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1.1 Local Climate - Penrith & Surrounds

TEMPERATURE EXTREMES & AVERAGES

- Summer Maximum Extreme: 48.9 °C (Jan 2020)
- Summer Average Maximum Temperature = 31 Degrees
- Winter Minimum Extreme: -1.8 °C (July 2018)
- Winter Average Minimum Temperature = 5 Degrees

WINDS

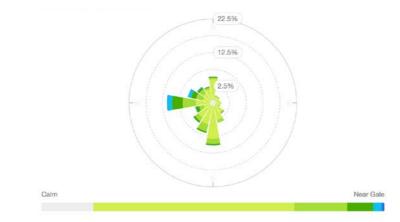
- Summer = Primarily Southerly Winds
- Autumn = Some Southerly Winds
- Winter = Primarily Westerly & South Westerly Winds
- Spring = Primarily Southerly Winds & Westerly Winds





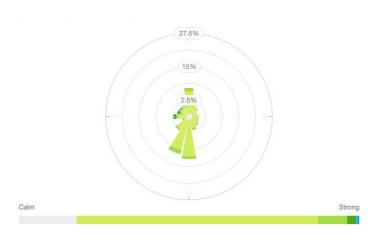


WINTER
AUGUST (5 YEAR WIND ROSE)



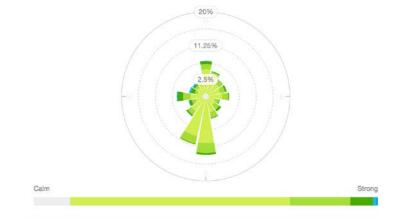
AUTUMN

APRIL (5 YEAR WIND ROSE)



SPRING

OCTOBER (5 YEAR WIND ROSE)



SOURCE: Bureau of Meteorology via Willy weather (https://www.willyweather.com.au/climate/weather-stations/nsw/greater-western-sydney/penrith-lakes)



1.2 Tafe Campus - Existing

Site Boundary

1 General / Mixed

Administration / Mixed

3 Sport / Gym

Design and Technology

5 Community Services

6 Hospitality

Unused

Vehicular Entry & Exit Point

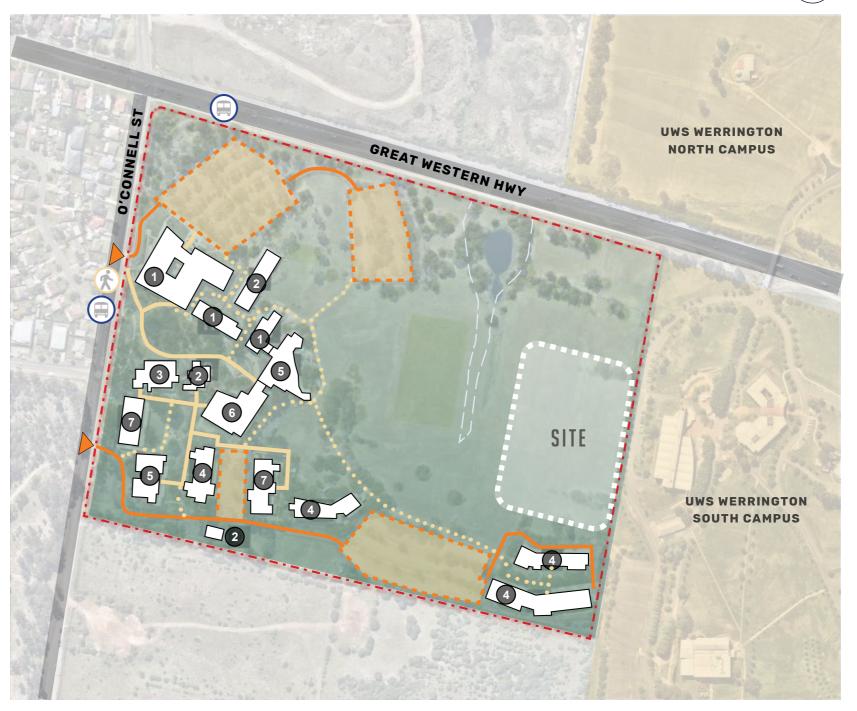
Vehicular Circulation

Pedestrian Access

Pedestrian Primary Circulation

• • Pedestrian Secondary Circulation

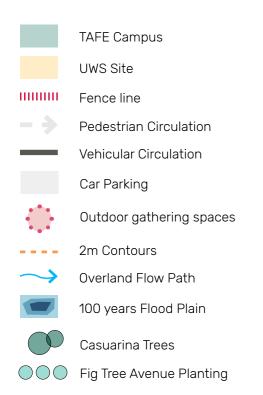
Bus Stop

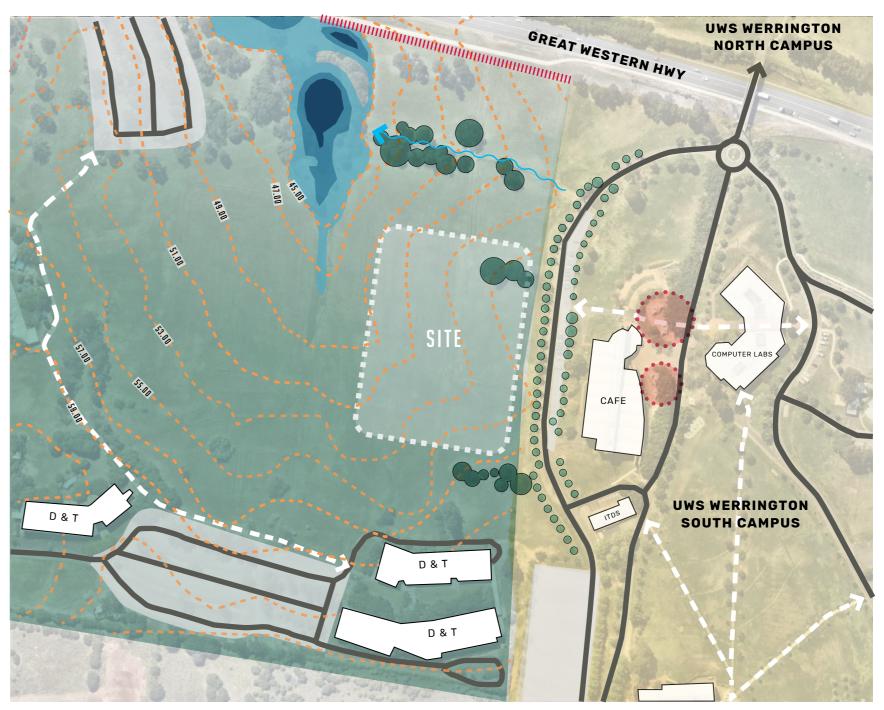




1.2 Construction Hub - Existing Site



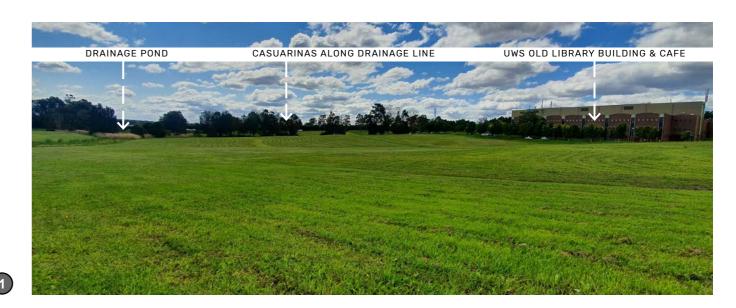






1.3 Construction Hub - Existing Site Photos











2.0 SITE PLANNING

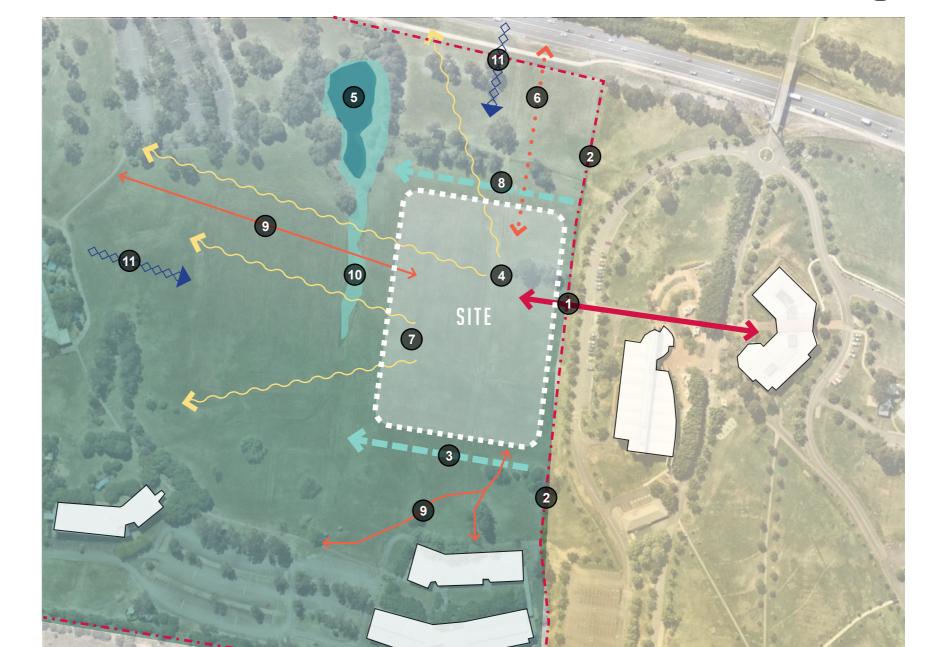
2.1 Opportunities & Constraints

OPPORTUNITIES

- Connection to UWS Werrington Campus with potential for shared use infrastructure and cross campus movement
- No existing fenceline between TAFE & UWS sites allows for adaptive and flexible connection points
- Sloping site topography provides opportunities for varied building/landscape interfaces to create diverse landscape spaces
- Connection to Blue Mountains with framed views
- Detention ponds & swale provide opportunity for enhanced biodiversity & water reuse
- New connection to Great Western Hwy & future public transport infrastructure links
- Pleasant vista over field and ample solar access provides opportunities for high quality landscape spaces

CONSTRAINTS

- Sloping site topography with a 14m (approx) level difference from Eastern boundary to low point (Swale & Drainage Ponds)
- 9 Isolated site located on Eastern side of campus away from existing Tafe Campus infrastructure to the West.
- Flooding potential needs to be considered with access points
- Site is exposed to strong Westerly & Northerly winds that could impact the functionality of landscape spaces during certain times of the year

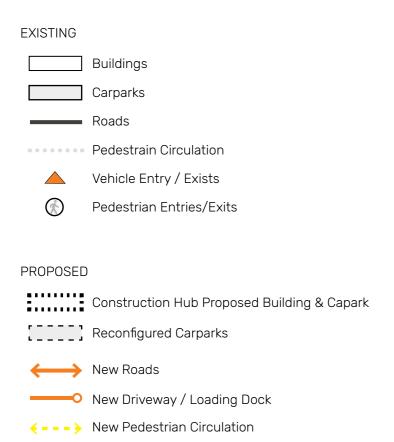


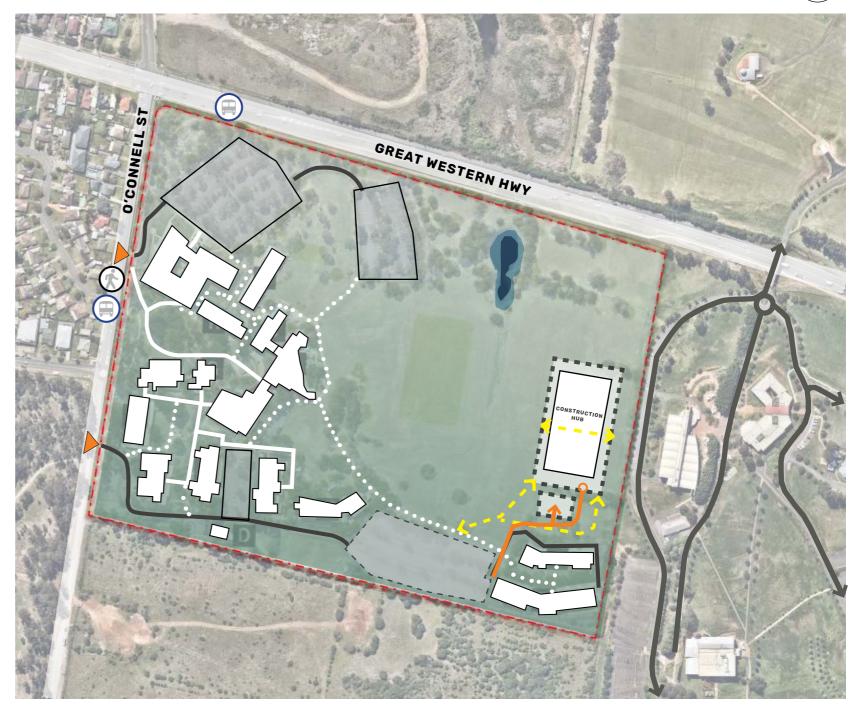


2.0 SITE PLANNING - MASTERPLAN

2.2 Tafe Campus - Stage 1 Construction Hub









3.0 DESIGN PRINCIPLES

3.1 Landscape Design Principles

1

Establish adaptive future focused learning environments to support construction trades

- + Establish a strong identity as a Centre of Excellence with high quality outdoor learning environments for construction trades which support building function & curriculum
- + Landscape spaces to support real world learning & simulated work environments
- + Adaptive outdoor learning spaces cross learning stream collaboration
- + Flexible outdoor learning & gathering areas for students & staff
- + Allowance for future expansion and connectivity to future Masterplan stages

2

Create a vibrant new precinct to foster connections with UWS, Industry & local communities

- + Create a student & community centric Eastern precinct that provides spaces for education & learning, social gathering and campus & community events.
- + Improve connections with UWS, Great Western Hwy & Future N/W growth corridor to activate the Eastern Tafe Precinct and encourage collaboration with the wider community
- + Provide adaptive & flexible outdoor spaces that allow for large group events including industry training & demonstration
- + Establish a unique identity for the Construction Trade Hub with a strong civic presence

3

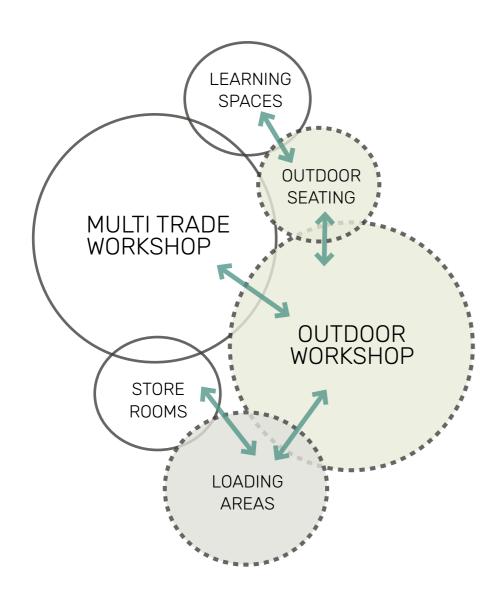
Implement sustainable design strategies that respond to local climate while enhancing the campus' parkland qualities

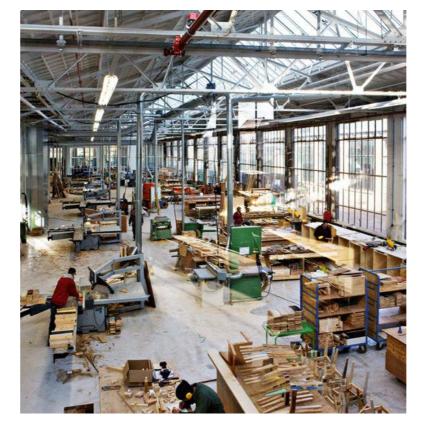
- + Design varied outdoor learning, gathering and movement spaces to provide options for year round comfort and use
- + Maximise energy efficiency with passive cooling & heating of spaces to support building sustainability
- + Respond to existing topography and landscape character through an integrated landscape approach
- + Prioritise spaces which support building function, sustainability & connectivity
- + Extend the parkland campus through endemic plantings suitable for local environment & landscape function



4.1 Outdoor learning spaces to support building function & curriculum

The buildings learning spaces & workshops will be supported and enhanced through the adjacent landscape spaces to provide opportunities for outdoor learning at various scales







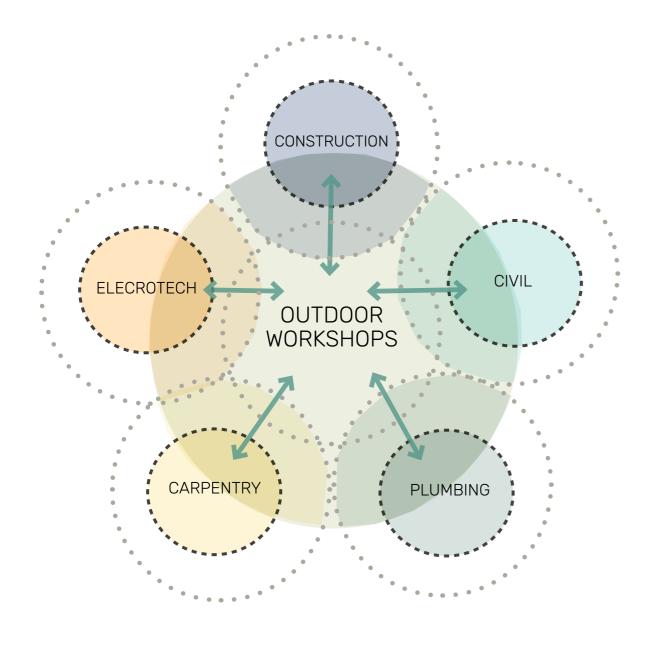






4.2 Adaptive & flexible outdoor learning spaces

Outdoor learning spaces to support real world learning skills & simulated work environments in open, adaptive & flexible spaces that encourage collaboration across learning streams







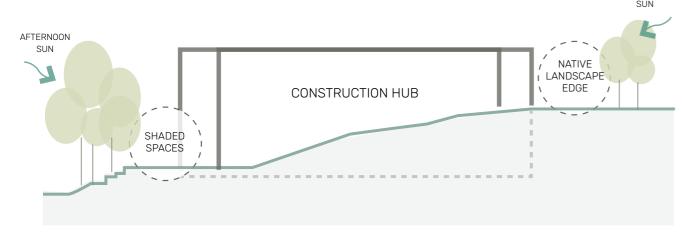


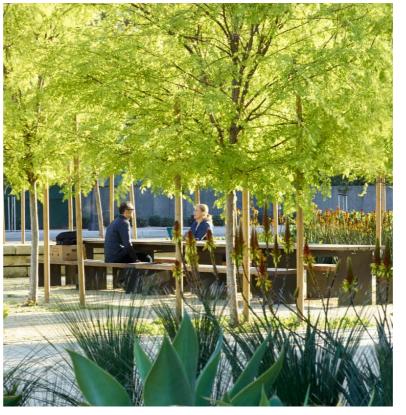




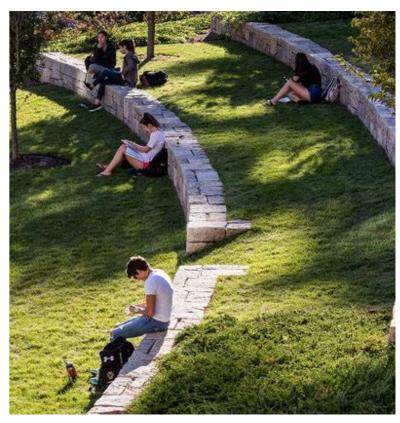
4.3 Parkland Campus

The landscape strategy will enhance the campus parkland landscape character through environmental & site responsive design that considers topography, microclimate and native flora.







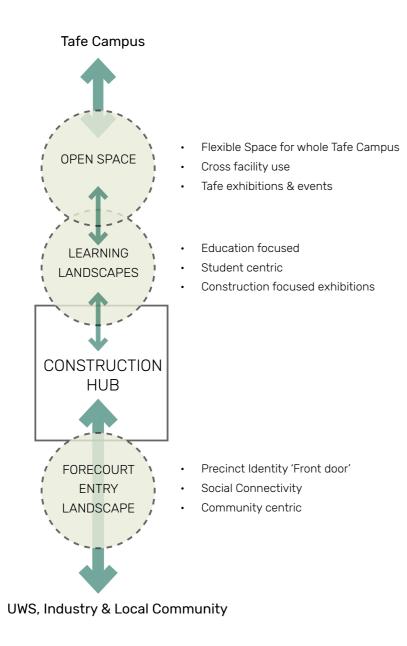






4.4 Connected Campus Precinct

Establish a strong identity for the Construction Hub while improving connections with UWS, Industry & wider community through a series of landscape spaces that provide opportunities for events & collaborations between communities







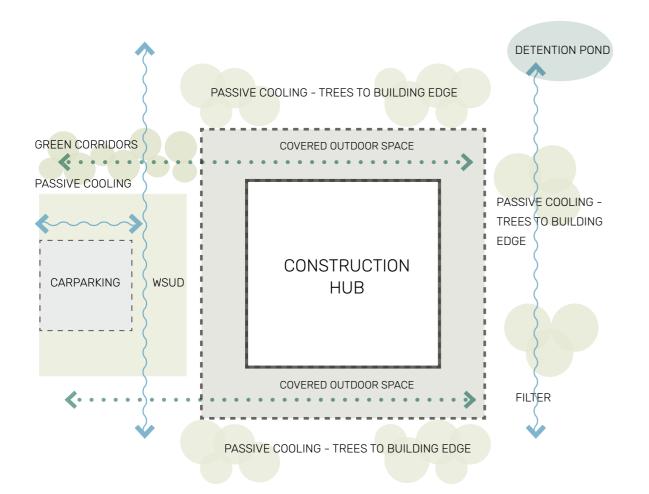




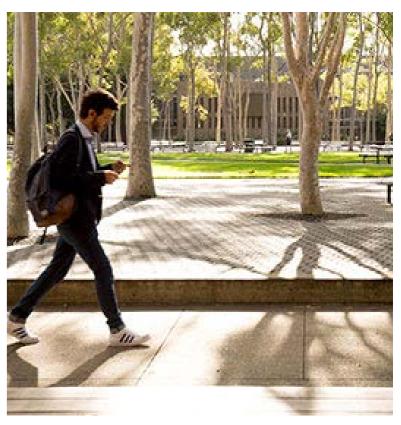


4.5 Sustainable Landscapes

- Design landscapes suitable for the local climate to maximise use throughout the year
- Solar access & wind protection in winter months and shade and passive cooling over summer months
- Assist Building with Passive Heating & Cooling
- · Water Sensitive Urban Design to filter hardstand run off
- Green Corridors to enhance pedestrian, vehicle & cycling connections
- Endemic planting for habitat creation













5.1 Construction Hub Landscape Planning Diagram

KEY

Pedestrian Circulation

Construction Hub Student Spine

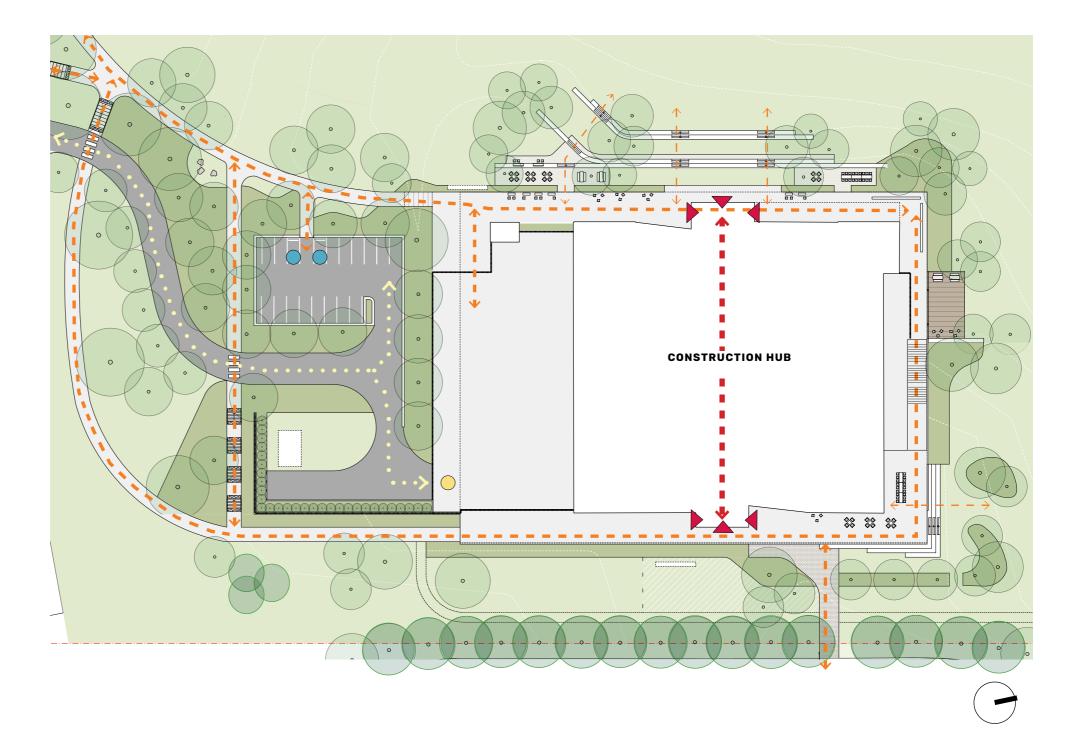
Main Entries

Vehicle Circulation (New Road)

Loading Bay

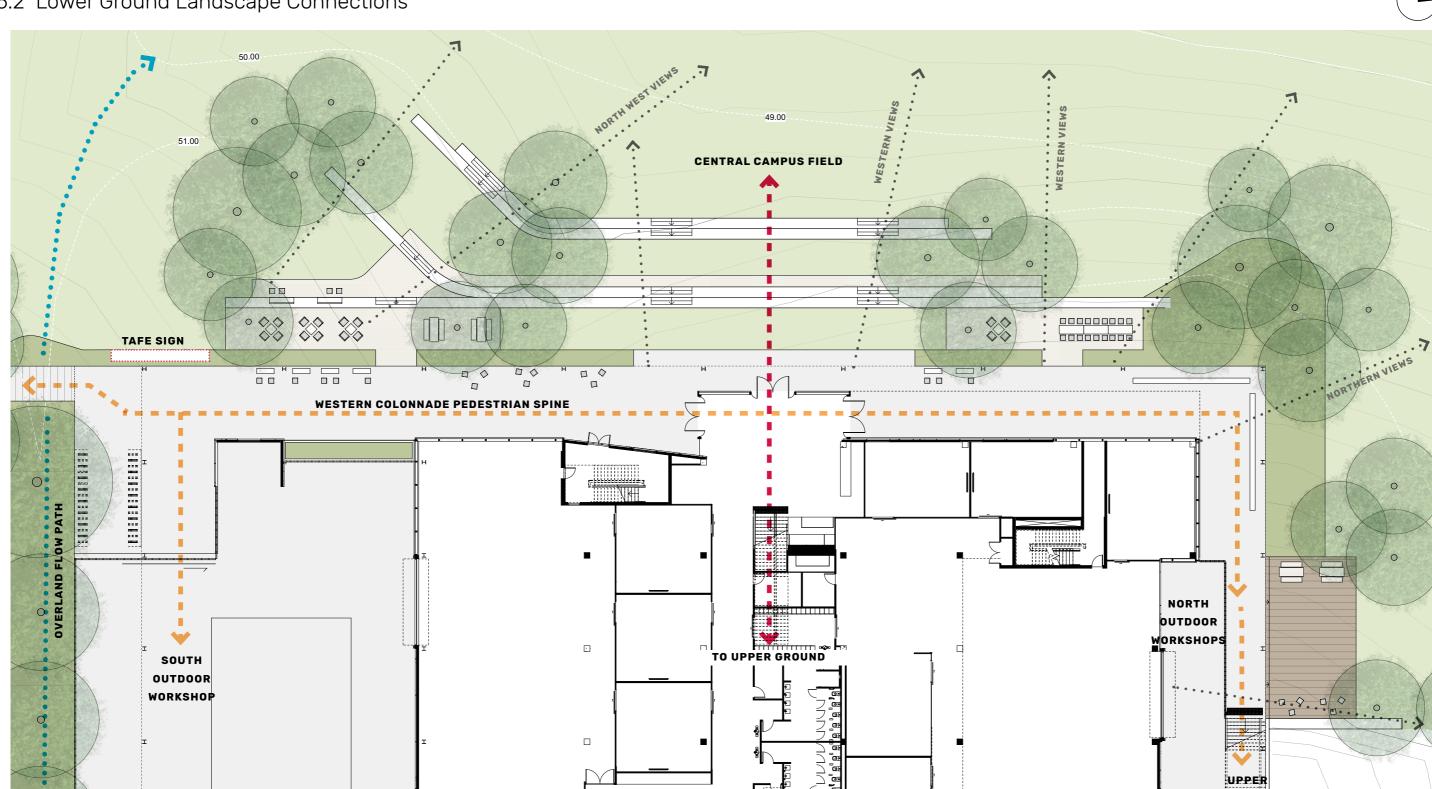
Accessible Parking

Existing Trees to be retained





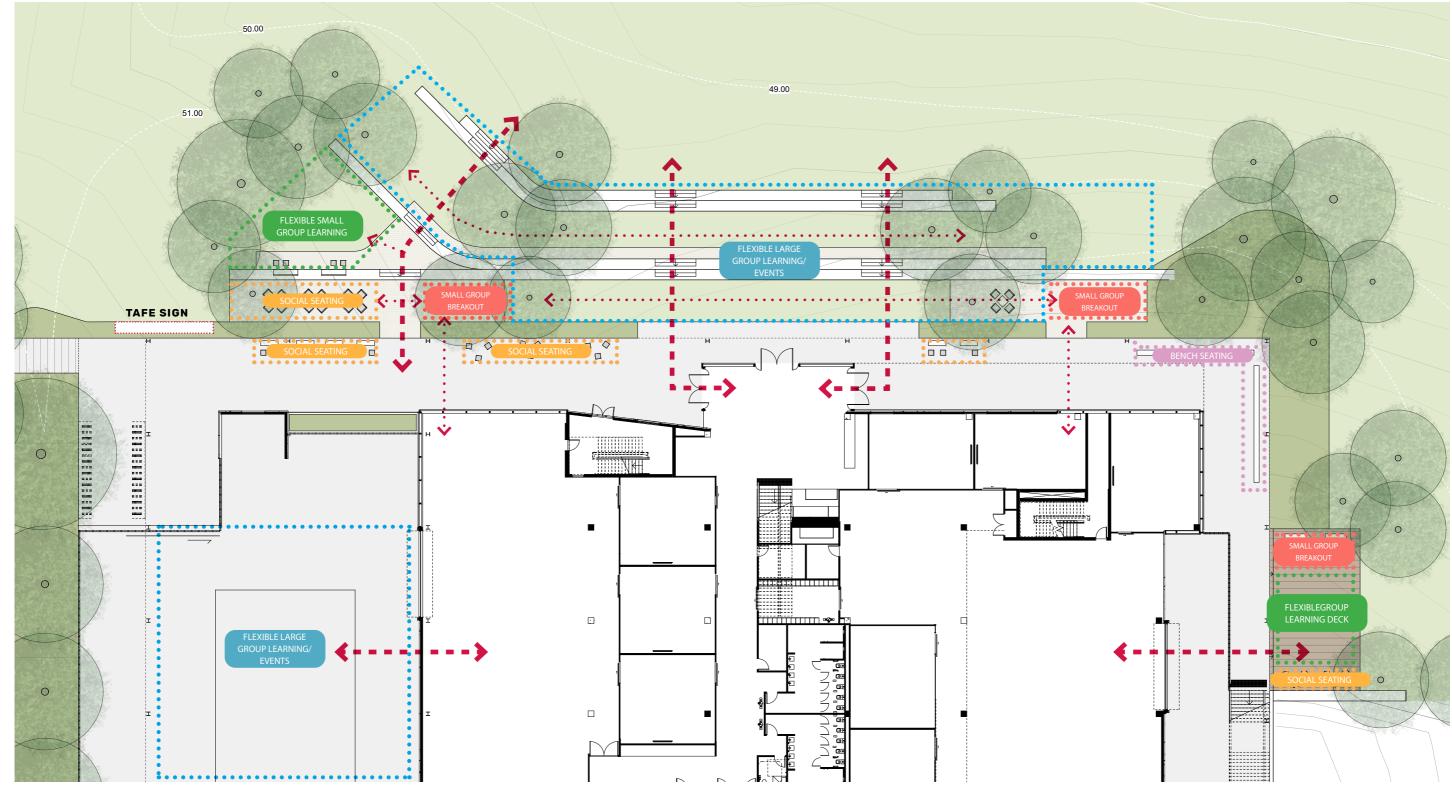
5.2 Lower Ground Landscape Connections





5.3 Lower Ground Landscape Zoning



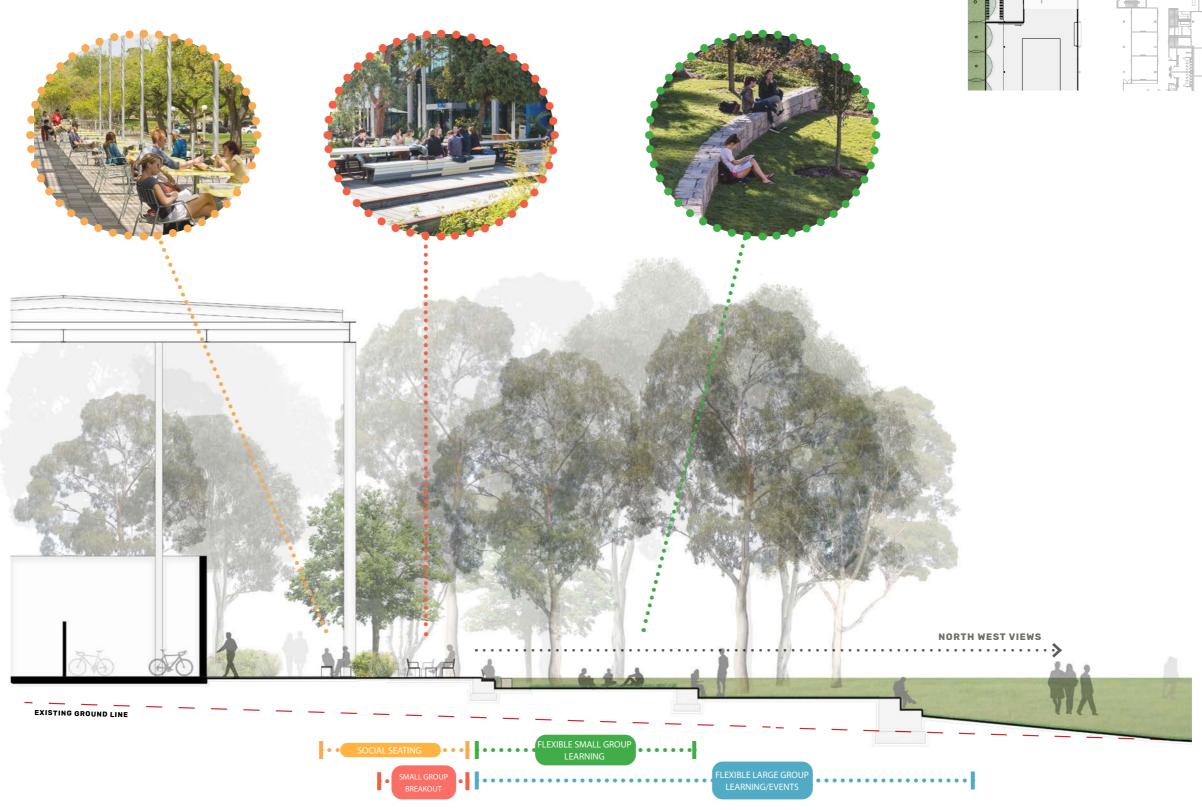




KEY PLAN

5.0 LANDSCAPE ZONING

5.4 Lower Ground Landscape Sections





KEY PLAN

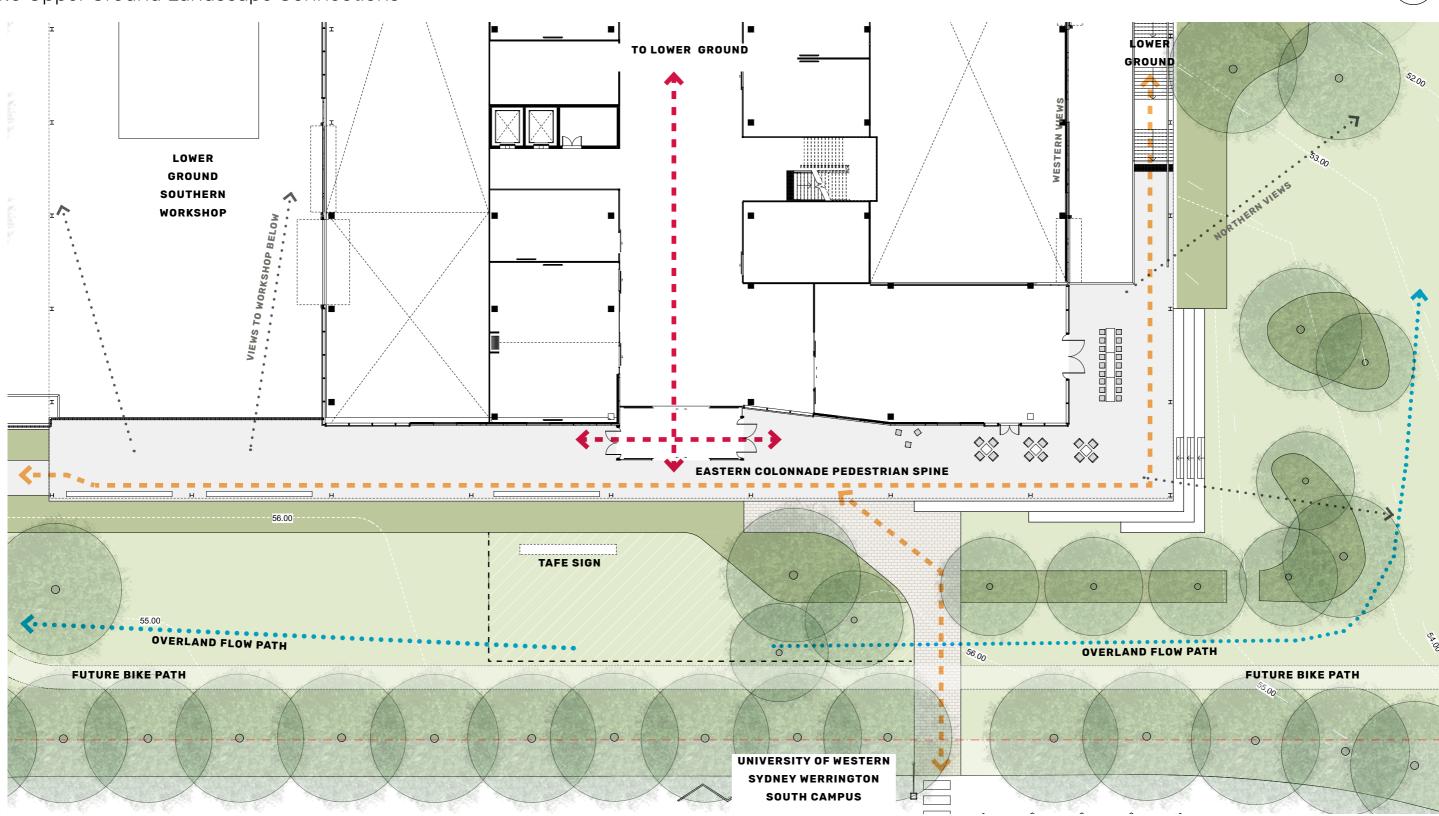
5.0 LANDSCAPE ZONING

5.5 Lower Ground Landscape Sections



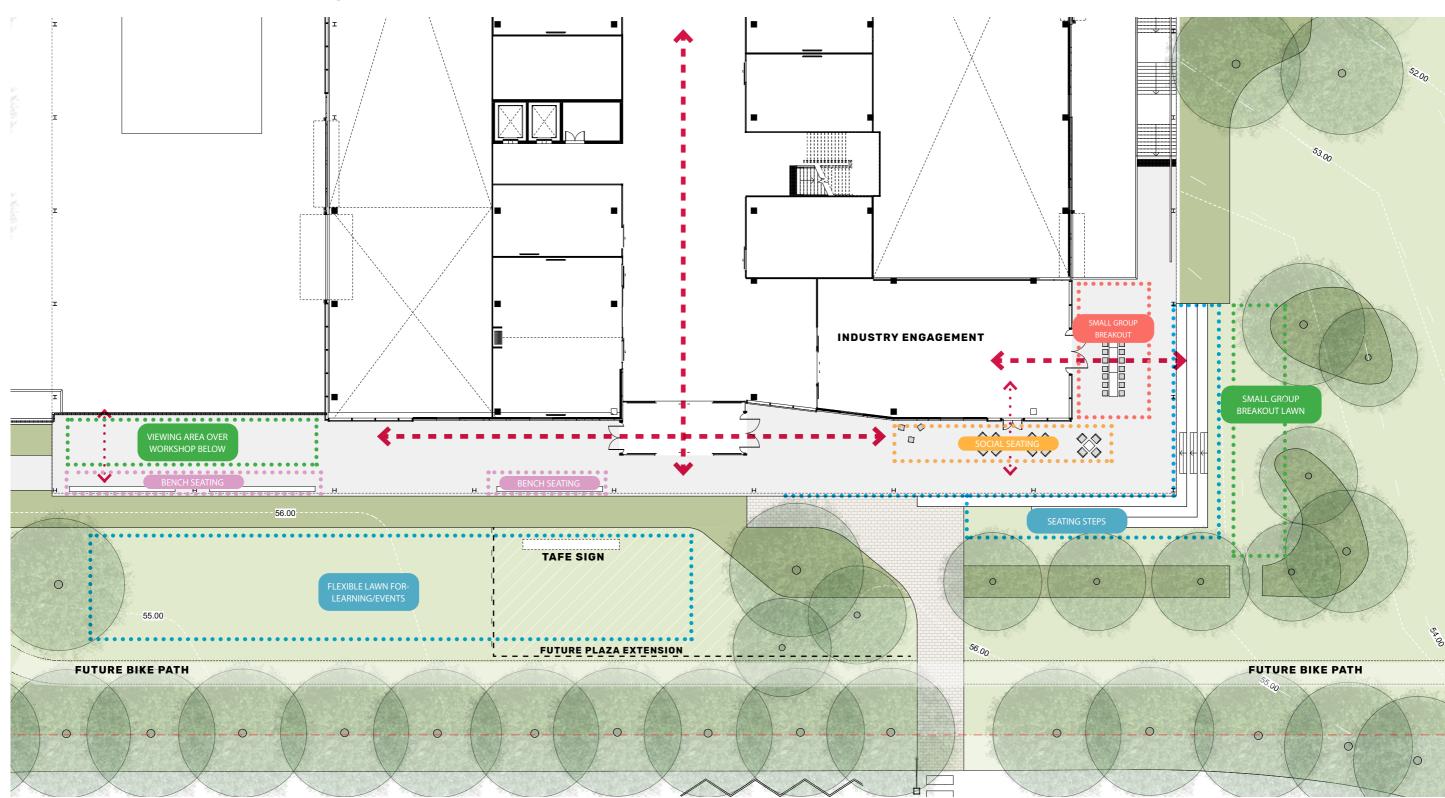


5.6 Upper Ground Landscape Connections





5.7 Upper Ground Landscape Zoning





6.0 PLANTING & MATERIALS

6.1 Planting Palette & Schedule

TREES



NSW Native



NSW Native Cultivar

GROUNDCOVERS & SPILLOVERS

NSW Native



TAFE NSW - CONSTRUCTION CENTRE OF EXCELLENCE SSDA REPORT (REV E)



PLANTING SCHEDULE

Botanical Name	Pot Size	Origin
TREES		
Corymbia maculata	400L	Cumberland Plain Native +
Eucalyptus polyanthemos	100L	NSW Native
Eucalyptus tereticornis	400L	Cumberland Plain Native +
Fraxinus pennsylvanica 'Urbanite'	100L	Exotic
Geijera parvifolia	100L	NSW Native
Melaleuca decora	75L	Cumberland Plain Native +
Tristaniopsis laurina	100L	Cumberland Plain Native ^
Waterhousea 'Sweeper'	75L	NSW Native Cultivar
Ulmus parvifolia	400L	Exotic
SHRUBS & PERENNIALS		
Babingtonia virgata dwarf	200mm	NSW Native
Banksia aemula	200mm	NSW Native
Callistemon 'Great Balls of Fire'	200mm	NSW Native Cultivar
Dodonaea viscosa subsp. cuneata	200mm	Cumberland Plain Native +
Euonymus Green Rocket	200mm	Exotic
Grevillea rosmarinifolia	200mm	Grevillea rosmarinifolia
Indigofera australis	200mm	Cumberland Plain Native +
Ozothamnus diosmifolius	200mm	NSW Native
Westringia fruticosa	200mm	NSW Native
GRASSES		
Dianella 'Little Jess'	150mm	NSW Native Cultivar
Lomandra filiformis	150mm	Cumberland Plain Native +
Lomandra longifolia 'Verday'	150mm	Cumberland Plain Native ^ cltv
Poa labillardieri	150mm	Cumberland Plain Native ^
Themeda australis	150mm	Cumberland Plain Native +
GROUNDCOVERS		
Acacia howittii 'Honey Bun'	150mm	NSW Native Cultivar
Carpobrotus rossii	150mm	NSW Native Cultivar
Casuarina 'Cousin It'	150mm	NSW Native Cultivar
Einadia nutans	150mm	Cumberland Plain Native +
Grevillea 'Poorinda Royal Mantle'	150mm	NSW Native Cultivar
Hardenbergia violacea	150mm	Cumberland Plain Native +
Rosmarinus 'Blue Lagoon'	150mm	Exotic
Wahlenbergia gracilis	Tube	Cumberland Plain Native +

Ke

- + Cumberland Plain Shale Woodland Spec
- ^ Sydney Coastal River Flat Species

6.0 PLANTING & MATERIALS

6.2 Landscape Materials

HARD FINISHES



Concrete with expressed saw cut-



Permeable Resin bonded gravel



Permeable Trihex paving



Precast Concrete Seating Steps & Walls Inlay's into hardstand in key locations





Timber/Composite Timber Decking

FURNITURE



Sandstone Blocks for informal seating/



Fixed Table & Seats Linea Seating Range (SFA) with wood look aluminium batterns



Integrated seating Linea Seating Range (SFA) with wood look aluminium batterns



Loose Casual Seating Forum Seating Range (SFA) with wood look aluminium batterns



Linea Seating Range (SFA) with wood look aluminium batterns







TAFE NSW CONSTRUCTION CENTRE OF EXCELLENCE

LANDSCAPE DOCUMENTATION

SSDA

DRAWING REGISTER

Dwg No.	Drawing Title	Scale	Size
General			
LA-DA-01	Cover Page & Drawing Schedule	N/A	A0
LA-DA-02	Landscape Schedules	N/A	A0
LA-DA-03	Tree Protection & Removal Plan	1:300	A0
Plans			
LA-DA-04	Site Plan	1:300	A0
LA-DA-05	Landscape Plan 1 - Lower Ground	1:200	A0
LA-DA-06	Landscape Plan 2 - Upper Ground	1:200	A0

GENERAL NOTES

* FOR DEVELOPMENT APPLICATION ONLY

* All tree dimensions and RLs in metres. All other dimensions in mm unless stated otherwise.

* Do not scale from drawings. Use figured dimensions only. Larger scale drawings and written dimensions take preference.

* All work shall be carried out in accordance with current versions of Australian Standards, BCA and Local Government Regulations.

* Structural Details are indicative only and are subject to Structural Engineer's Details and Specifications.

* Drainage details are subject to Hydraulic / Civil Engineer's Detail and Specification.

* Subbase details including compaction are to Civil and Structural Engineer's Specification.

* Lighting Plans are subject to detailed design by a qualified Lighting Consultant or Electrical Contractor.

* Water Feature Details are indicative only and are subject to detailed design by a specialist Water Feature designer.

* Service location on plans are indicative only. 360 Degrees Landscape Architects Pty Ltd accepts no responsibility for the accuracy of service locations shown or for services not shown. It is the responsibility of the contractor to determine service locations prior to the commencement of work, including contacting Dial Before You Dig and performing on site service locations. Locate and protect all services on site and in adjacent public domain. Any damages to services and associated damages remains the responsibility of the contractor and shall be rectified at no cost to the client or any other party.

*All adjoining property elements including but not limited to buildings, walls, trees and paving to be protected. Damaged elements remain the responsibility of the contractor and shall be rectified at no cost to the client or any other party. Existing trees to be retained are to be protected to Council and Project Arborist's requirements. No vehicular traffic, stockpiling or storage of materials within Tree Protection Zones (TPZs).

* No responsibility will be taken by 360 Degrees Landscape Architects Pty Ltd for any variations in design, construction method, materials specified and general specifications without permission from the Project Landscape Architect.

* This Drawing is copyright to 360 Degrees Landscape Architects Pty Ltd.

LOCATION PLAN











HARDW	ORKS	
E1	Edge Type 1	Flush Steel Edge
	Fence Type 1	1000mm High Palisade Fence
HR	Handrail	Stainless Steel 316, Satin Finish. 42 OD pipe
P1	Paving Type 1	Concrete
P2	Paving Type 2	Permeable Resin Bound Gravel
P3	Paving Type 3	To Architect's Specification
P4	Paving Type 4	Permeable Unit Paving
TD	Timber Deck	Class 1 Hardwood Timber (Tallowood)
W1	Wall Type 1	Concrete Wall
W2	Wall Type 2	Retaining Wall to Structural Engineer's Detail
TGSI	Tactile Ground Surface Indicators	Stainless Steel with Black Carborundum. Indicatively Shown
FT	Furniture	Loose / Fixed Furniture
SOFTWO	DRKS	
+T#	Tree to be Retained and Protected	Refer to Arborist Report
T#	Tree to be Removed	Refer to Arborist Report
0	New Tree	Refer to Plant Schedule
GB	Garden Bed	Garden Bed on Grade
LAWN	Turf	Buffalo 'Palmetto'. 300mm min Soil Underlay
GENERA	ALS	
	Site Boundary	Refer to Survey's Drawings
	Extent of Works	
	Awning Over	Refer to Architect's Drawigs
LEVELS		
+ ex RL 88.00	Existing Level	To be Retained
+ RL 88.00	Reduced Level	Top of Finish Level
+ ToW 88.00	Top of Wall RL	Top of Finish Level
+ ToE 88.00	Top of Edge RL	Top of Finish Level
+ ToS 88.00	Top of Seat RL	Top of Finish Level
+ ToF 88.00	Top of Fence RL	Top of Finish Level

PLANT SCHEDULE

Botanical Name	Pot Size	Origin
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Hardenbergia violacea	150mm	Cumberland Plain Native +
Rosmarinus 'Blue Lagoon'	150mm	Exotic
Wahlenbergia gracilis	Tube	Cumberland Plain Native +

Rev Amendment
A DRAFT SSDA
B DRAFT SSDA
C SSDA
D SSDA Date By
17/12/20 GF
09/02/21 GF
05/03/21 GF
11/03/21 GF PRELIMINARY NOT FOR CONSTRUCTION

IMPORTANT NOTES:
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Larger scale drawings and written dimensions take preference. All dimensions in mm unless otherwise stated.
All tree dimensions and RLs in metres.
Use figured dimensions only.
Verify all dimensions on site before the commencement of any works.
Contractors shall locate and protect all services prior to construction.
All work shall be carbination with ASB, BCA and Local Government Regulations.
Structural Details shall be subject to Fingineer's Specifications.
Drainage & Water Feature Details shall be subject to Fingineer's Specifications.
No responsibility will be taken by 360 Degrees Landscape Architects Pt Ltd for any variations in design, construction method, materials
specified, and general specifications without permission from the Project Engineer or Landscape Architects.

Size
N/A

Size
N/A

Size
N/A DWG. TITLE

Landscape Schedules PROJECT
TAFE NSW - CONSTRUCTION CENTRE OF EXCELLENCE STAGE SSDA









⁺ Cumberland Plain Shale Woodland Species ^ Sydney Coastal River Flat Species



