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REDLANDS SENIOR CAMPUS MASTER PLAN DESIGN STATEMENT

for

REDLANDS
LET YOUR LIGHT SHINE

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Rev A

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Introduction

The proposed Master Plan for the redevelopment of the Redlands Senior School Campus is a staged development aimed at providing Redlands with the framework to support the schools development of the highest quality learning environment for its current and future school community.

The proposed Master Plan will be delivered in five stages.

The staging will allow the school to operate on the campus during the construction works. It will ensure the safety of staff and students during the works and minimise the impact of the construction activities on the schools operations. It will also allow the school to develop within a prudent financial planning strategy.

The proposed Master Plan staging is generally:

Stage 1 – New Learning Hub:

- Demolition of existing buildings and structures
- Construction of Interim teaching and administration facilities within the carpark structure
- Construction of a new multi-purpose education building with basement car park and associated vehicular entry off Gerard St
- A new significant landscaped area above the carpark
- A new entry forecourt
- Creation of a new internal vehicular link between Waters Rd and Military Rd

Stage 2 - Sports and Multi-Purpose Centre:

- Demolition of existing buildings and structures
- Construction of a new sports and performing arts centre

Stage 3 - Redlands Hall, Roseby Building and Liggins Building Refurbishment:

- Internal alterations and additions of existing buildings

Stage 4 - Humphery Learning Hub and Resource Centre:

- Demolition of existing buildings
- Construction of a new multi-purpose education building with swimming pool and associated facilities at roof top level
- Expansion of basement car park at completion of New Humphrey Learning Hub

Stage 5 - Adams Centre Extension:

- Alterations and additions to the Adams Centre at 219 Military Road

Interim sequencing works

A number of the stages will include interim sequencing works including, the construction of temporary facilities, early works and enabling works and staged completion.

Existing facilities

Existing Campus Layout

The existing Redlands Senior School Campus is constrained and there is a general impression of crowdedness and a lack of open space. The campus has not had a formal Master Plan and has developed incrementally to meet the needs at the time. This has resulting in new buildings being located without planning in relationship to other buildings often creating awkward spaces between and with little consideration of light and air and circulation.

Existing Built Form

The campus comprises of a range of buildings including generally single storey to 4 storey construction. There are multi-purpose classrooms, a library, design and technology teaching areas, science laboratories, a school auditorium, a gymnasium, a fitness centre, music rehearsal areas, a canteen, an administration building staff facilities and student and staff amenities.

The main teaching buildings are the Humphrey building and Roseby Science buildings. These are 3 to 4 storey buildings linked by external walkways.

As noted above the Redlands Senior School Campus has developed incrementally to meet the needs at the time. The Liggins Building was constructed around 1923 however the majority of the purpose designed school buildings were constructed between 1950's to the 1980's and the latest major building being the Roseby Science building extension constructed in 2004-2005. A number of the school facilities are former dwellings which have been acquired by the school and adapted for school uses.

While many of the buildings have been significantly modified and adapted over time the buildings are now outmoded and do not meet with curriculum standards or the requirements of the schools progressive learning platform:

> The relationship of spaces does not meet the current requirements for teaching.
> The size of the spaces does not meet the schools classroom size needs and they do not provide the necessary flexibility
> The buildings have not been designed for current and projected technology to be integrated
> Outdoor spaces are not adequately integrated as learning spaces
> The buildings do not meet with current building standards, have poor thermal performance, are not energy efficient and in some cases provide unacceptable comfort levels for significant parts of the school year.
> The buildings are outdated and not aesthetically pleasing and do not reflect the schools high standing or represent the schools advanced learning platform.
> The buildings do not meet with the optimum standards for safety

Sporting facilities

Sport is an important part of the Redlands learning platform, however the school campus is constrained and there is a lack of open space;

> There is an indoor gymnasium which is too small for competition basketball and is only used for training. The undercroft of the Gymnasium has a relatively low head room and is encumbered by columns but is used for sports training.
> There is a fitness centre gymnasium which is well utilised and valued by the School.
> There are two outdoor basketball courts

The School utilises nearby hired or leased facilities offsite for competition sport. There is also no swimming pool within the School Grounds.

Landscape and outdoor play space

The landscape is a mixture of hard paving surfaces and soft surfaces. Liggins Quadrangle is a hard paved surface which is used for ball games, a general play area and as a gathering space. There is a green space behind the Gerard Street Cottages which provides opportunities for various outdoor activities including outdoor learning and recreation.

Vegetation

The School has a variety of trees across the campus, however there is no order to the landscape setting.

Services

Power, water, stormwater, sewer currently service the campus.

Vehicular access and Carparking

There are vehicular access points to the site from Military Road. This access allows for vehicles to enter and leave the site in the forward direction and is used mainly by the schools buses and some limited parking. There is also vehicular access from Gerard Street and Winnie Street.

Environmental factors

Some of the key environmental factors that impact on the site are;

- Noise generated by surrounding busy streets
- The impact of noise on adjacent properties
- Solar access and weather
- Privacy to and from neighbouring properties
- The potential for views and vistas

Master Plan Description

Aims of the Master Plan

The proposed Master Plan has been designed to;

- Support the schools excellent academic program and provides a framework to support the ongoing development of the highest quality learning environment including provision for emerging developments in educational excellence
- Support a fulfilling and diverse extra-curricular experience
- Meet the schools commitment to 'regular reinvention' designed to meet the changing circumstances and fresh ideas emerging from proven successes in the field of education.
- Create an inclusive, supportive and secure pastoral environment and attract public interest and the interest of the community with its positive contribution to the urban landscape
- Attract and retain exceptional staff
- Achieve productive industry, community and parental partnerships
- Maintain a robust and flexible operational infrastructure
- Support the schools program as a school of choice for parents seeking a co-educational broad liberal education for their children
- Support the school's reputation as a school recognised for being internationally minded and with a strong expatriate community
- Provide efficient, effective, expressive and environmentally sustainable facilities
- Provide a framework for development which respects and values the school's history.
- Embody an inclusive, transparent and strong governance model
- Provide a framework which guides the school's development for the next 20 years

- > Clearly reflect Redlands as a world class centre of excellence for Teaching and Learning.
- > Demonstrate a clear resolution of the constraints and opportunities of the site as related to the needs of the school.
- > Accommodate the requirements for vehicular traffic and parking requirements for staff, visitors, operational requirements and students.
- > Allow equal access throughout
- > Permit implementation within deliverable budget.

The School Facility Standards have been used as a reference document to inform the design breif.

Staging generally

The proposed Master Plan has been designed to be constructed in 5 stages over a 20 year period.

The staging is designed to allow the school to continue its operations and occupation of the campus during the construction works. It will also allow the school to develop within a financial planning strategy.

Demolition of existing structures

The Master Plan includes the demolition of a number of existing buildings on the school campus to make way for new facilities. Demolition is carried out in accordance with the Master Plan staging.

The existing campus is listed in the North Sydney Council Heritage Inventory. The Inventory mentions the Liggins Building which is one of the original school buildings on the school site and the Lang Gymnasium as an award winning architect designed contemporary building. The former Post Office, now known as the Adams Centre, is also a locally listed Heritage Item. The Masterplan retains the existing Liggins Building, the Lang Gymnasium and the Post Office. It also retains the recently refurbished Roseby Science Building and Liggins Courtyard which form a key hardstand space at the heart of the school. These structures are retained as important elements in the history of the development of the campus. They are integrated in the design as key components and new masterplan buildings have been designed with consideration of the future context with these buildings including; views and important vistas, scale and building form relationships, and building alignment.

Building form generally

The completed Master Plan generally comprises of 3 main building wings or hubs, radiating from a New Library Resource Building at the centre of the campus.

The main learning hubs, comprising of the New Learning Hub (NLH) constructed under stage 1 and the Humphrey Learning Hub constructed under Stage 4 will include the core teaching facilities of the school. The NLH will replace the existing MowII Building and will align in the east-west orientation extending from the eastern boundary to the central Library building. The Humphrey Learning Hub will extend from the Library Building in the north-west direction parallel with the existing Lang Gymnasium which is to be retained.

The learning hub buildings will connect with the existing Liggins Building and Roseby Building which form the Liggins Courtyard. This spine will be extended south with a new sporting complex to be constructed under stage 2.

The Master Plan relocates the main entry to the campus from the Military Road at the south to Gerard Street at the northern end of the Campus under stage 1. The arc of buildings formed by the new learning hubs and Library will frame a significant new green space with a new entry forecourt on the Gerard Street Frontage providing the school with a new presentation.

The proposed built form is to be a 4 to 5 storey consistent with the scale the existing Roseby building. The buildings have been designed so that the buildings levels will align with existing floor levels allowing all buildings to connect with via external walkways for efficient circulation and providing compliant accessibility throughout the campus.

The proposed height of buildings allows for a consistent and simple form of building to be maintained over the construction of the Masterpan without level changes between buildings which would impact on accessibility and ease of circulation. It also allows for the school to provide the facilities required by their curriculum needs.

Accessibility

The Master Plan includes a number of key circulation nodes which include lifts connecting each level of the campus. This concept is developed over the Master Planning staging so that the school remains accessible at each stage and during construction. Accessible amenities are provided throughout the Campus for and accessible parking is provided within the Carpark.

Views, daylight and Privacy

The Master Plan has been designed to maximize the opportunities for views and natural light while providing solar protection and retaining the privacy to neighbouring properties.

A façade concept has been developed for the Stage 1 NLH which will provide a basis for the architectural expression and design and detailing of the future stages. The façade concept utilizes a proprietary terracotta façade system which incorporates vertical blades and horizontal members, which work together, to screen the façade against direct solar gain under various sun angles, while allowing views and maximizing natural light. In locations adjacent to neighbouring properties, where natural light and ventilation is required, deeper, angled blades are used to ensure privacy to neighbouring properties. Alternatively solid components are used to respond to the requirements for fire protection and privacy in relation to adjacent properties.

Roof top garden areas will be used for educational purposes. These areas will be landscaped with planting at the perimeter to prevent views into adjacent neighbouring properties.

Materials and structure

The proposed NLH has been designed as a reinforced concrete framed structure with aluminum framed and glazed windows. It is envisaged that the future Master Plan stages will be constructed of similar materials.

The terracotta facade material will provide a high quality finish with visual interest to the buildings.

Sustainability

The proposed NLH will incorporate environmentally sustainable design. Sustainable initiatives have been selected which are appropriate to the use of the building providing a real benefit to the school community.

The proposed NLH incorporates the following ESD initiatives;

> Rainwater reuse for landscape irrigation
> Natural cross ventilation
> Natural lighting (where possible)
> Mixed mode ventilation
> Night time purging
> Energy efficient lighting
> Water efficient fitting and fixtures
> Environmentally Preferable Materials (where possible)

ESD initiatives are also integrated with the proposed building as an educational tool. Display panels will provide the students and staff with information on the energy usage of the building. The rooftop area will also include educational tools associated with natural sciences.

Carparking

Stage 1 includes underground carparking for 68 cars, including 2 accessible spaces and spaces for visitors. The extended car park during Stage 4 will include 115 cars, including 3 accessible spaces and spaces for visitors.

The carpark is to be used for staff parking, visitor parking. The carpark will also be used on the weekends and during holiday periods in relation to sporting and other recreational activities.

Entry and exit to the carpark will be via the Gerard Street. The entry driveway will be secured with a roller shutter and gates.

The carpark has been designed to be accessible and includes lift access and accessible parking spaces.

Carpark exhaust is integrated with the landscaped space above and is designed in accordance with Australian Standards.

Internal Driveway

The internal driveway along the western boundary of the Campus will be constructed at the completion of Stage 1. The Driveway will be used for school buses and school vehicles only. It will be one way and vehicles will enter from Waters Road and exit into Military Road.

Landscaping

The Redlands campus is constrained and has limited open space. The Stage 1 NLH will provide the school with a significantly improved landscape outcome.

- Northern green space above the Carpark
  - > The northern green space above the carpark will be the main open green space on the campus. This space will provide predominantly soft landscaped areas with some paved areas. The space is designed to allow for some active play although it will not be used for formal ball games.
  - > Planting will be a mixture of low shrubs and smaller trees. A deep soil plating zone to eastern boundary will provide a landscaped buffer to neighbouring properties.
  - > Low scale shade structures will be incorporated in the landscape
- Landscaped Roof Terraces
  - > The rooftop terraces are designed to include a mixture of green roof, hard paved surfaces. These spaces will be used predominantly as outdoor learning areas.
- The Entry Forecourt
  - > The proposed Entry Forecourt has been designed as the new main pedestrian entry to the school. It will be completed in Stage 1.