing street fronts.
- Internal functional connections between the operational and, teaching areas of theCollege and car parking facilities.

OPTION 1

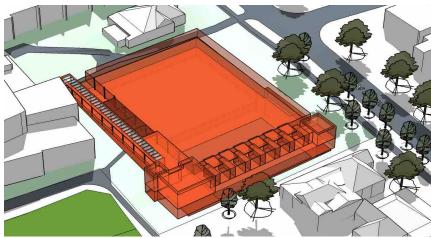
- The proposal consisted of 6 lanes swimming pool, change rooms, amenities and lower carpark at level 1, a classroom, Gym and upper carpark at level 2, and a classroom and outdoor roof sports courts at level 3 or roof level.
- Corners of the proposed facility were emphasised to terminate and signify their verticality with tall solar/vent chimneys on the east adjoining the 39 Bancroft Avenue which impact on the solar corridor to the adjacent property.
- Main entry to the facility was from the south west linking back to the main campus as well as a secondary public entry on Bancroft Avenue.

OPTION 2

- The proposal consisted of 8 lanes swimming pool, change rooms, amenities and lower carpark at level 1, four classrooms, Gym and upper carpark at level 2, and four classroom, Nutrition & Food Technology teaching kitchen and outdoor roof sports courts at level 3 or roof level.
- Low and stepping facade along the east adjoining the 39 Bancroft Avenue, stepping away as it rose in height. This reduces scale of the built form and maintain solar corridor to the adjacent property.
- Main entry to the facility were from the south west at level 3 rooftop linking back to the main campus and the secondary entry on Bancroft Avenue..
- Sinuous curved curtain glass wall with vertical sun shading fins to the southern facade to create identify difference to the existing Joy Yeo Centre, green wall and timber battened eastern facade with glass and vertical fins on the northern facade on Bancroft Avenue.

OPTION 3 current proposed design

- The proposal consists of 8 lanes swimming pool, change rooms, amenities and lower carpark at level 1, four classrooms, Gym and upper carpark at level 2, and four classroom, Nutrition & Food Technology teaching kitchen and outdoor roof sports courts at level 3 or roof level.
- Low and stepping facade along the east adjoining the 39 Bancroft Avenue, stepping away as it rises in height. This reduces scale of the built form and maintain solar corridor to the adjacent property.
- Single main entry to the facility is from the south west at level 3 rooftop linking back to the main campus.
- Dark face brick with bay window to the southern building in response to the existing Joy Yeo Centre and light face brick to east and north facades which again breaks up the scale of the proposed facility.



Option 1



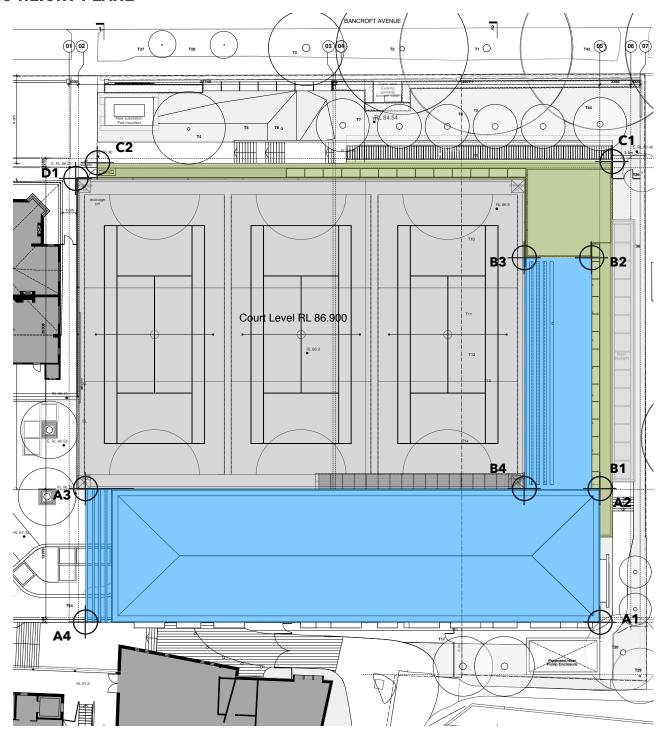
Option 2



Option 3 current proposed design



4.5. BUILDING HEIGHT PLANE



Point	Description	Top RL	Ex Gnd RL	Height
A1	Roof Parapet	91.900	82.33	9.57
A2	Roof Parapet	91.900	82.54	9.36
A3	Roof Parapet	91.900	86.72	5.18
A4	Roof Parapet	91.900	86.00	5.9
B1	Roof to Shaded area	89.750	82.54	7.21
B2	Roof to Shaded area	89.76	82.54	7.22
ВЗ	Roof to Shaded area	89.77	83.26	6.51
B4	Roof to Shaded area	89.78	82.52	7.26
C1	Top to Garden Bed	86.400	82.74	3.66
C2	Top to Garden Bed	86.400	85.92	0.48
D1	Top to Court Fence	90.250	86.04	4.21



4.6. VISUAL IMPACTS





Bancroft Avenue: View of Roseville College existing sports court

Bancroft Avenue: View with proposed development



4.6. VISUAL IMPACTS





Bancroft Avenue: View of Roseville College existing sports court

Bancroft Avenue: View with proposed development



4.7. SOLAR AND SHADOW IMPACT STUDY

The site enjoys good solar access from the north and experiences the prevailing easterly breezes during the summer months.

With the architectural shadow study presenting minimal overshadowing of the adjoining residential property to the east 39 Bancroft Avenue during both Summer and Winter from 4pm in the evening.

Analysis for the tennis courts to the south, opposite the site at Victoria Street presents no additional overshadowing of the tennis courts when reviewed in conjunction with the existing vegetation.





 WINTER
 9:00 AM
 12:00 PM
 3:00 PM
 4:00 PM



4.16. VEHICULAR ACCESS AND CAMPUS PARKING

The college has two main street frontages Victoria Street and Bancroft Street. These Streets are 50kph speed zones, which a portion converting to 40kph school zones during designated times. As noted the primary on street drop-off and pick-up zone for the children careers is Victoria Street, permitting approximately 13 vehicles at any one point. This area is signed as timed 'no parking' restriction control during school peak periods. There is no allocated space on site for careers to park and or pick-up/ drop-off.

Bancroft and Victoria Street do provide a level of on-street car parking, however do not rely on this when calculating required parking spaces for the facilities they are providing on site.

As existing the college provides 127 car parking spaces for staff and Year 12 students, of which includes six disabled spaces, as well as two minibus spaces and one large vehicle loading bay.

Access to the existing basement level car park to be utilised by staff will remain from Recreation Avenue.

Above the staff car park the proposal seeks to construct a new ground level carpark accessed from Recreation Avenue with the construction of a new driveway.

Existing car park spaces on campus: 129 spaces

Level 1 of the proposed development: 28 spaces

Level 2 of the proposed new facility: 28 spaces

Total 185 spaces



Existing car spaces on campus: 129 car spaces



4.9. PARKING STRATEGY AS PART OF DEVELOPMENT

The parking strategy relies on analysis of the existing infrastructure including public transport, new facility demands and general staff requirements.

The college is serviced by the northern train line serving Berowra to Parramatta as the T1 Railway Line. The Roseville Station is approximately 300m by foot from the college.

The college is serviced by a number of bus routes along Boundary Road, Pacific Highway and Hills Street. One of the bus stops is approximately two minutes by foot from the college.

With the proposal and increased student numbers the additional demand has been reviewed to confirm or otherwise if current on site facilities can suffice. The following was determined to be provided on site:

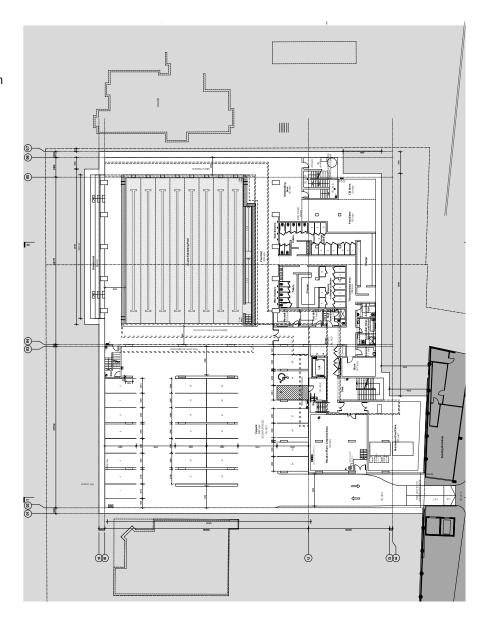
- · Minibus remains unchanged
- · Student vehicle parking 18 car spaces
- Staff vehicle parking 152 car spaces
- · Service vehicles remains unchanged

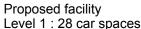
The existing car park provides 129 car parking spaces and will remain unchanged.

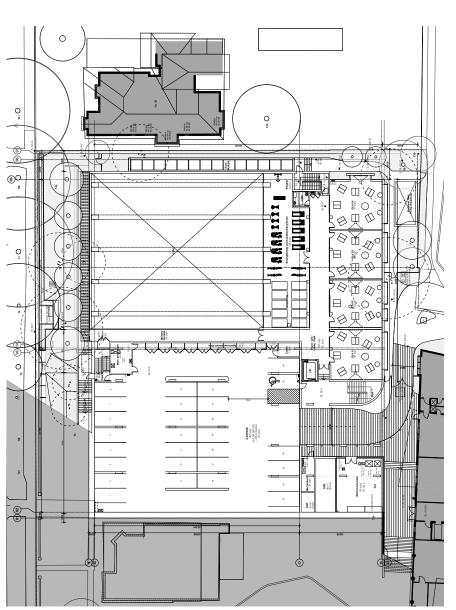
The proposed carpark for staff usage will provide 23

The proposal includes two new accessible car parking spaces ,bringing the college total for accessible car parking spaces to seven, which confirms with the Ku-ring-gai DCP requirements.

- · Pedestrian traffic around and on campus will include:
- · Students from the College
- · Staff to the college
- · Student carers
- · Local residents
- · Delivery drivers





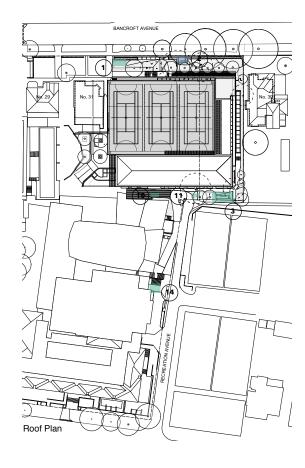


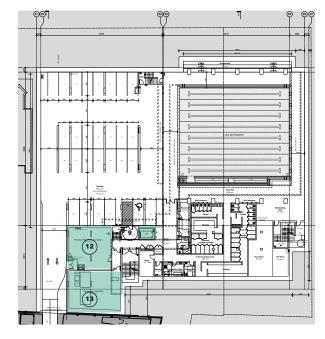
Proposed facility Level 2 : 28 car spaces



4.10. BUILDING SERVICES AND PLANTS

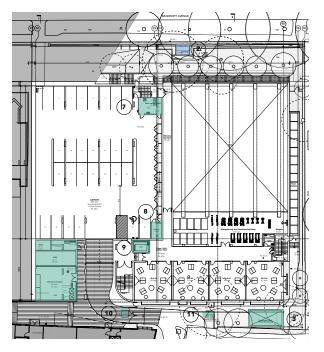
The site will be serviced by water, sewer, telecommunications and electricity infrastructure. The proposed development will not place additional demand on existing services beyond the current capacity.



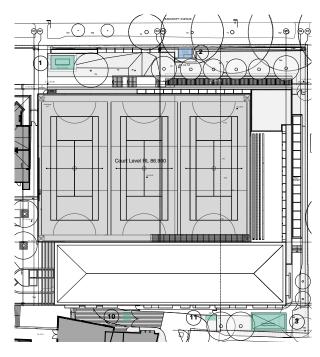


Level 1 Plan

- 1 New electrical substation
- 2 Existing sprinkler booster valves
- 3 New pool water heat pump enclosure
- 4 New mechanical plant room
- 5 New on site detention tank
- 6 New rain water recycle tank
- New Communication Room
- 9 New Li
- 10 New in ground stormwater quality control device
- 11 New in ground grease arrestor
- 12 New pool water filtration plant room
- 13 New pool mechanical plant room
- 14 New waste collection bay



Level 2 Plan



Level 3 | Roof Plan



4.10. NATURAL DAYLIGHT AND VENTILATION

This design allows for natural light penetration and ventilation to the building, resulting in passive energy saving while taking advantage of aspects to views where available.

Natural Daylighting:

- Incorporation of large windows to classrooms (General Learning Activity Space GLAs)
- Skylight window to Pool Hall.High level large window to northern facade of the Pool Hall.

Natural Ventilation:

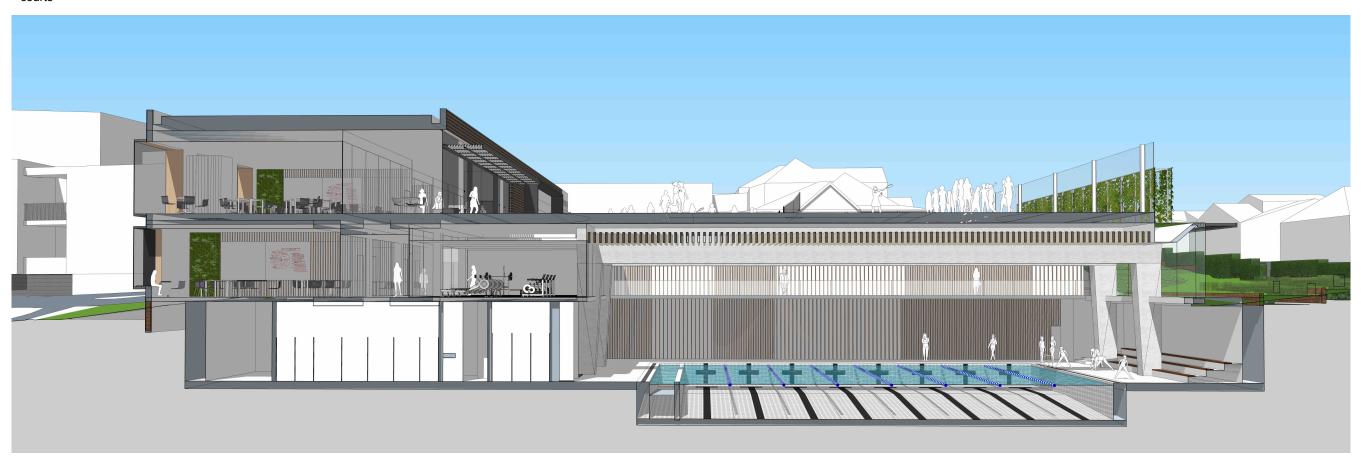
- Incorporation of openable windows to classrooms.
- Break up spaces or wide corridor that is able to be open to outside external courts



Level 3 Classrooms & Outdoor Sports Court



Level 1 Swimming Pool Hall





4.12. MATERIALS AND COLOURS

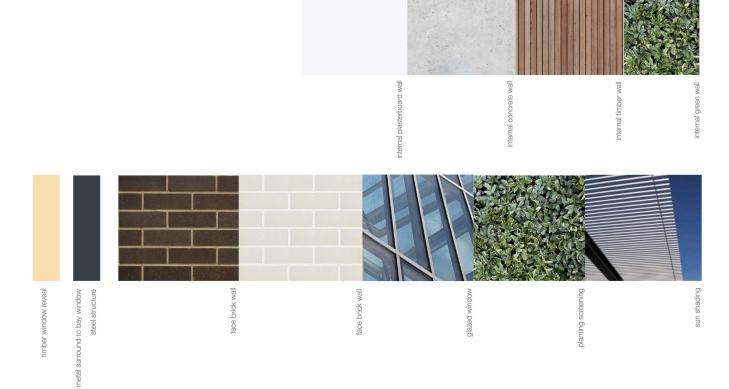
To ensure the appearance of the building is attractive and fitting within its context described, the façade is articulated through the varied use of materials, including glazing, brickwork, timber and and articulated panel sunshading.

The use of modern materials that will require minimal maintenance, vandal resistant and a neutral colour palette to work in harmony with the adjacent existing college and residences are subtable in their articulation and playful in their patterning.

Visual transparency is critical to the appearance of the facility with large glazed areas, creating active views of usage and operation for patrons in the college and visitors of the precinct.

The address of the college to Victoria Street looks onto the active and vibrant community neighbours and commuters.

The entry facing west is proposed with deep eaves and glare control. Similarly sun shading is adopted on eh east facade to minimise glare in the main swimming pool area.







4.13. HERITAGE

Roseville College is adjoined by the heritage conservation area (HCA) on the north east, east and south east of its site. No 31 Bancroft Avenue sits within the HCA.

37 Bancroft Avenue, reflects the history of the Clanville Estate subdivision from the early twentieth century. The dwelling was constructed in c1913-1914. The property has undergone alterations and additions since its construction, including a rear addition and construction of a tennis court and pool at the rear of the property. While the dwelling is representative of an early twentieth century dwelling within the Clanville HCA, it is only a simple, unrefined example. The painted brickwork too, degrades the dwellings contribution to the aesthetic value of the HCA.

37 Bancroft Avenue, therefore, does not meet the criteria for individual heritage listing.

4.14 CPTED DESIGN PRINCIPLES

Surveillance

The proposed development will not result in an increased level of risk in crime or safety issues in this area. The college is more likely to increase the level of local surveillance in the area, along with a stronger presence of people on the street moving between facilities which acts as a deterrent to vagrancy & petty crime.

Facades have large glazed windows where the students and staff will provide the presence of surveillance during the operating hours.

External landscaping is general low ground cover or tall slender trees. Minimising opportunities for loitering.

Lighting is proposed around externally to highlight the facade of building but at the same time deters the likelihood of crime taking place.

During the design development phase surveillance cameras are proposed to be installed in areas where exposure or opportunities to be seen by the public are more obstructed to monitor.

Access Control

Way-finding, desire-lines and formal/informal routes are important crime prevention considerations and have been implemented across this proposal. Evidence of this, is the pedestrian corridors for students, staff and visitors. Thus proving to be very effective subconscious way-finding system and works in parallel to provide effective access control by using these physical and symbolic barriers.

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

Existing access to the college will be maintained. as follows:

Main access to the college for external parties, college visitors, including delivery and couriers is directed to Bancroft.

Access for students and their careers is directed to Victoria Street, including pickup and drop off.

Territorial Reinforcement

Signage, fencing and landscaped areas defines the college precent and subconsciously directs visitors and or staff to be aware of their 'ownership' and influence over the immediate environment.

Space Management

As the project develops it is proposed to implement strategies to develop and maintain natural community control, including formal supervision, control and care of the development.

The staff and students will be encouraged and enabled to effectively use and maintain the new college facilities to maximise community safety.

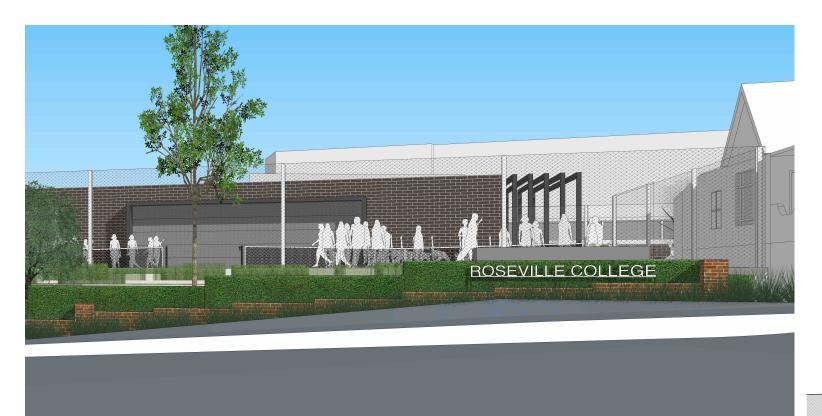
4.15. ABORIGINAL CULTURAL HERITAGE

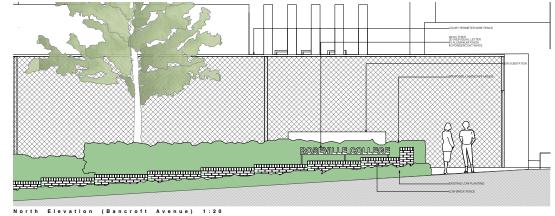
The Aboriginal Cultural Heritage Assessment of the site has concluded no aboriginal cultural heritage value items have been located on site during their investigations, however should construction of the proposed Development Application present any items as noted protocol as outlined int he report is to be followed.

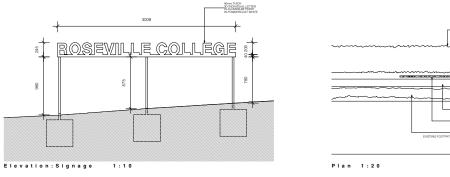


4.16. SIGNAGE

The development application address' suitable signage clearly identifying specific areas which will be implemented to the proposal as the design progress'.







Bancroft Avenue

Roseville College SWELL Centre - SSDA Architectural Design Report - 04 Nov 2019



5. SCHEDULE OF AREAS AND FSR

Schedule of Areas and GFA

Schedule of Areas sqm Level One Foyer, Lift Lobby and Stairs 93 17 Reception and Lifegurard First Aid Room 11 Staff Amenities 11 Marshalling Area 67 Public Amenities and Change Facitkies 339 Swimming Pool 545 Swimming Pool Concourse 395 Grandstand 70 Plant Area (filtration and chemical store) 101 109 Plant Area (mechanical) 53 Store (pool equipment) Store (learn to swim equipment) 34 956 Carpark L1 Store (carpark level one) Store (general S1) 4 Store (general S2) 12 Distribution Board 1 COMMs Services 1 Cleaners Room 5 Stair One 28 Stair Two 16 Stair Three 14 Total Area: 2869.3

Schedule of Areas and GFA

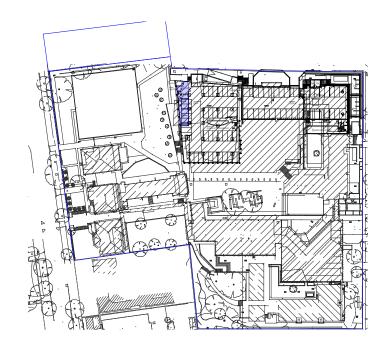
Fover Lift Lobby and Stairs	133
Foyer, Lift Lobby and Stairs	
General Learning Space 1 (GLAs)	79
General Learning Space 2 (GLAs)	75
General Learning Space 3 (GLAs)	76
General Learning Space 4 (GLAs)	75
Tutorial Room	31
Strengthening and Conditioning Room	139
Weights Room	51
Balcony/ Corridor	65
Carpark L2	945
Main Switch Room	14
Public Entry Bancroft Avenue	8
Gym Store	7
General Learning Space Store Room	9
Sports Equipment Store	30
Mechanical Plant Room	67
Onsite Stormwater Detention and Rainwater Tank	59
Store Rooms (general)	8
Accessible Water Closet	7
COMMs	8
Stair One	32
Stair Two	33
Distribution Board	1
Stair Three	0
Total Area:	1951.22

Schedule of Areas and GFA

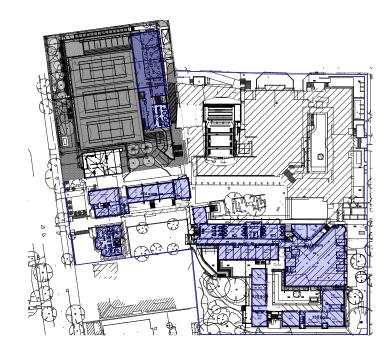
Schedule of Areas and GFA	
Schedule of Areas Level Three and Rooftop	sqm
Foyer, Lift Lobby and Stairs	85
General Learning Space 5 (GLAs)	75
General Learning Space 6 (GLAs)	75
General Learning Space 7 (GLAs)	75
General Learning Space 8 (GLAs)	75
Food Technology and Nutrition	97
Break Out Area	123
Store (sport equipment)	43
Store (miscellaneous)	2
COMMs	1
Distribution Board	1
Total Area:	651.2
Outdoor Courts	1764
Covered Area	175
Total Area:	1764
Grossing	
Level One	447.7
Level Two	163.78
Level Three	87.8
Building Plan Floor Area	
Level One	3317
Level Two	2115
Level Three	739
TOTAL:	6171



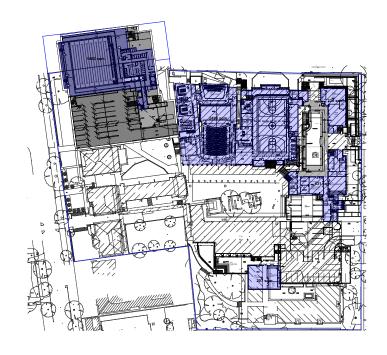
5. SCHEDULE OF AREAS AND FSR



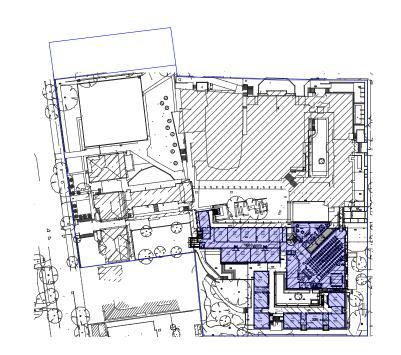
Level 0: 110 m²



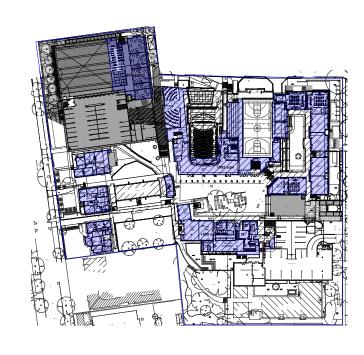
Level 3: 3633 m²



Level 1: 4918 m²



Level 4: 2217 m²



Level 2: 4163 m²

Site Area: 20618 m²

Total GFA: 15041 m²

FSR: 0.73 : 1



6.1. COMMUNITY CONSULTATION

As part of the design development process a number of forms of community consultation was undertaken, including letterbox drops, community drop in sessions and interviews with neighbours. This consultation highlighted a range of community feedback. The table below summaries feedback that related to design the of the proposed development along with our commentary on our design considered and incorporated this feedback.

n responses	Community consultation feedback	Design responses
eloping the design we have positioned ctional components of the College's brief into account the topography of the site nimise the height and bulk of the sed facilities.	Noise from development including: - from courts - from pool and gym	There are currently two courts along this boundary alignment, this will be increased by one court. Landscape screening as noted above have been sued to create noise buffers from courts.
ve positioned the courts to link in with nt external courtyards and allow the pool elow. The general learning spaces have oth: It to the southern edge of the site to se impacts on Bancroft street and the e conservation area; and ted so that their narrow facade faces the nt property east of the proposed pment.		In regards to swimming pool and court the facade facing the street includes a glazed wall. It is intended that this glazing is double glazed. The acoustic engineer has advised this arrangement will limit nay noise breakout from swimming pool hall. The gym is at the southern side of the pool hall and behind a second glazed partition. Form this location, no break out of noise form gymnasium to Bancroft Avenue will occur.
with the landscape architect have ed the design along the Bancroft Avenue to enhance the extent of screening of w building, the design strategies used as assing extent of area to be turfed; we increased the number and size of trees the boundary;	ventilation of pool and car parking	Both the pool ventilation and carpark exhaust systems are planned to run from lower levels up through building and discharge at the western end of the roof level of new general learning space wing of the proposed building. The distance of this discharge point is well beyond Australian Standards for such system and their proximity to boundaries.
rks to ensure screens is maximised at etion of works; on of screen planting under trees to a foreground in front of the facade to ing pool; of part court fencing has double mesh to allow climbing plants to create a dense I landscape screen behind the trees.	Additional street traffic and parking generated by the development	The College has previously had a DA application approved to increase the student population. The car parking being provided with the proposed development is in line with that required for the increase in student numbers. The primary purpose of the development is to provide additional learning facilities to students, and will thus not generate requirements for additional car parking over and above that
	into account the topography of the site into account the topography of the site nimise the height and bulk of the sed facilities. It is positioned the courts to link in with interest external courtyards and allow the pool elow. The general learning spaces have ooth: If to the southern edge of the site to see impacts on Bancroft street and the econservation area; and ted so that their narrow facade faces the interest property east of the proposed pment. With the landscape architect have ed the design along the Bancroft Avenue te to enhance the extent of screening of whilding, the design strategies used exaining extent of area to be turfed; we increased the number and size of trees the boundary; inned to use of mature trees as part of rks to ensure screens is maximised at extent of screen planting under trees to a foreground in front of the facade to sing pool; of part court fencing has double mesh to allow climbing plants to create a dense	Reloping the design we have positioned ctional components of the College's brief into account the topography of the site nimise the height and bulk of the red facilities. We positioned the courts to link in with the external courtyards and allow the pool elow. The general learning spaces have both: It to the southern edge of the site to see impacts on Bancroft street and the econservation area; and ted so that their narrow facade faces the not property east of the proposed prief to enhance the extent of screening of w building, the design strategies used size assing extent of area to be turfed; we increased the number and size of trees he boundary; anned to use of mature trees as part of rks to ensure screens is maximised at eation of works; on of screen planting under trees to a foreground in front of the facade to inig pool; of part court fencing has double mesh to allow climbing plants to create a dense



6.1. COMMUNITY CONSULTATION

Community consultation feedback	Design responses	Community consultation feedback	Design responses
Impacts on adjacent 39 Bancroft Avenue, including: - distance of pool from boundary - overshading of	To minimise the impacts of the proposed development to the adjacent property at 39 Bancroft Avenue, we have: Stepped the building forms to reduce the overall bulk of the development. The pool hall projects	Streetscape should retain avenue of trees	The design retains all street trees in Bancroft Avenue. The substation was placed such that it could be installed without impacting on existing trees.
covered area to courts on adjacent property - noise impacts from covered area	out of the ground adjacent the boundary, however is located so that the top of the skylight is limited in height and is below or approximately at the height of fence between	Why couldn't the existing pool be refurbished?	The existing pool cannot allow for the Colleges future learning needs and being an external pool is not be used in winter months.
overshadowing of development on adjacent property	properties. The building then steps back to be 3540 mm away from the boundary. This setback being consistent with Council's side setback for multi residential developments and maximises solar access to this property. The top of this wall is 500 mm below the court level and includes low planting to soften the top of wall and further reduce the apparent overall building height. Along the eastern edge of courts it is proposed to separate the courts from the neighbouring property through the use of a hedged landscape screen. The lower base wall is to be constructed form a light coloured low gloss brick which is consistent with facade character of neighbouring buildings. The general purpose learning spaces are	Concerns about a seperate pool entry off Bancroft Avenue	The design includes a corridor at upper level of pool hall running through to Bancroft Avenue facade. Initially options for this to be a formal entry off Bancroft Avenue were investigated. However following community consultation and operation reviews it was decided that day to day access to pool will be from southern side of building. The access from the north is intended for emergency egress and controlled student access. The design has been amended so that the circulation from door in facade leads to west back to main college entry and not out onto Bancroft Avenue.
	planting is proposed. The trees planted in this Ave	Demolition of 37 Bancroft Avenue	This will be discussed by dfp and heritage
zone will create layering between the boundary and the proposed building breaking up the view and hence the size of the new building. This will be enhanced by the fact that their is a line of dense mid sized existing trees located directly on the eastern side of the neighbouring property that will add an additional layer of depth to this view. We have reviewed the over shading of the proposed development and include shadow diagrams as part of our drawings. These show that the proposed development has no or minimal overshadowing in Summer up to 3pm. By 4 pm part of the property is in shadow. But is should be noted that existing trees on this property would create equal shadowing. In Winter there is a very similar extent of over shadowing.	Streetscape should retain avenue of trees	The design retains all street trees in Bancroft Avenue. The substation was placed such that it could be installed without impacting on existing trees.	
	view. We have reviewed the over shading of the proposed development and include shadow	Why couldn't the existing pool be refurbished?	The existing pool cannot allow for the Colleges future learning needs and being an external pool is not be used in winter months.
	Concerns about a seperate pool entry off Bancroft Avenue	The design includes a corridor at upper level of pool hall running through to Bancroft Avenue facade. Initially options for this to be a formal entry off Bancroft Avenue were investigated. However following community consultation and operation reviews it was decided that day to day access to pool will be from southern side of building.	
			The access from the north is intended for emergency egress and controlled student access. The design has been amended so that the circulation from door in facade leads to west back to main college entry and not out onto Bancroft Avenue.



6.2. PRE DA MEETING

As part of the design team we attended a Pre DA meeting at Kuringai Council to present the proposed design and to allow Council planning and development officers to provide feedback. The following table outlines items raised by Council and our design responses.

Item raised at Pre DA meeting with Kuringai Council	Design responses
Concern with removal of tree 7 - Himalayan Cedar	The existing tree needs to be removed to allow for the development. The landscape architect has included three super advanced trees of same species in their landscape design to replace this tree.
Reliance on green walls to create landscaped elements not supported	We have reviewed the inclusion of green walls over the lower walls of project and have deleted these from the design, instead reviewing the materiality of the wall choosing a pre-finished brick with low gloss glazing which will create a base for the building forms and be inline with the local character of painted brickwork facades.
Terracing of Bancroft Avenue frontage not supported	We have reviewed the structured terraces originally proposed to the building setback from Bancroft Avenue and redesigned this area to minimise fill and to use battering to stop down the topography in line with Council's comments.
Preference to greater tree planting to eastern boundary	The landscape design shown to council included larger areas of turf in the building set back to Bancroft Avenue. We have reviewed the design with the lAndscape Architect and included a greater level of planting including trees.

Item raised at Pre DA meeting with Kuringai Council	Design responses
Usually require 3 metre side setback with landscaping elements of varying heights	Along the eastern boundary the proposed building is stepped to create appropriate setbacks. The pool hall projects out of the ground adjacent the boundary, however is located so that the top of the skylight is limited in height and is below or approximately at the height of fence between properties. The building then steps back to be 3540 mm away from the boundary. This setback being consistent with Council's side setback for multi residential developments and maximises solar access to this property. The top of this wall is 500 mm below the court level and includes low planting to soften the top of wall and further reduce the apparent overall building height. The general purpose classrooms are stepped back from base and are planned to be in a darker coloured brick. This change in colour will both break down scale of forms with varying heights and visually make the building form reduce further. These techniques being consistent Councils design objectives.
Exotic species preferred	The landscape design incorporates exotic planting.
Consider breaking down the formality of the landscaping	The landscape design shown to council was more formal in its approach. In developing the landscape around the building especially in the building setback zone to Bancroft Avenue a looser free flowing arrange of planting has been created.
Landscaping to provide filtered views from 39 Bancroft Avenue	Initially our design proposal included additional tress along eastern boundary to 39 Bancroft Avenue. In consultation with adjacent neighbour these were removed as they did not want overshadowing or bulky landscaping along the boundary line.

Item raised at Pre DA meeting with Kuringai Council	Design responses
Deep soil planting required along eastern boundary	Along the northern portion of the eastern boundary there is 1.4 metre soil depth for planting. This matches Council's landscape guidelines and will allow appropriately sized vegetation to be planted along this boundary to screen the building.
	The souther end of the boundary includes a zone for deep soil planting and will allow tall trees to screen the building at the point where the general purpose learning spaces are proposed. The tall trees in this location will screen and break up the scale of the higher building form.
Consider reorienting the proposed pool	The planning of pool hall is almost square and reorienting will not increase setbacks to
	eastern boundary.
Can see the design is trying to address the character of the area and sympathetic, building still quite contemporary	eastern boundary. This captures the intent of design and is in accordance with the the GANSW recommended approach to designing adjacent heritage items or conservation zones.
to address the character of the area and sympathetic, building still quite	This captures the intent of design and is in accordance with the the GANSW recommended approach to designing adjacent



6.3. GA NSW

Over the design phase we met with the Government Architects Office twice to brief them on the and for them to provide their feedback.

At the first meeting we provided a brief on the proposed facilities, site analysis and the development of design approach. The GANSW comments included advise that the following needed to be developed and addressed in design:

- · How the development will sit in the landscape.
- · The inclusion of character study of area should be included in submission
- The character of the Bancroft Street elevation and how it responds to the local neigbourhood character.
- Provision of detail on the relationship of development to 39 Bancroft Avenue.

Formal feedback from the GANSW office noted that "The design team are highly competent and the school appears to be mindful of managing and mitigating impacts on near neighbours and the street as a whole."

A second consultation session was undertaken once the design with a comprehensive overview of the proposal and its functionality. Emphasise was placed on:

- minimisation of impacts to 39 Bancroft Avenue and the tennis club;
- presentation to Bancroft Avenue;
- · mix of materials to complement the existing locality;
- · functionality of the learning spaces and their interconnection with each other;
- · efficient parking design;
- · well-articulated development with a high degree of landscaping; and
- · active spaces for students ("be well to learn well").

The following advise was received from the GANSW in relation to the design:

- Generally the design and approach to the project is supported, in particular:
 - The retention of trees across the site and integration of new landscaping into the proposed extensions;
 - The rational planning and adaptation of existing vehicle circulation to support intensification of use with minimum impact;

- The internal relationships of functional spaces and efficient optimisation of interior/exterior space adjacencies;
- The scale, massing, articulation and materiality of the street façade, carefully relating to neighbouring residential properties;
- The following commentary provides advice and recommendations for the project and should be incorporated into the SSD submission:
 - Commit to the highest level of sustainability strategies for the project and provide details of how these have been incorporated.



7. DESIGN QUALITY PRINCIPLES OF SEPP EDUCATION AND GANSW DESIGN GUIDE FOR SCHOOL

Schedule 4 Schools – Design Quality Principles

Principle 1 - context, built form and landscape

The college design cohesively marries with the existing, including spatial organisation and existing facilities. All working collaboratively with the new and surrounds.

The landscape seamlessly meets the needs of the present without compromising the ability of future generations to meet their own needs. The landscaping is suitable for its purpose including the species selection.

No aboriginal cultural heritage items have been found during initial investigations, however procedures are mapped should any items of significance during construction be found.

The client and architect are collaboratively working towards achieving a 4,.5 Greenstar rated facility, placing the college at the forefront in provisions for students and the wider community a complex that exceeds current standards.

Principle 2 – sustainable, efficient and durable

The site will be serviced by water, sewer, telecommunications and electricity infrastructure. The proposed development will not place additional demand on existing services beyond the current capacity.

Existing structures are in place that encourage waste reduction and recycling.

Principle 3 – accessible and inclusive

The college proposal maintains and enhances the existing accessible and inclusive facilities and routes that all patrons can use, such as college students and sporting facility visitors.

The Development Application seeks to install general identification signage for the college, but as an ongoing initiative college campus way-finding will be part of the scheme

The proposal seeks to share the sporting faculties with the community for activities outside of school hours. These factors have contributed to generating the design for access and car parking numbers for example.

Principle 4 – health and safety

Natural access control through the tactical use of landforms and landscaping design measures including building configuration; formal and informal pathways, landscaping, fencing and gardens can be seen in this proposal.

Facades have large glazed windows where the students and staff will provide the presence of surveillance during the operating hours.

External landscaping is general low ground cover or tall slender trees.

All these natural design features provide a balanced design environment that does not offend and or exclude.

Principle 5 - amenity

The design of the extension of the college faculties reflects the following design principles:

- · An importance and openness to the community as a whole.
- Intimately connecting the design of teaching spaces with the quality of education received
- Collaborative resolution of pedagogic and design issues with the client and architect
- · Engaging adaptable spaces for new learning
- Sporting Facilities that at the forefront and will shoulder community demand in the area

Principle 6 - whole of life, flexible and adaptive

The current Development Application works collaboratively with the previously approved Development Application which will see the schools population expand significantly by 2030, it has been a natural process to ensure the new proposed spaces including car park will provide for this and if necessary can be adapted.

Principle 7 – aesthetics

The college and architects have worked to select a material palette for the design that includes glazing, brickwork, timber and and articulated panel sunshading.

The use of modern materials that will require minimal maintenance, cost effective, vandal resistant and a neutral colour palette, work in harmony with the adjacent existing college and residences.

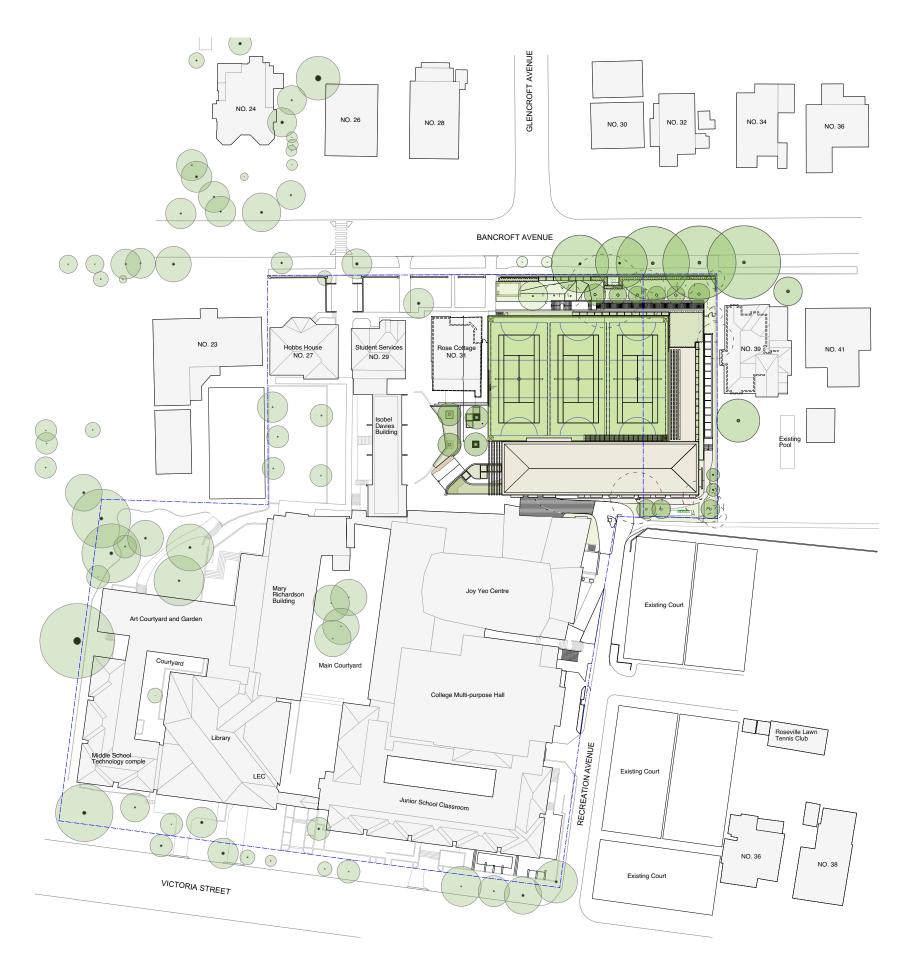
The landscape seamlessly meets the needs of the present without compromising the ability of future generations to meet their own needs. The landscaping is suitable for its purpose including the species selection.



8. APPENDIX 01: ARCHITECTURAL DRAWINGS

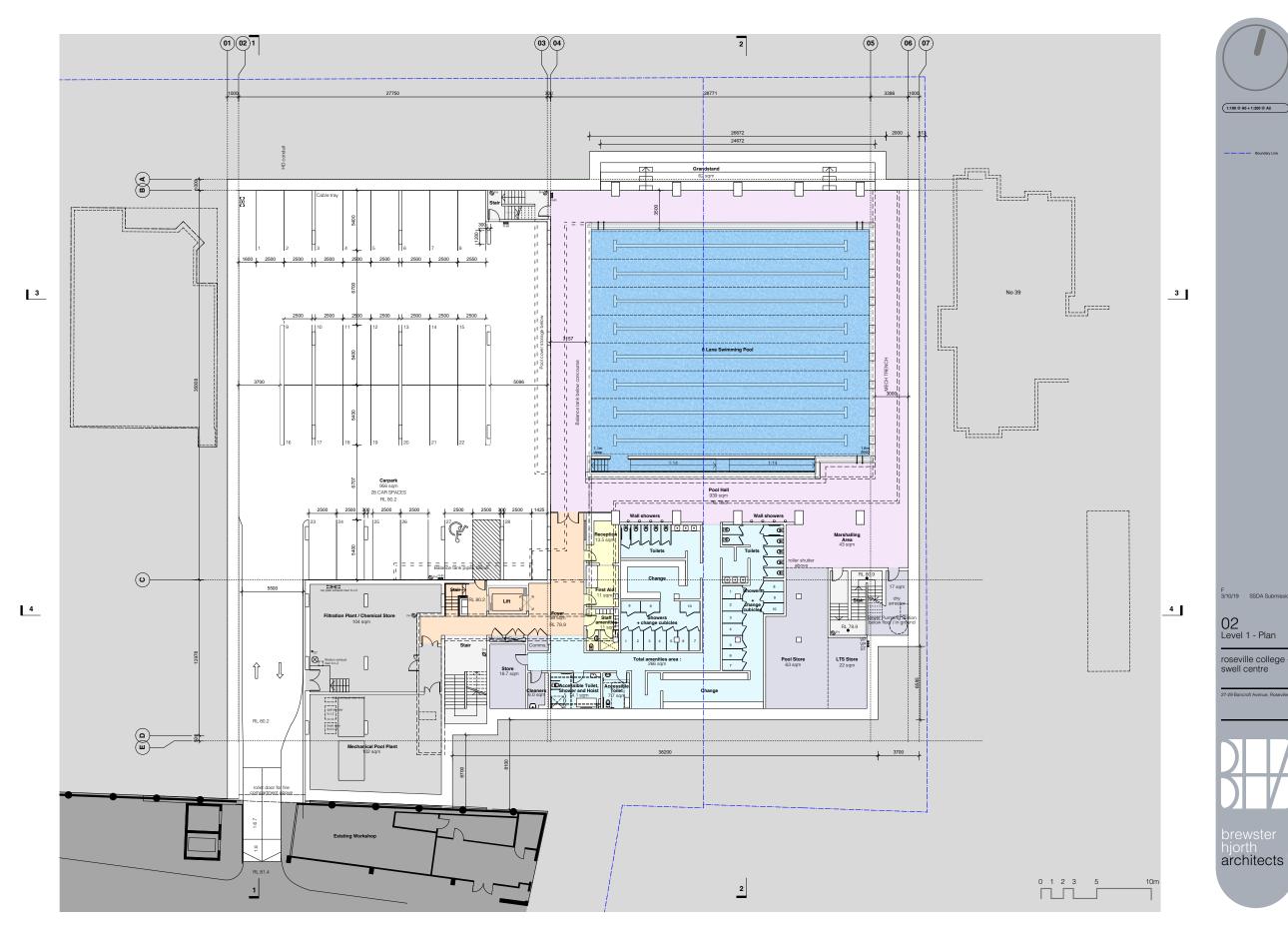
01 Site Plan (B)
02 Level 1 Plan (F)
03 Level 2 Plan (F)
04 Level 3 Plan (F)
05 Roof Plan (B)
06 Elevation North&South (F)
07 Elevation East&West (F)
08 Section 01&02 (F)
09 Section 03&04 (F)
10 Demolished Plan (B)
11 Existing Building (B)
12 Wall Sections 1-20 (B)
13 Signage (B)
14 Shadow Study (B)



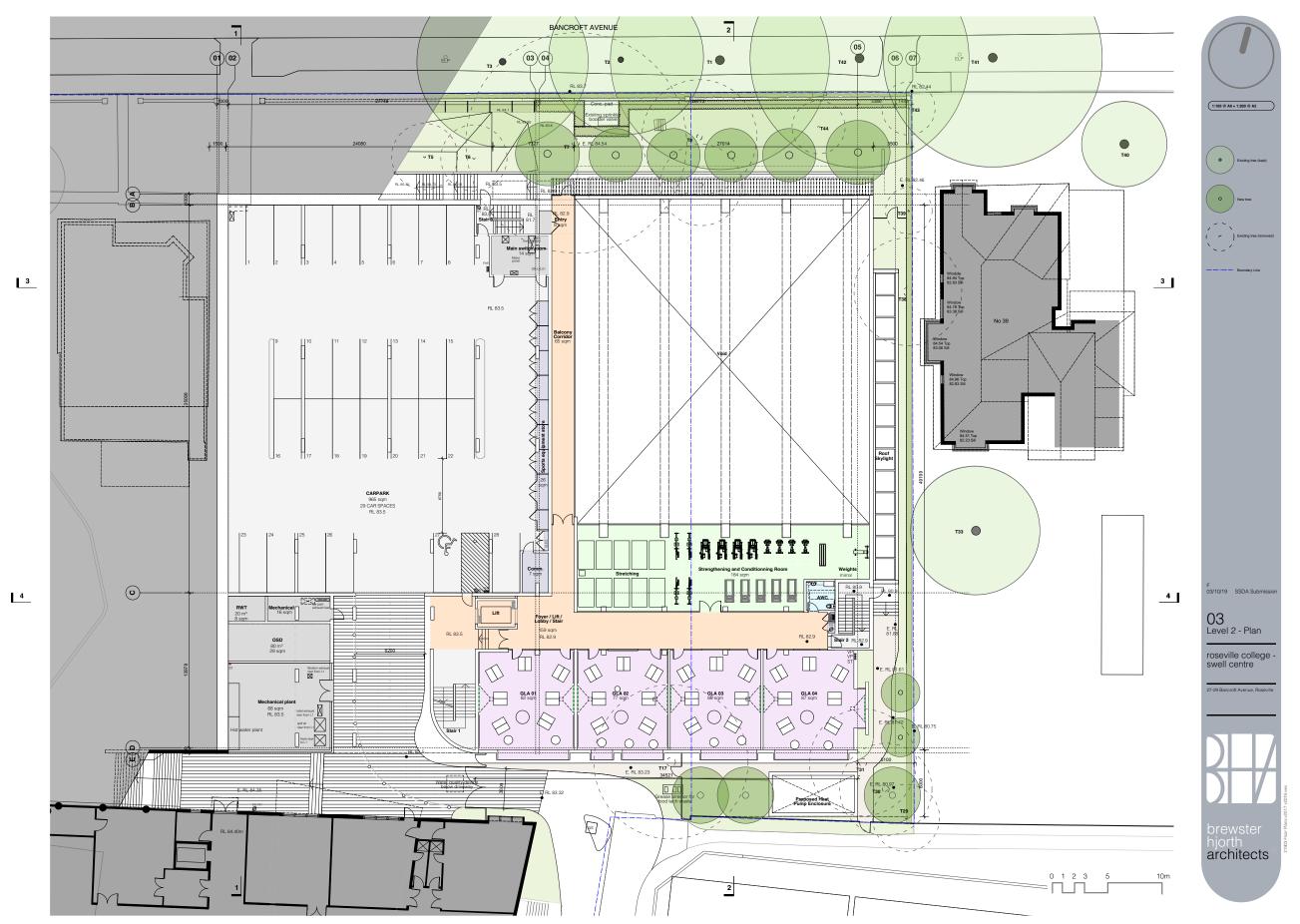




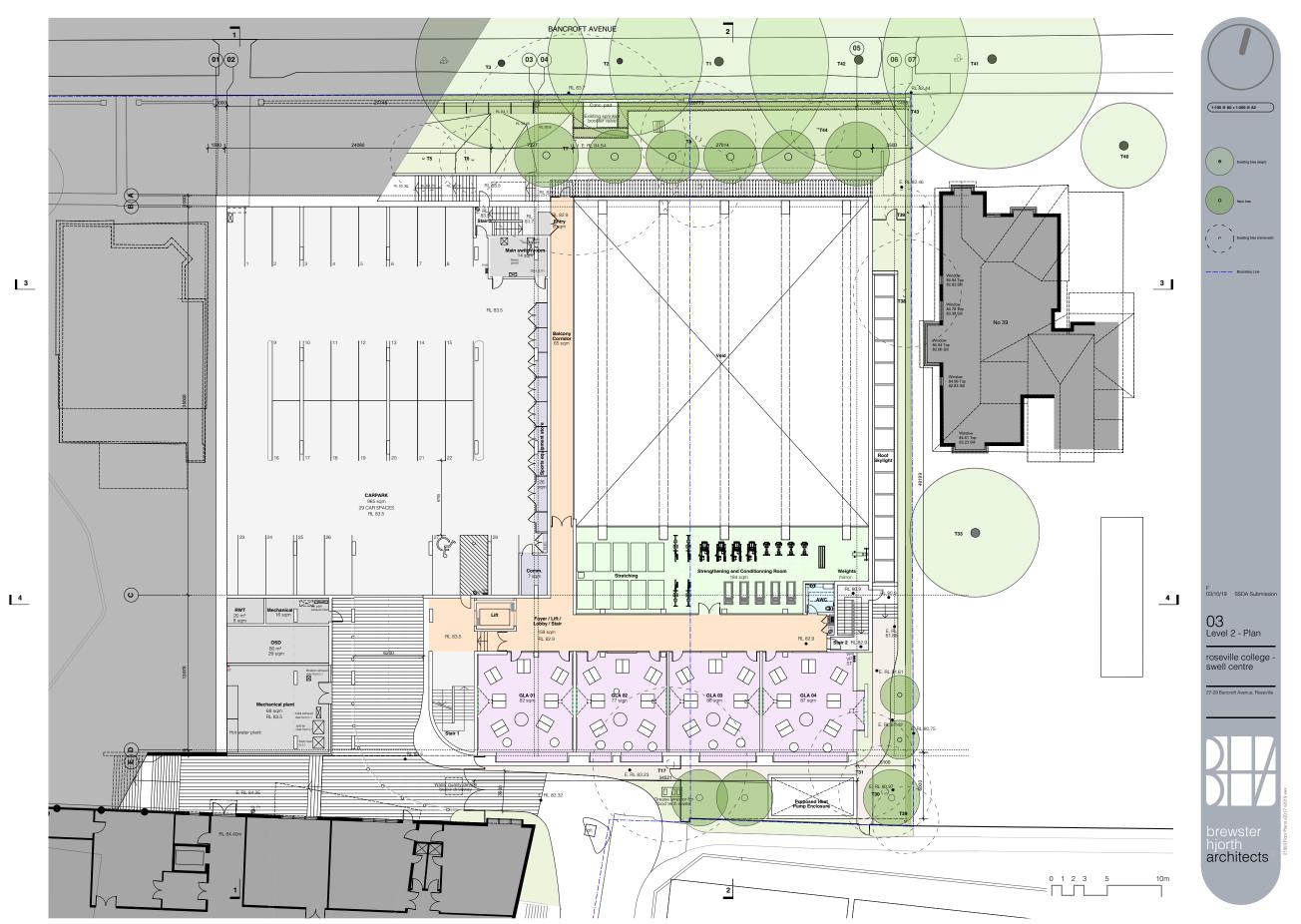




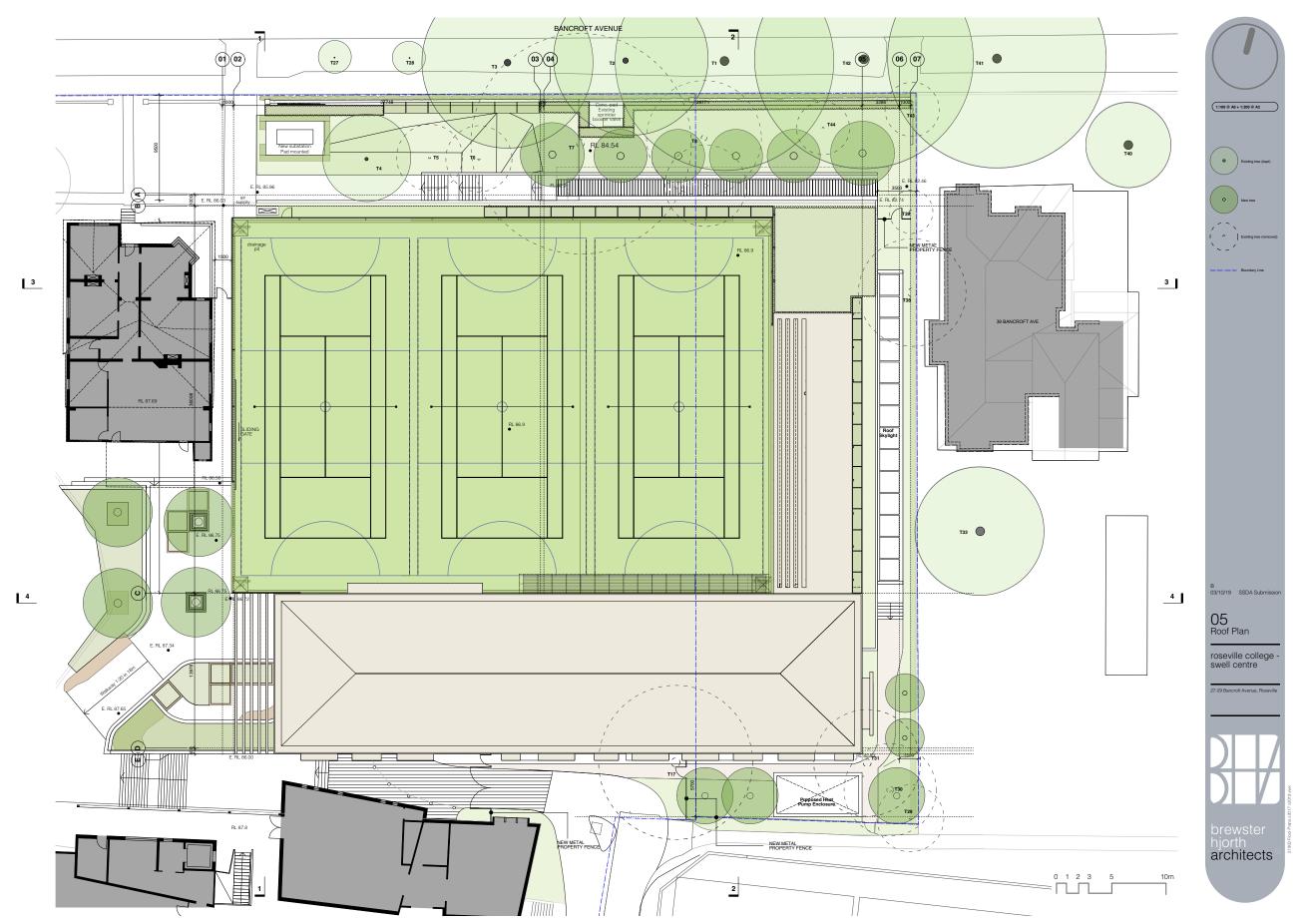




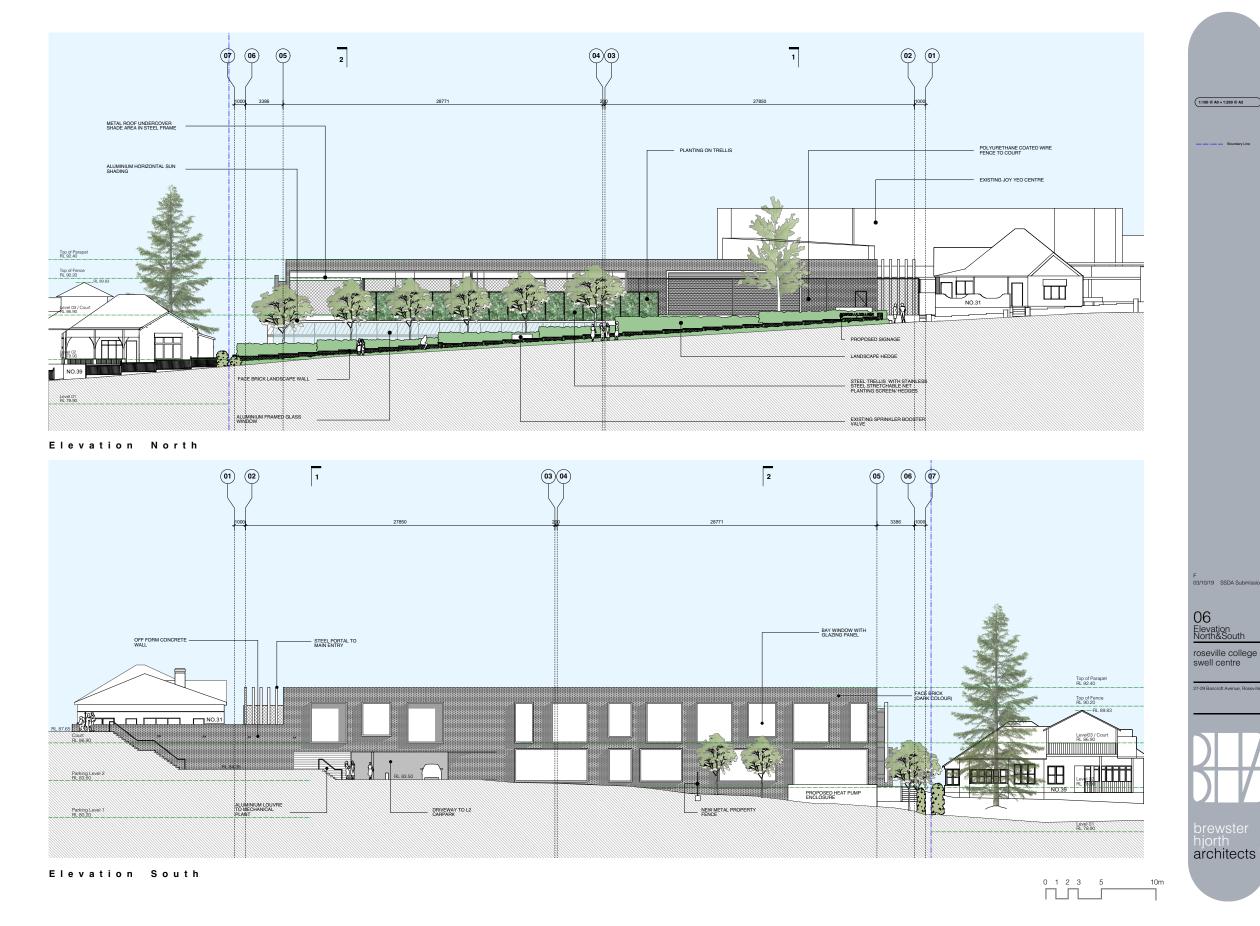






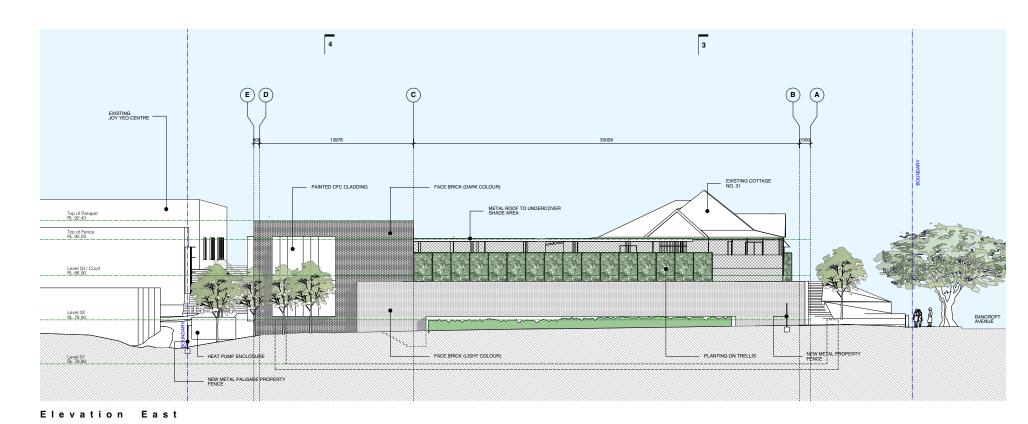


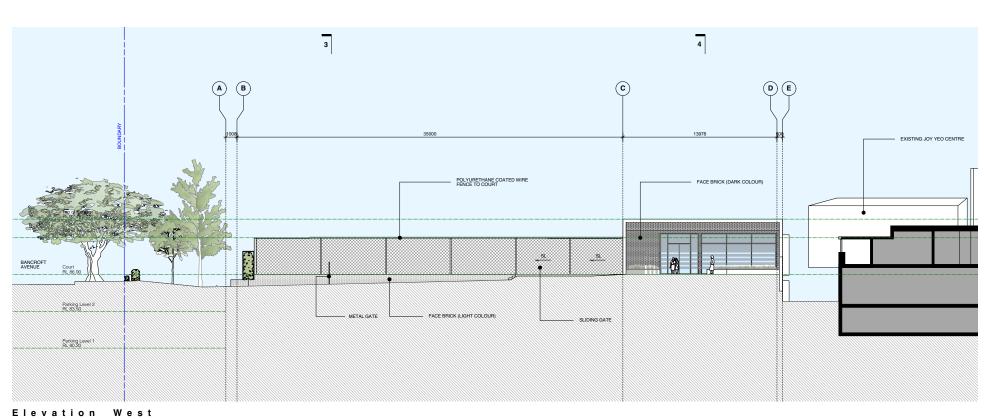






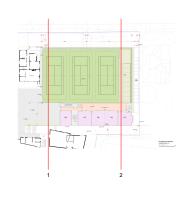
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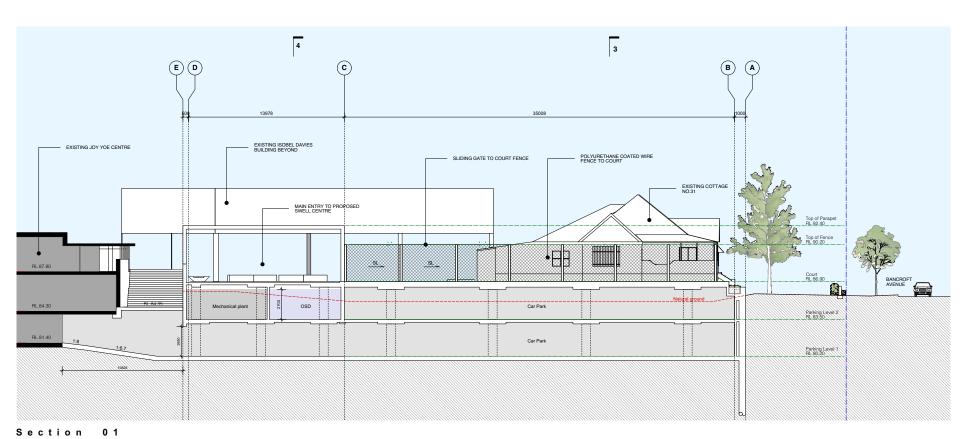


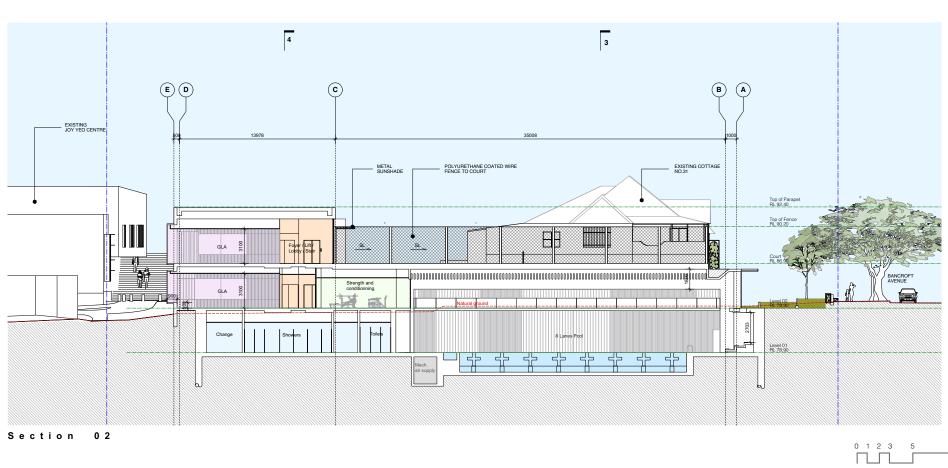


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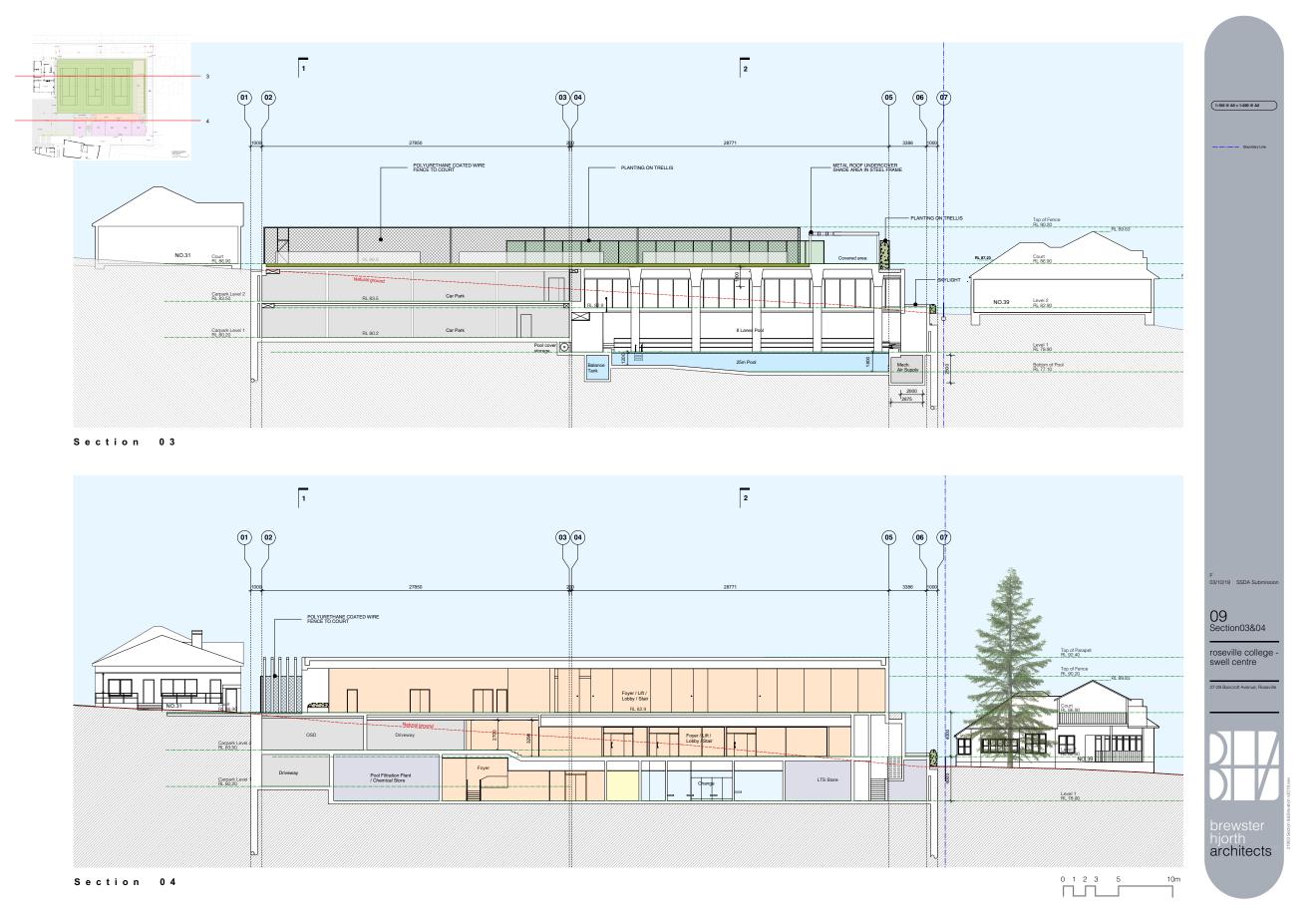




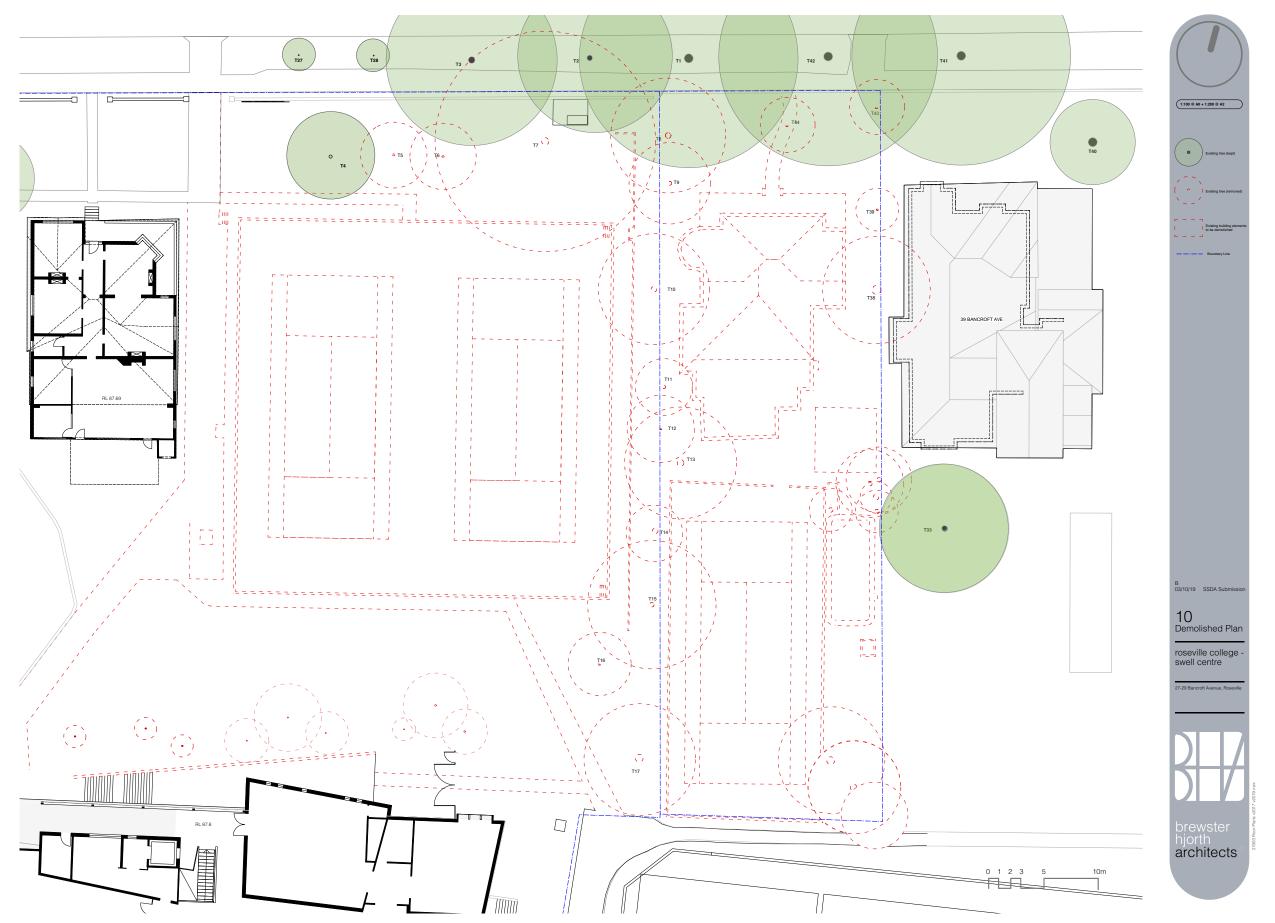












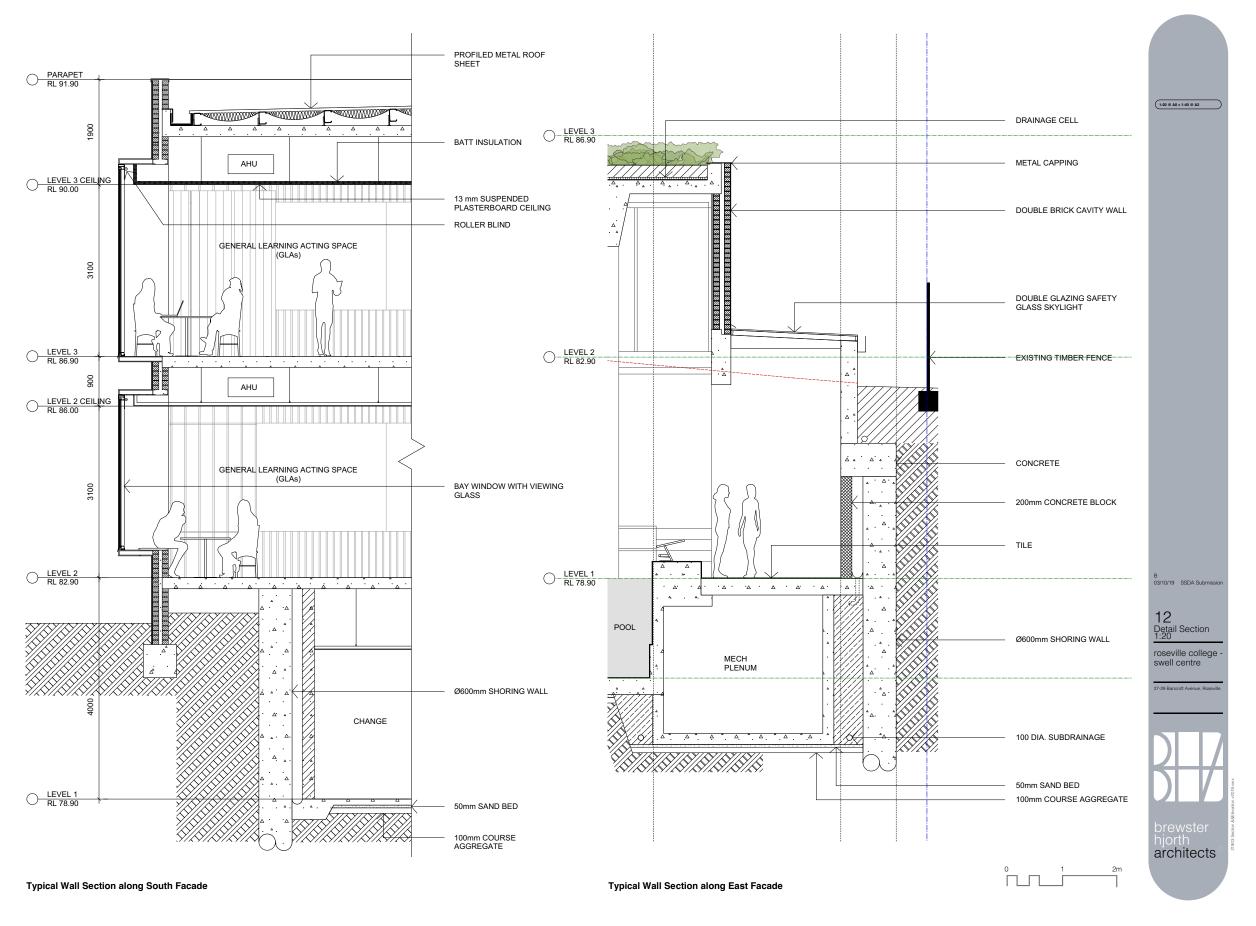




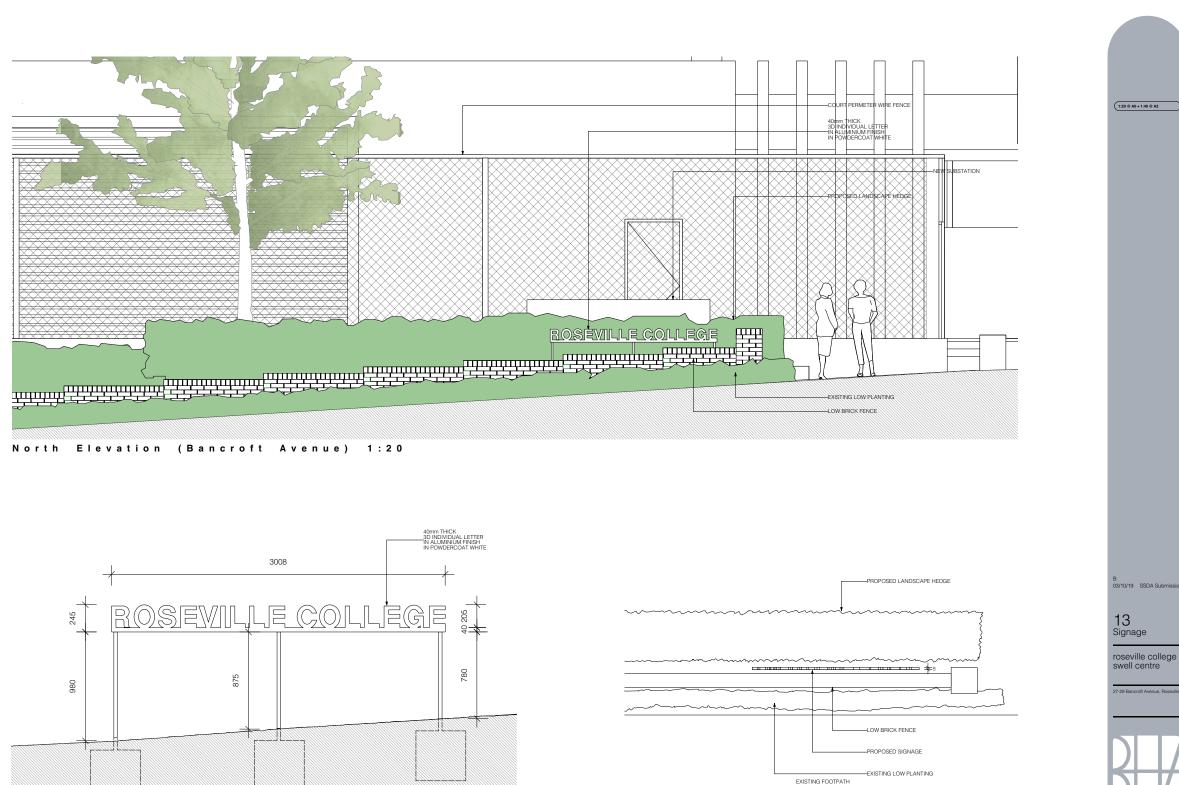


architects

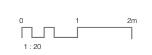








Plan 1:20

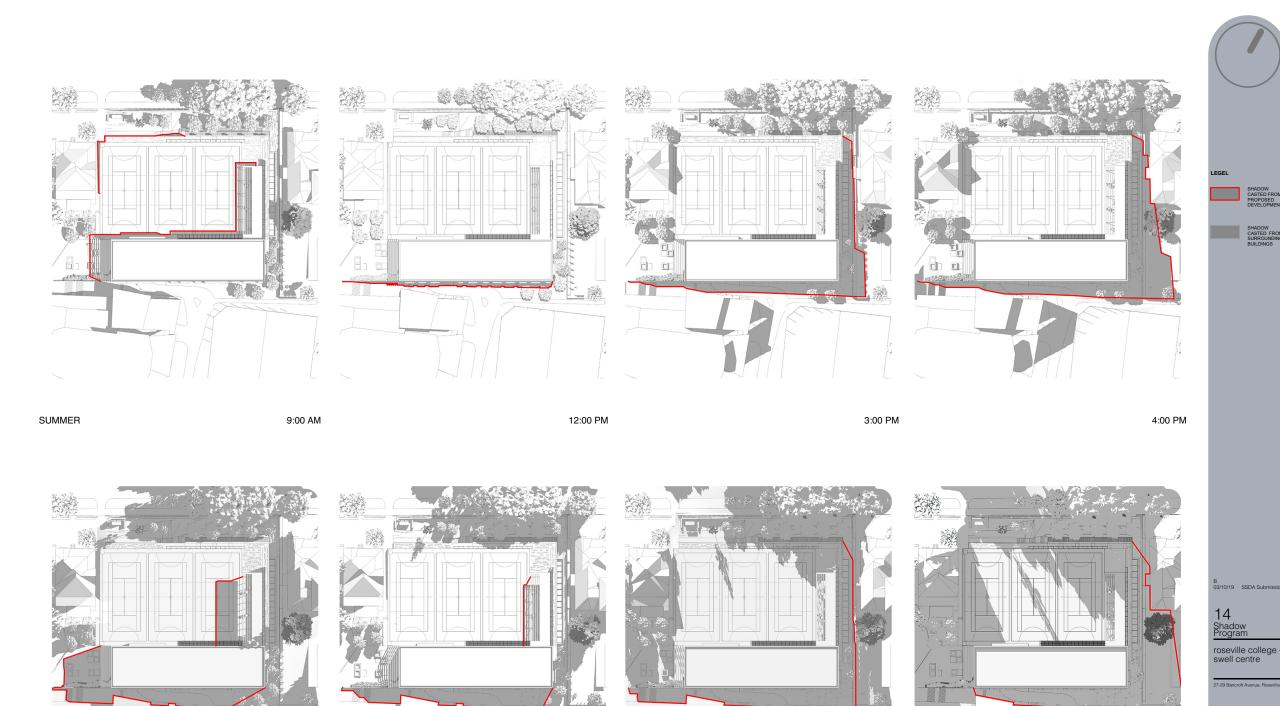


Elevation:Signage

1:10

architects





 WINTER
 9:00 AM
 12:00 PM
 3:00 PM
 4:00 PM

architects



B. APPENDIX 02: SURVEY DRAWING

