WEE WAA HIGH SCHOOL
LANDSCAPE ARCHITECTURE CONCEPT DESIGN PACKAGE

Prepared for: BUILT Pty Ltd

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00	Preliminary	TB	04/08/2021
01	Preliminary	TB	07/10/2021
02	For E.I.S. Preparation	TB	13/10/2021
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1.1 Introduction

Students and staff were evacuated from the current Wee Waa High School site due to ongoing health issues in late 2020. Students are currently co-located within the town's primary school in an overcrowded site. A Ministerial announcement made on 3 June 2021 committed to the construction of a new High School at Wee Waa on existing Department of Education owned land and adjacent Crown land as an urgent priority. The site is located on Mitchell Street/Kamliaroi Highway and is legally described as Lot 1 DP577294, Lot 2 DP550633 and Lots 124-125 DP757125.

This report accompanies a State Significant Development Application which seeks consent for the construction of a new high school. The school will service 200 students with potential to grow to a total capacity of 300 students, subject to further funding and service need, and 61 staff. The school will consist of a two-storey building, an Indigenous learning centre, sporting fields, active play areas and associated civil and utilities works. For a detailed project description refer to the EIS prepared by Ethos Urban.

This report describes the design of the proposed landscape for the new school and the manner in which the designed landscape integrates the natural land character, the issues of local cultural heritage, the architectural design, the engineering requirements, and the needs of the school community. The landscape design has been prepared in accordance with the required NSW State Government policies and Narrabri Council requirements.

The landscape and external areas of the school will accommodate the day to day needs of the students and staff. It will provide areas of external space for active play and socialisation for student breaks. The school will deliver an agricultural education stream on another site for the students and this will require a series of open fenced paddocks of various sizes for its operation. This site will provide opportunities for outdoor education and outdoor learning spaces to assist with the delivery of the school curriculum. In addition – the school landscape will provide a multi-purpose grass area that can be used for field sports, and as an athletics facility. The sports facilities will be available for use by the community at defined times.

Agriculture surrounds the town and is a significant part of the community

Large scale infrastructure exists in Wee Waa to process and transport the local produce

The Wee Waa Lagoon forms a notable part of the local environmental context

The Namoi River is a regional feature that contributes to the character of north west NSW

1.2 Strategic Approach

RELEVANT POLICIES

Better Placed - Design Guide for Schools and *Environmental Design in Schools* are part of a suite of documents developed by the Government Architect NSW (GANSW) as part of the *Better Placed* design policy. These documents have been prepared by GANSW in collaboration with School Infrastructure NSW (SINSW) and provide specific guidance for good design in NSW schools.

The *Design Guide For Schools* provides guidance on how to meet the Education SEPP Design Quality Principles, listed as the following:

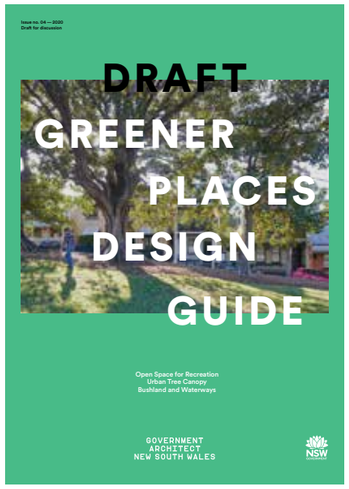
1. Context, built form and landscape
2. Sustainable, efficient and durable
3. Accessible and inclusive
4. Health and safety
5. Amenity
6. Whole of life, flexible and adaptive
7. Aesthetics

The Design Guide provides recommendations for a best practice approach to the design process for schools, emphasising the importance of a holistic and participatory design approach.

Environmental Design in Schools outlines the benefit of environmentally sensitive design for people and their surroundings in schools. The manual presents strategies for designing buildings and landscapes that respond to the natural environment in order to create comfortable and sustainable learning spaces.

The GANSW documents *Greener Places Design Guide* and *Designing with Country* discussion paper provide additional guidance that is relevant to certain aspects of the project.

The guidance provided by these documents will inform the design approach for the landscape strategy, ensuring the delivery of a high quality design in line with State Government principles.



Source: Government Architect NSW

1.3 Response to Sears and State Design Review Panel

SEARS Item		Report Reference
Landscape Strategy, Report and Landscape Plans		**This report**
	Details the proposed site planting, including location, number and species of plantings, heights of trees at maturity and proposed canopy coverage.	Landscape Plans - Appendix A
	Provides evidence that opportunities to retain significant trees have been explored and/or informs the plan.	Refer Section 3.1, 3.2, 3.3
	Considers equity and amenity of outdoor play spaces, and integration with built form, security, shade, topography and existing vegetation.	Refer Section 3.3
	Demonstrates how the proposed development would contribute to long term landscape setting in respect of the site and the streetscape	Refer Section 3.3
	Demonstrates how the proposed development would ensure appropriate comfort levels on site.	Refer Section 3.3
	Demonstrates how the proposed development would contribute to objectives to increase urban tree canopy cover.	Refer Section 3.3
Prepare a detailed landscape plan prepared by a suitably qualified person.		
	Relevant Policies and Guidelines: • Australian Standard 4970 Protection of trees on development sites. • Draft Greener Places Design Guide (GANSW). – Technical Guidelines for Urban Green Cover in NSW (Office of Environment and Heritage (OEH), 2015).	Landscape Plans - Appendix A

SDRP #2 Comments on Landscape Design and Response	
SDRP Comment	Landscape Design Response
5. Use the landscape design to strengthen the relationship between the existing primary school campus and the bridges across the WSUD Drainage channel	Subsequent detailed design will provide greater definition of the bridge abutments and crossing points through planting and materials. Details of crossings will require negotiation with TfNSW
6. Further develop the connections/circulation between the existing primary school and new high school using sketch diagrams	Subsequent detailed design will work with traffic and pedestrian safety guidance to develop these connections. Details of crossings will require negotiation with TfNSW
7. Combine the ramps and changes in levels into the landscape design where possible	Subsequent detailed design with architecture and landscape will develop a more highly resolved interface between the landscape and architectural level changes
8. Further integrate the built forms into the landscape setting	Subsequent detailed design will seek to integrate the architectural forms into the landscape design and detailing
9. Increase the number of smaller and more intimate spaces to enable smaller group interaction	The landscape design has been modified to meet with budget and EFSG requirements. Small scale spaces are created with in the land form and between plantings.
10. Use CwC consultation to inform useful and meaningful plant selection and planting design	Further CwC consultation required through the SINSW program to inform planting selection and design.
11. Ensure the proposed community garden reflects Aboriginal heritage of the site and incorporate the results of the CwC consultation	A community garden is not proposed in this scheme - but can be accommodated if required
12. Further develop the landscape design within the WSUD drainage channel	The WSUD drainage channel does not form part of the SSDA.
13. Reconsider the treatment of the two fences along the Kamilaroi Highway. Integrate fence barriers into the landscape design with the use of landscape elements such as large stones/ boulders, barrier garden beds or dense acoustic planting	Further consultation with security and safety staff at SINSW will inform the technical requirements for fencing of public High Schools in NSW. Where possible - the fencing will be reduced/mitigated with landscape design
14. Maximise the number of trees which can provide shade and shelter for the students throughout the site to enhance the potential for the school to become an oasis for the community of Wee Waa	Tree cover on site covered by the SSD has been increased by more than 2 times from approx 2,000m2 to approx 4,7000m2 (after 10-15 years growth). Subsequent detailed design will consider the addition of greater numbers of trees.
15. Further develop the biophilic response to the site and learning spaces for the students	The consideration of CwC requirements and subsequent detailed design requirements outlined above will seek to address a more detailed biophilic response.

1 2 3 4 A

OVERVIEW SITE VISION LANDSCAPE DESIGN APPENDIX

2.1 Site Context

Wee Waa is a small town in western NSW that provides services and amenity for the townspeople and the surrounding agricultural community. The town is on the banks of the Namoi River. The river is an important feature in the local, regional and cultural landscape. The Lower Namoi Plains are punctuated by local outcroppings and geological features such as the Piliga sandstone ridges to the south and the remnant volcano of Mt Kaputar to the north west.

The local setting of the school is close to the centre of town on Mitchell Street/Kamilaroi Highway. This is a traditional country town street with the Public School and a number of older style single storey residences on the southern edge. The architectural design situates the school on the north side of the road with significant landscape areas both to the east and the west and a landscape buffer to the south. The eastern landscape area of the site is characterised by extant native grasses and trees and the western parts of the site are more open grassland with fewer trees.

The site for the new Wee Waa High School in located in the centre of town on the Kamilaroi Highway/Mitchell Street. The site sits adjacent to the Wee Waa Public School and diagonally opposite Dangar Park - the main recreational open space in town.

The site is currently an undeveloped area with scattered native trees. The existing tree cover is predominantly on the eastern edge and northern edge where groups of mature trees exist. Individual specimens are scattered across the balance of the site. The ground surface is covered with substantial areas of native grassland.
The site is divided by shallow wide open drains that connect the nearby street culverts and road-side drainage infrastructure to the discharge channel at the low point of the site to the north east. The wide shallow drains exhibit almost no fall as the site is very flat indeed. The site is low lying and flood modelling suggests that this is a localised low point within the Wee Waa township.

Solid fences exist between the residential areas on the northwest boundary and open wire fences exist on the north east boundary to the nearby residence. There are no other fences on site.

Source: SixMaps

2.2 Existing Landscape Character

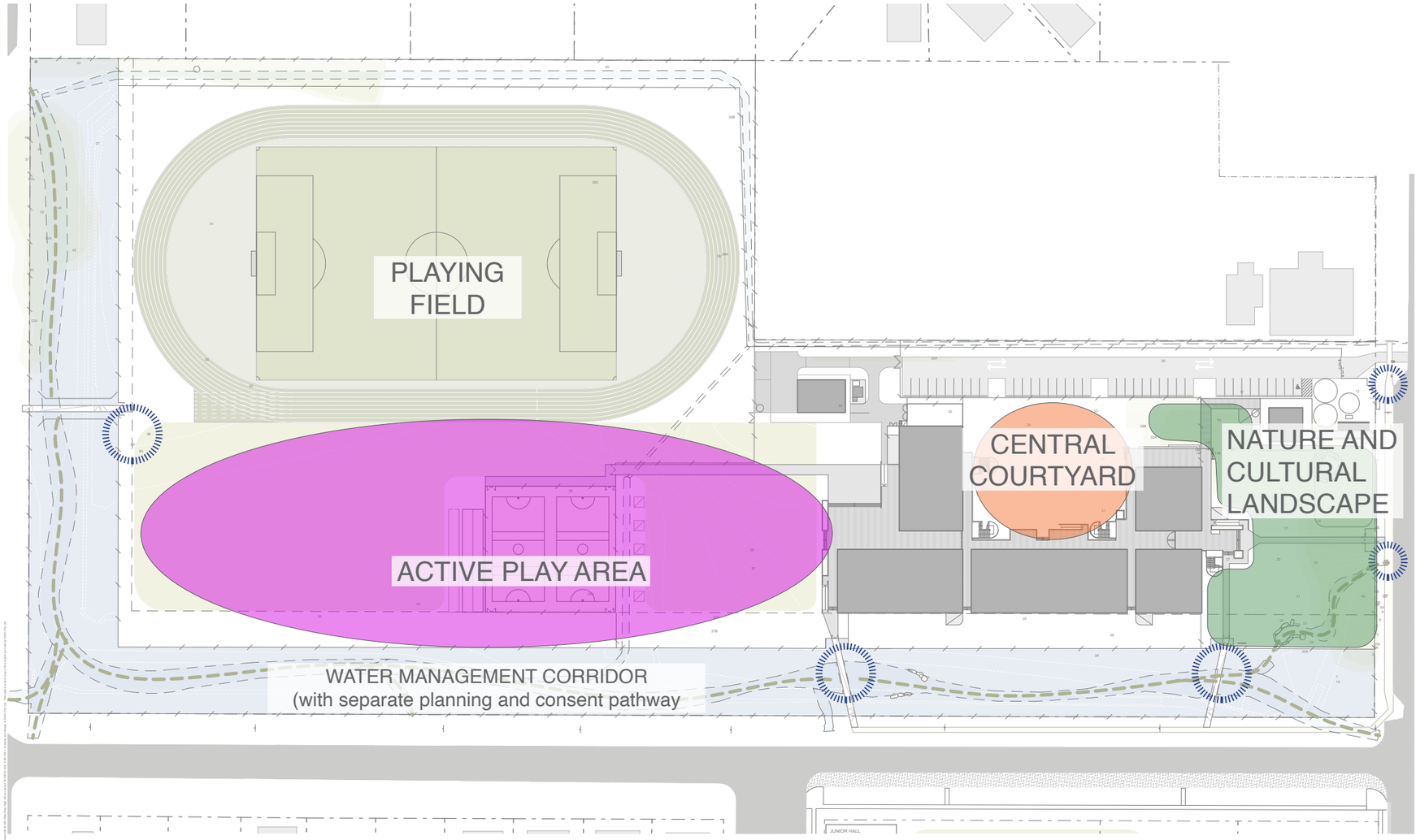
3.1 Functional Landscape Zones

The proposed precinct plan has been adapted from the architectural Master Plan. The development of these areas has been informed by the following:

1. the broad functional requirements and the site-wide issues of drainage
2. the site wide architectural built form
3. the functional and educational requirements of the school
4. the desire to retain areas of existing landscape
5. access

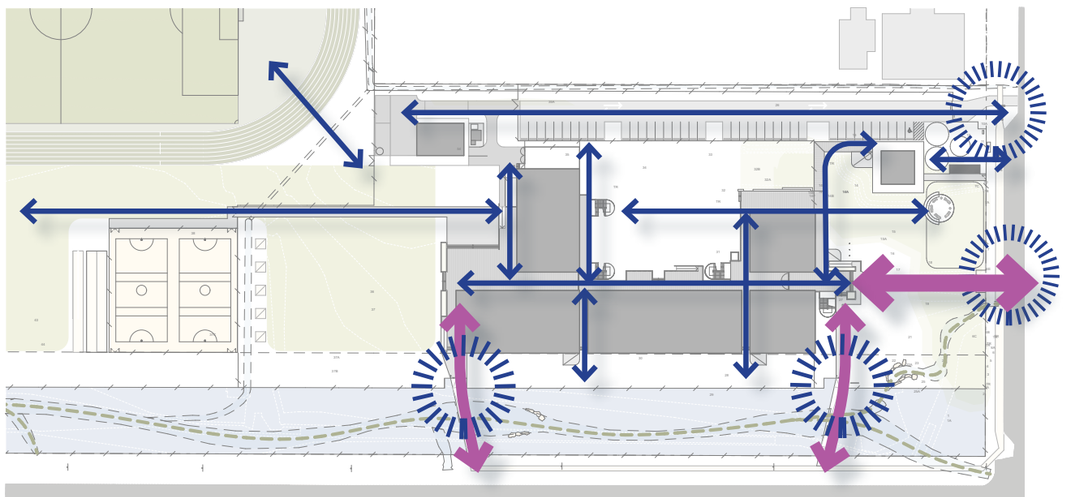
These zones include the following:

- The retained natural and cultural landscape
- Central Courtyard
- Active Play
- Playing Field
- Water Management Corridor

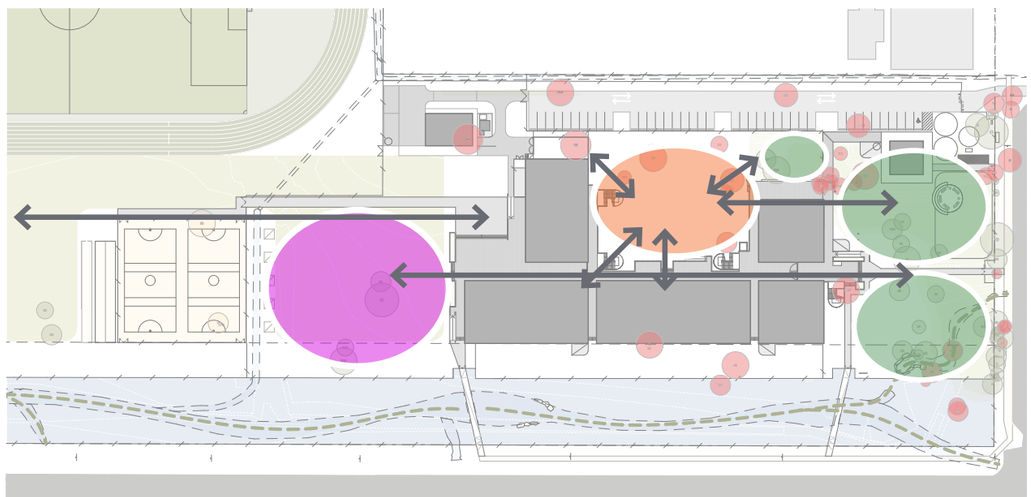


NTS

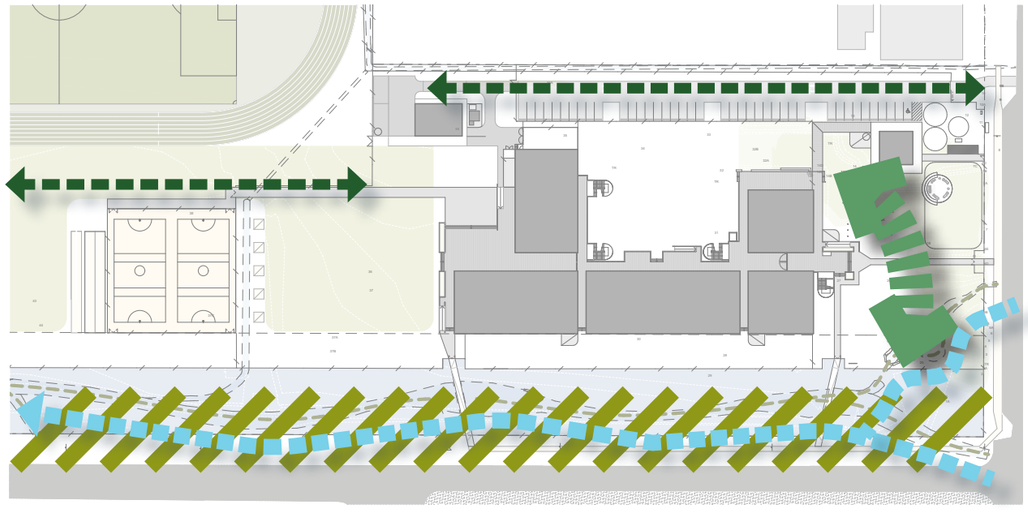
3.2 Key Design Principles



Clear & welcoming entries & functional pedestrian thoroughfares through a legible series of open spaces



Integrate indoor & outdoor learning, providing spaces for learning, gatherings, ceremonies & play



Weave the natural landscape into the site through native plantings, natural open space & wsud principles

3.3 Landscape Design Strategy

The landscape design has been developed to provide an exterior environment for the school community that reflects the current values and policies of the Department of Education and the requirements of School Infrastructure NSW (SINSW).

The design of the landscape has been completed in accordance with the relevant policies and guidance from SINSW including;

Better Placed - Design Guide for Schools

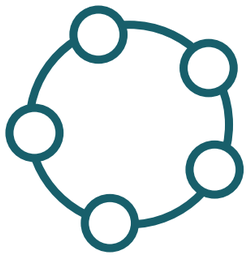
Better Placed – Environmental Design for Schools

GANSW - Connecting with Country

Draft Greener Places Design Guide (GANSW)

1. Context, built form and landscape

2. Sustainable, efficient and durable



3. Accessible and inclusive

4. Health and safety

5. Amenity

6. Whole of life, flexible and adaptive

7. Aesthetics

1. Context, built form and landscape

The broad intent of the Landscape Strategy is to integrate the natural and extant landscape (native trees and grasses) with the new design and contribute to the overall town landscape through site improvements and planting.

At the eastern edge of the site elements of the remnant tree cover and native grass cover will be retained and the landscape will wrap around the new built form to provide a ‘native bush’ feel to the school entry. This will link the main heart of the school with the surrounding country.

The School courtyard will be planted with new trees to provide shade and amenity for students.

The paving of the central courtyard is plain concrete in line with the EFSG and guidance from SINSW. Small areas of planting in the courtyard space provide some softening to the architectural form and rectilinear layout.

The western open area of the school is intended to be playing fields and active recreation. While the retention of the native grasses are incompatible with the active use it is proposed to provide tree planting along the southern and western edges of the school grounds to define the spaces, to provide summer shade and to modulate the impact of the modern architectural façade on the traditional streetscape of Mitchell Street/Kamilaroi Highway.

Beyond the main education area – there are plantings of trees to provide shade and amenity for users of the school and to benefit the streetscape. These areas are integrated into the flood and drainage channels (subject to a separate planning and consent pathway) that run along the Mitchell Street and Charles Street boundaries. The tree plantings are both in formal arrangements with straight line plantings along fence lines and grouped informally in the flood channels. These arrangements reflect the typical plantings in rural landscapes.

The plantings chosen for the school landscape are a blend of locally indigenous species and species that carry post-settlement cultural associations. By selecting a range of plant characteristics – the landscape design can provide culturally relevant species as well as enhance both summer and winter comfort.

The landscape design, the planting selection and the arrangement of external features provides the students and teachers with an external environment that moderates the extreme climates experienced in Wee Waa. The landscape design provides shade in summer, solar access in winter and shelter from the prevailing winds.

The landscape design provides planted edges to the public realm and a softening of the edges of the school grounds. The longer-term growth of the planted trees will provide shade, a sense of arrival for the town and visual softening of the double story architectural façade.

Integrating the existing landscape context

Simple treatments to the exterior spaces provide legible and easy to maintain grounds

2. Sustainable, efficient and durable

The landscape design proposes the use of durable and hard-wearing surfaces with concrete for pathways and paving in accordance with the EFSG.

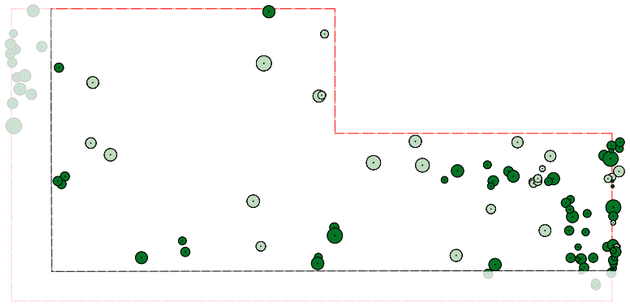
Landscape construction materials chosen for the design are mostly readily available in northwest NSW minimising the need to bring in materials from remote locations.

Given the location with extremely hot summers and cold winters, the provision of substantial shade to the north facing spaces is critical to provide thermal comfort. The design allows for deciduous trees that have the potential to grow quite large to the north and west facing areas of the central courtyard. The winter sun can penetrate and provide a sun trap that is also sheltered from the cold winter winds.

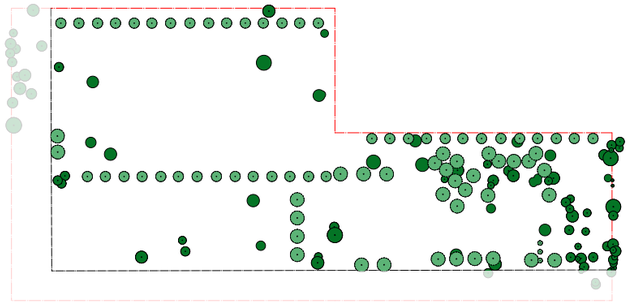
The landscape areas will focus on sustainability with water use, fertiliser use and maintenance minimised where possible. The retention of the grass lands and locally indigenous trees in the eastern area will require limited inputs.

The soft landscape in other areas of the campus will be planted with drought tolerant species that provide year round amenity with low water demand and minimal maintenance requirements.

The flood mitigation system being introduced with a separate consent process but adjacent to the school provides a fantastic opportunity to introduce the concepts of Water Sensitive Urban Design (WSUD) principles into the school community and to use the ephemeral and semi aquatic environments as teaching and learning opportunities. The flood and open swale drains required for the school will be planted with drought tolerant wetland species typically found around drainage lines in the Namoi Plains. The seasonal changes in the water availability will be reflected in the planting. The opportunities to use the WSUD in curriculum to discuss plant biology and the nexus between the natural environment and human-modified landscape systems.



Existing Tree Canopy (approx 2000m2)



Tree Canopy (approx 4,700m2) in approx 10 - 15 years.

Water drainage facilities developed into WSUD treatment facilities to improve water quality

Affordable materials with simple detailing

3. Accessible and inclusive

The layout of paths and access ways through the school landscape links the entry points and key destinations within the school. These paths will be surfaced to allow appropriate levels of access for all abilities. Pathways are designed to be easily identifiable and provide a clear ‘path-of-travel’ for users. The paths and access networks are designed to complement the architectural form and provide an intuitive series of way-finding cues for users/visitors.

The soil and topographic situation for the new school is such that the finished floor level of the ground floor needs to be raised above the surrounding landscape to provide ventilation and flood avoidance. The raised ground floor will be accessed from the landscape through ramps and stairs built into the architectural design. Areas of landscape will all generally be on ground level with very minor changes in elevation to promote drainage. Accessibility for students, teachers and parents with mobility restrictions will be catered for in the layout of the landscape with all areas of the school being connected by ramps and stairs in accordance with AS1428 Design for Access and Mobility.

Passive areas to the east will include the native grass meadows and will be shaded under existing native trees. The main entry pathwill travel through this natural landscape. A footbridge will connect the main school entry to the adjacent Wee Waa Public School on Mitchell Street and another footbridge will connect the Sports Hall over the flood channel to Mitchell Street, meeting in line with Church Street and connecting to the town centre.

The central courtyard will provide a series of sitting and lounging opportunities while around the edges of the central courtyard small scale seating and socialising opportunities will be developed. The picnic areas, exercise spaces and ball courts to the west of the main building block are accessible directly from the central axis through the buildings. These exterior facilities may be used by the public and will deliver hard surfaced access from the street.

Careful consideration of levels, gradients and pathways to ensure access and mobility

Well designed and finished footbridges to the school over the Flood Channel

Clear paths of travel

4. Health and safety

The site planning and landscape design will avoid conflict between pedestrian and vehicles with all parking being kept to the periphery of the school and the central areas being devoted entirely to pedestrian activity. The entry path from George Street to the east will be well defined and wide enough to accommodate a large number of students coming in /out to buses and private cars. The pick up and drop off areas are designed to minimise the need for crossing and conflicts. Cycle parking is included in the development to allow students and teachers from the Wee Waa township to ride and securely park a bike at the school. New pedestrian blisters are currently being constructed at the corner of George and Mitchell/ Kamilaroi Hwy to the east of the proposed school site which will provide direct access to Dangar Park - Wee Waa's primary open space.

Crime prevention through Environmental Design (CPTED) is an important aspect of landscape design for schools. The ability of teachers to survey the student population at break times and the ability of students to have choices regarding challenging social situations is critical to the safety and happiness of the school community. The landscape for Wee Waa High School has been designed with extensive natural surveillance. In areas with high activity such as the school entry, the central courtyard and the active play area there are open sight lines with minimal visual obstructions. Planted trees are selected to have high canopies and single clear trunks that will not provide hiding opportunities. Amenity plantings will similarly not provide any opportunities for concealment with only low growing species being selected.

Paths of travel through the building and landscape of the school for both staff and students provide multiple options in route selection. If a particular route is perceived as undesirable, other routes are possible. In addition – there are multiple points of exit from any space within the school meaning that if an individual feels unsafe – escape is always possible through the school grounds.

Most areas of the school landscape are able to be viewed easily from elevated positions within the class rooms and other buildings, and from the external elevated walkways. This provides excellent passive surveillance.

Entry and exit points to/from the school are designed to be clear and obvious. Entry points are designed to be always open to public view. The entry points are combined with surrounding high palisade fencing to provide a safe and 'containable' school precinct – where random uncontrolled entry by members of the public is restricted. The boundaries created by the open but secure fencing leads to a clear indication in both physical form and behaviour of territorial reinforcement. There is a clear transition between the unrestricted 'public realm' and the controlled realm of the High School. The territorial reinforcement is enhanced with access controls through the main school entry and other gates. The playing fields and the covered ball courts are contained within a lower fenced perimeter - allowing weekend and after hours use of the fields and ball courts by the community.

The ongoing management and maintenance of the school grounds will also promote the CPTED Principles of the school. Exterior spaces that are cared for and maintained are far less likely to be damaged, graffitied and vandalised.

Health and safety of local indigenous students and their families is considered in the design with specific spaces being designed for indigenous children and their families. A specific Indigenous Cultural Centre is constructed to the north of the school and a 'yarning circle' or story telling space is provided off to the side of the main part of the school grounds near the Cultural Centre. The Cultural Centre and the Story Circle is positioned to allow a culturally appropriate distance allowing indigenous students and their families to engage with the school on their own terms and not to be forced into interactions that they are not comfortable with. The provision of a conversation/story circle provides an opportunity for both indigenous and non-indigenous students to be exposed to traditional ideas and learnings through the knowledge of the traditional owners.

High canopy trees and low planting to ensure clear view lines

Design and operation to care for indigenous culture

Story space for cultural exchange

5. Amenity

Shaded social spaces are created in all areas of the school to provide amenity for students and staff. In open areas a selection of extant and/or new locally indigenous trees provide shade and sun. Depending on the seasonal requirements – users can seek sun or shade to provide thermal comfort. In the main school courtyard there are deciduous trees proposed along the north facing facades to deliver summer shade but allow solar penetration in winter – providing thermal comfort.

The arrangement of the architecture and supported by the landscape design – the scheme protects staff and students from the cold westerly (northwest to southwest) winds that are prevalent in winter.

The functional arrangement of the school grounds provides three main social areas;

1. The main courtyard is the primary space where students and staff will interact.

2. The area to the east retains the natural low-lying topography and vegetation which is enhanced through the designed drainage channel. This area is intended for passive social interaction with small or large groups. The grassed area with remnant trees is flexible in its use and can be adapted to a variety of passive pursuits. The area is intentionally retained as a natural landscape to encourage interaction with natural systems and seasonal change.

3. The area to the west of the school buildings is an area for active play and sports. The ball courts and the open grass area to the immediate west of the school buildings provide opportunities for students to participate in informal sports, formal sports and exercise by using the ball courts and exercise zone. The ball courts are roofed – meaning they can be used both winter and summer as they are protected from sun and rain. Beyond the ball courts and the exercise zone is the wide open playing field which will operate as both a school and community facility. The summer season will see a marked running track on the grass providing opportunity to participate in athletics while in winter a football (soccer) field will be located in the middle of the field. This area will host active and organised sports throughout the year for both the students and the wider public. Tree planting is arranged to the north of the open area providing shade for spectators in the northern flank and protection from northerly winds.

Noise mitigation is an issue for the school as the site is directly adjacent to a NSW State Highway. The Kamilaroi Highway (Mitchell Street) has a significant volume of large heavy vehicle traffic including B-Double trucks. The noise and visual intrusion from this traffic will impact on the amenity of the landscape. The edges of the school grounds to the south of the new school building and along the edge of the playing field will be incorporated into the flood conveyance channel and will be planted with informal but regularly spaced trees to provide a visual barrier and a screen to the highway. In so doing – the school-ground trees will also deliver much needed amenity and form to the road corridor through Wee Waa.

Active play areas for physical activity

Native remnant grass land retained

6. Whole of life, flexible and adaptive

The design recognises that the resources for asset management and renewal to Wee Waa High School when operational will be limited. The materials and arrangement of design elements have been selected to be robust to minimise the chances of damage and/or wear over time. If damage does occur the materials chosen are easily replaceable without the need for bespoke fabrication.

The spaces are designed to be flexible in the way in which the students and staff use them. Large and small groups can collect in the more open areas. Social groups can form in the various seating arrangements that are provided throughout the landscape. Teachers can use the various scaled spaces as outdoor learning areas or as ‘live laboratories’ depending on the needs of the curriculum.

Use of simple robust materials

Areas of high canopy trees and low planting

7. Aesthetics

The aesthetic consideration of the landscape design is such that it moderates the space between the modern architectural form, the fabric of the existing township and the surrounding natural environment. The landscape design seeks to provide references and cues in the arrangement and material selection that link the new school to its context.
Examples of this include;
1. The arrangement of the hard pavement links the design to the architectural facade.

2. The use and expression of the native grasslands, the retention of the existing vegetation and the planting of locally indigenous species within the new landscape link the school to the indigenous cultural heritage and the surrounding environment

3. The planting of 3 iconic Washingtonia palms outside the Administration area provides a reference to the post-settlement landscape traditions and links this development with other civic spaces throughout country town landscapes in rural NSW. These

The development of the school provides a significant opportunity to increase the amount of vegetation on site and therefore within Wee Waa town centre. The provision of extensive tree planting, shade and visual amenity will improve the aesthetics of Wee Waa township and make the High School a pleasant place to spend time.
In addition to and as a consequence of increasing the substantial tree planting on Mitchell Street/Kamiliaroi Highway the school development will create a significant entry feature to Wee Waa town ship and will present the community to the passing traffic.

Integrating shaded courtyard being for seating and socialisation

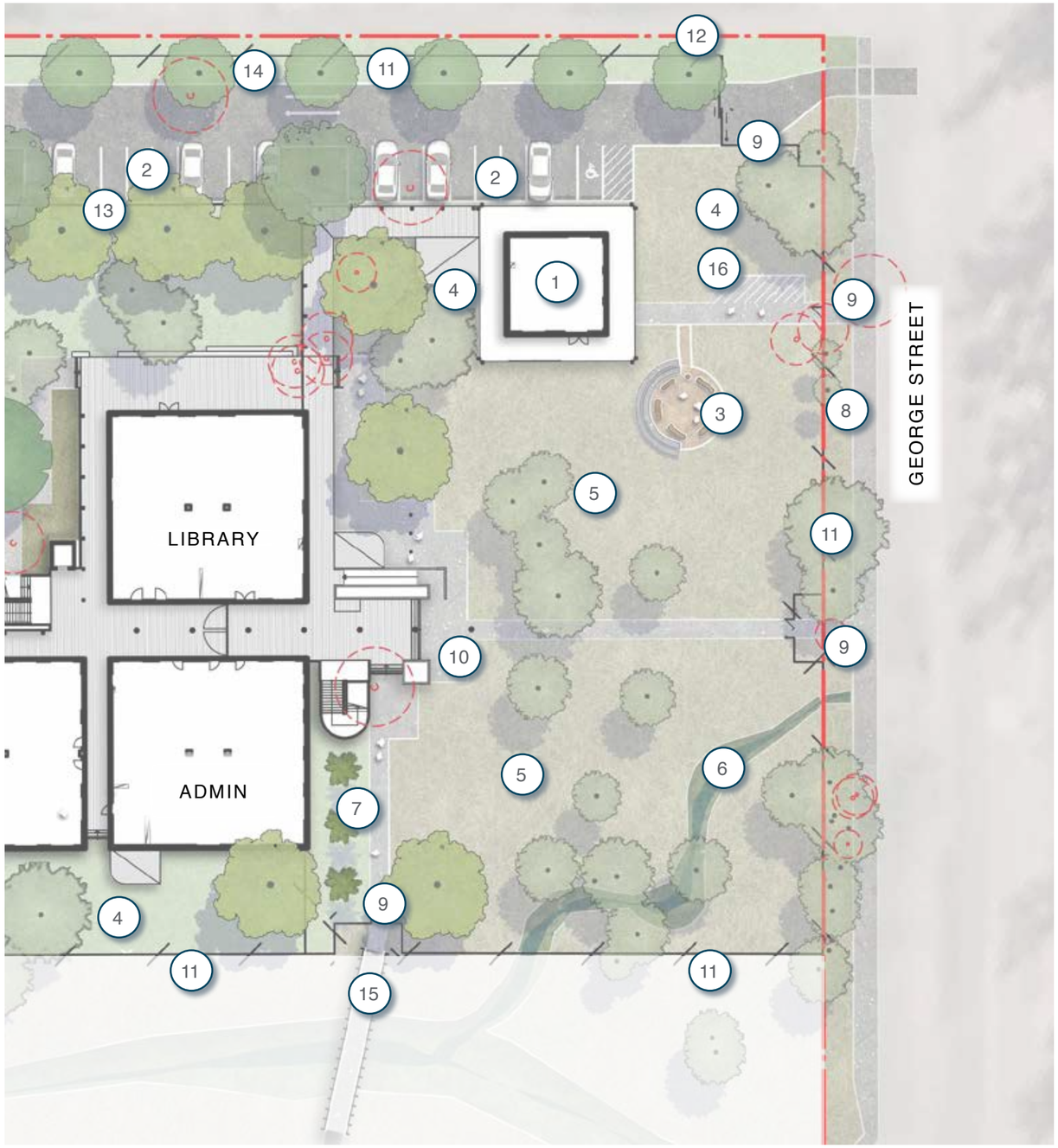
Use of Washingtonia Palms in nearby Narrabri

4.1 Landscape Concept

OVERALL LANDSCAPE PLAN

INSET 1 - CULTURAL LANDSCAPE

1. INDIGENOUS CULTURAL CENTRE
2. PARKING
3. YARNING AND STORY TELLING SPACE
4. SCREENED SERVICES
5. NATURAL AND CULTURAL LANDSCAPE
6. WSUD DRAINAGE
7. WASHINGTONIA PALMS
8. BUS AND DROP OFF AREA
9. ENTRY GATE
10. ENTRY PLAZA
11. PERIMETER SECURITY FENCE
12. EXISTING NEIGHBOURING FENCE
13. INTERNAL SECURITY FENCE
14. SCREEN PLANTING
15. FOOTBRIDGE
16. SERVICES AND BIKE ENCLOSURE



INSET 2 - CENTRAL COURTYARD

1. PLANTED LANDSCAPE AREA
2. PAVED COURTYARD
3. DECIDUOUS TREES
4. NATIVE TREES
5. PERIMETER SECURITY FENCE
6. EXISTING NEIGHBOURING FENCE
7. INTERNAL SECURITY FENCE

INSET 3 - ACTIVE RECREATION AREA

1. ACCESS BRIDGE
2. SPILL OUT SPACE FOR SPORTS HALL
3. DECKING FOR SCHOOL BUILDINGS
4. SHADE TREES
5. PICNIC SHELTERS
6. PERIMETER SECURITY FENCE
7. EXISTING NEIGHBOURING FENCE
8. INTERNAL SECURITY FENCE
9. BALLCOURT FENCE
10. GATES
11. OPEN PLAY AREA
12. ATHLETICS TRACK AND ACTIVE PLAY
13. SCREENED SERVICES
14. ACCESS PATH

4.2 Planting Selection

PLANTING AREAS

- Courtyard spaces that service the adjacent classroom functions
- Native WSUD planting that provide functional natural edges
- Native grasslands
- Shaded thoroughfares

TREE SELECTION

The provision of shade is a key requirement for the project, particularly to thoroughfares and congregation spaces. The species selection has been guided by local availability and with respect to the local growing conditions, soils and character of the site.
There is a balanced proportion of both native and non-native tree planting to provide variation in the landscape design and to reflect the contextual planting palette of Wee Waa township. The inclusion of native species provides a consistent reference to the local ecology and wider landscape while the use of Zelkova and Chinese Elm provide for both seasonal variation and the ability to deliver summer shade/winter sun in the occupied areas of the school grounds – particularly to the north and west of occupied spaces. The tree species to the south of the Playing Field and to the South of the Covered Ball Courts are specified as Eucalyptus microtheca (Coolibah) and these will provide a strong visual framework of these significant sized open spaces.

All the species selected are either locally indigenous to the Wee Waa area or have extensive histories as street trees throughout Australia, are widespread as specimen and park trees and do not exhibit a history of infrastructure damage or invasive root systems. All species have been selected to withstand cold frosty winter temperatures and hot dry summers. All proposed specimens of the Zelkova and Ulmus are positioned away from the immediate building line and are unlikely to negatively impact the buildings. In addition – the buildings are raised above the ground level on piered footings with air space beneath to allow for air circulation which will significantly reduce risk of root damage to building footings.

Ulmus parvifolia ‘Todd’

Eucalyptus microtheca

Zelkova “Wireless’

Washingtonia filifera

Casuarina cristata

SHRUB SELECTION

Our shrub selection includes species endemic to the area. The aim of the shrub palette is to provide a colourful, textural and sensory planting feature that functions as both a natural and functional edge.

Atriplex semibaccata

Rhagodia spinescens

Rhapheolepis ‘Snow Maiden’

Rhagodia spinescens

GROUNDCOVERS AND GRASSES SELECTION

The groundcover and climber species have been selected with the intention to strengthen existing vegetation community link the school to the indigenous cultural heritage and surrounding environment.

Stipa scabra

Juncus usitatus

Carex appressa

Lomandra fluviatilis ‘Shara’

Dianella caerulea ‘Little Jess’.

Bolboschoenus fluviatilis

Myoporum parvifolium