Design Quality Principles

A report tabling how the proposed Primary School responds to and upholds the 'Design Guide for Schools' and the 'Design Quality Principles' as per Schedule 4 of the Education SEPP.

October 2018



Principle 1 - Context, built form and landscape

Better Fit

Contextual, local and of it's place.

The site is located within a semi-rural area of far western Sydney. It is outside the current suburban growth area beyond the western edge of the M7 Motorway. The landscape consists of rolling hills and creek lines, largely cleared for market gardening and stock grazing.

The site was created by the relatively recent subdivision of a former market garden. Future further subdivisions for suburban growth are anticipated. The population in the suburbs to the east and south-east are growing rapidly with an extraordinarily diverse cultural background. The only existing, immediate neighbour is the Parish Church to the north.

An Aboriginal Cultural Heritage Assessment Report (ACHAR) has been commissioned. The ACHAR may reveal cultural information which could be incorporated into a display in the main entrance foyer of the school, if appropriate and approved by the elders of the local aboriginal community.

A display describing the pre-colonial history and Aboriginal Cultural Heritage of the original inhabitants of this area (part of the Country of the inland Darug people) could also contribute to this display.

Interpretative displays along the perimeter path around the flood plain may display Darug dreamtime stories, cultural motifs, bush tucker and medicine plants.

This interpretative display system may also incorporate ecological issues responding to the native flora and fauna, especially of the riparian zone.

A key objective of the proposed Primary School is to respond to the anticipated future development of the area as well as integrate with the St Narsai Assyrian College in Horsley Park, where the majority of students will go following their time in this Primary School.

Transforming the existing denuded landscape into a permanent 'green oasis' is the primary aim of the Landscape design project.

Principle 2 - Sustainable, efficient and durable

Better Performance

Sustainable, adaptable and durable.

The new facilities have been developed through an iterative process with passive and active Environmentally Sustainable Design (ESD) principles at the core of the thinking. ESD is not a separate element of the design process but an integral aspect of all high-quality design fit for the 21st century.

This approach ensures a demonstrable, educational benefit for the users of the buildings as clean, fresh air, maximum daylight access, thermal comfort, good acoustics and solar glare control all increase learning outcomes in schools, as well as reduce running costs and lost productivity days of staff.

This integrated design approach has created ample opportunity for natural ventilation, with additional mechanically-assisted fresh air flow (with heat recovery) within a well-sealed and highly insulated building. Simple user controls provide the most environmentally beneficial outcome for the occupants, thus addressing acoustic attenuation and indoor air quality, simultaneously.

Building depths and three-dimensional spatial relationships have been developed to optimise natural daylight access and opportunities for cross ventilation and night purging through low-level and high-level, operable, louvre windows.

Solar and glare controls have been integrated into the façade design of the buildings, as appropriate to their orientation, to reduce heat gain in the summer months and to avoid unnecessary glare within the learning and working spaces, whilst still allowing winter solar access as part of the passive solar design strategy for the entire project.

Rainwater collection, storage and recycling will support food growing and shade-plant irrigation.

The careful selection of robust, quality, locally- sourced, low-maintenance, fit-for-purpose, sustainable building materials and construction methods will provide for the long-term future performance of the buildings.

Principle 3 - Accessible and inclusive

Better for Community

Inclusive, connected and diverse.

- Openness and transparency, celebrating teaching and learning.
- Strong sense of place, identity and community.
- Entrance to the school is clear and welcoming with a direct connection to its Civic Heart and all school facilities being accessible to all.
- A sense of ownership, pride and belonging through meaningful and connected spaces.
- Offering an invitation beyond the immediate school community to engage with the school's culture and its users.
- Use of accessible routes throughout the school landscape as a design feature.

Principle 4 - Health and safety

Better for People

Safe, comfortable and liveable.

- Integration of high levels of natural daylight and access to fresh air promotes better teaching and learning outcomes.
- Strong indoor outdoor connections encouraging diversity of use and blurring of formal and informal uses.
- Crime safe approach based on good surveillance with clear sight lines, effective lighting of public areas and appropriate perimeter landscaping.
- Age and user appropriate spaces through diversity of scale and enclosure, creating a variety and diversity of learning settings and opportunities.
- Clarity of place and space providing clear way finding and orientation as well as an understanding and sense of community.
- Strong organisational principles and attention to duty-of-care / security obligations.
- Creation of meaningful spaces with all spaces contributing to the teaching and learning and sense of community ownership.

Principle 5 - Amenity

Better Working

Functional, efficient and fit for purpose.

- New, custom-designed facilities to cater for a variety of uses and users, supporting diverse teaching and learning within a semi-rural context.
- Respect and order of private, group, public and community spaces and activities.

- Integration of natural light, airflow and visual interconnection between indoor and outdoor areas.
- Creation of a strong sense of place and community heart.
- Careful organisation of teaching and learning cohorts without prescriptive determination of spaces.
- Adaptable use of spaces particularly multi-purpose spaces and circulation areas which support diverse teaching and learning.
- Providing outdoor opportunities for learning through exploration, hands-on activities and play.

Principle 6 - Whole of life, flexible and adaptive

Better Value

Creating and adding value.

- The proposed buildings are designed for future adaptation and responses to changes in teaching and learning. It is not about a collection of classrooms and corridors but rather groups of learning cohorts around a central sense of community, anchored in the specific signature of the School.
- Efficient structure and building fabric maximising future opportunities.
- Use of robust and low maintenance materials ensures the longevity of the building fabric and maintains appearance.
- Part of the ongoing life and activities of the community. Not just about "school".

Principle 7 - Aesthetics

Better Look and Feel

Engaging, inviting and attractive.

- Opening of the principal pedestrian entry directly through to the Civic Heart celebrates the School's activities and offers an invitation to the community to engage.
- The three dimensional articulation and façade expression aims to reduce the bulk of the building and inform of the activities within, offering an invitation to the local community for engagement and participation.
- The strength of identity and presentation to the street adds a sense of place to the precinct and offers a dialogue with existing and future adjacent facilities.
- Careful integration of landscape and materiality to provide a unified but diverse whole.
- Respect for the semi-rural and future residential context through appropriate scale, materials and forms.
- Opening up views to and from the School connecting its users with their broader environmental and social context whilst offering distant neighbours a glimpse of their school life.