

Artist's impression

The River Gateway to Parramatta

- The Pedestrian and Cyclist Bridge at Alfred Street will be the first Diagonal Arch bridge to be designed and constructed in Australia.
- The bridge deck threads through the vertical plane of an arch centred on the navigable channel of the Parramatta River.
- This means the single arch can be experienced in two distinct ways, when moving under or along the bridge deck.
- The structurally honest and dynamic design will also provide an ever changing form in harmony with the surrounding landscape.

Key Design Principles

- 1 Maximise Accessibility**
Connect directly to the foreshore path, but also maximise access to and from the new street network.
- 2 User Safety**
Deliver a design that minimises risks to users and follows Crime Prevention Through Environmental Design (CEPTED) principles.
- 3 Timelessness**
Deliver an elegant bridge that is a prominent landmark defining the river gateway to the City.
- 4 Clarity of Form**
Cross the Parramatta River in a structurally honest and elegant single span, bank to bank, and centred on the visual and navigable river channel.
- 5 User Experience**
A smooth and delightful user journey along the bridge with gentle gradients not exceeding 3%, avoiding landings.
- 6 A Balanced Outcome**
Thoughtfully designed to balance aesthetics, constructability, maintenance, as well as whole of life and construction costs.
- 7 Respectful of the local setting**
Consider the visual setting from all angles towards and from the bridge.

Pedestrian and Cyclist Bridge across Parramatta River at Alfred Street

Concept only, subject to approvals and further detail design



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Local context

The new bridge sits centrally between two major drivers of pedestrian and cycling movement: the CBD and the Western Sydney University.

Further to this, the higher density development immediately surrounding the Bridge will be supported by direct access to the proposed Light Rail Station at corner of River Road West and Alfred Street.

Legend

- Existing Shared Pedestrian and Cycle Path
- Proposed Shared Pedestrian and Cycle Path
- Proposed Cycle Lanes
- Light Rail Line/Stop
- Pedestrian and Cyclist Bridge at Alfred Street



Plan not to scale

Context Plan: Connection to Parramatta CBD and Western Sydney University

Pedestrian and Cyclist Bridge
across Parramatta River at Alfred Street

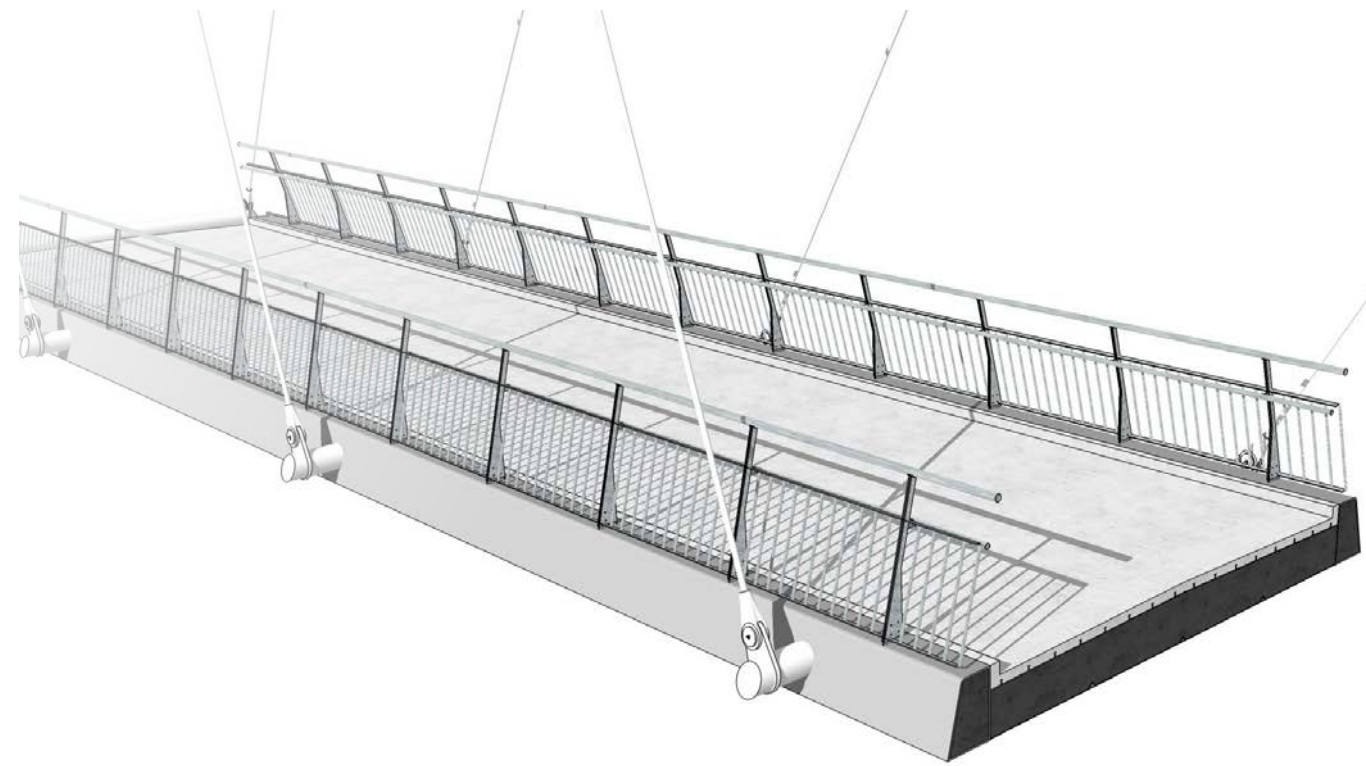
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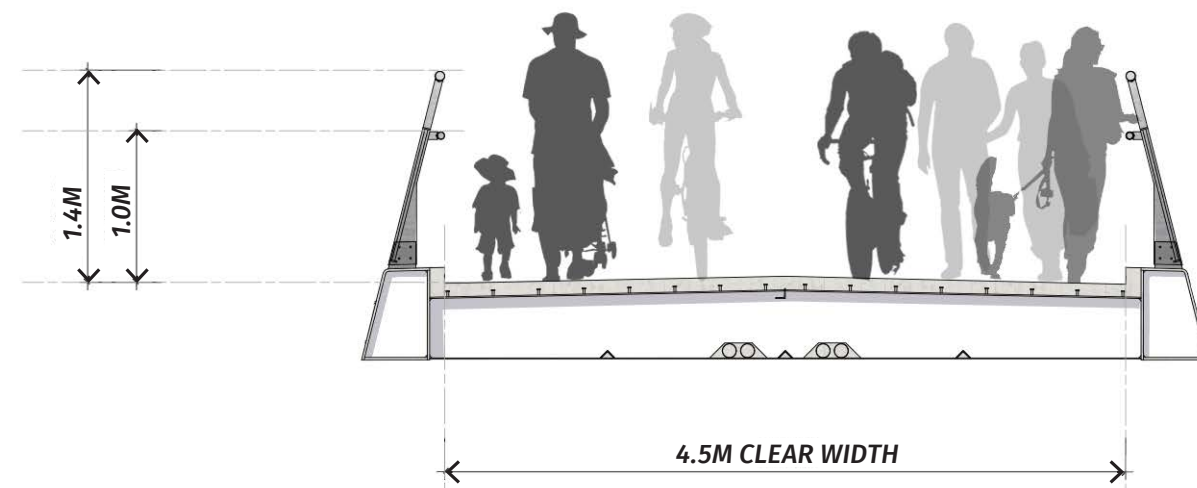
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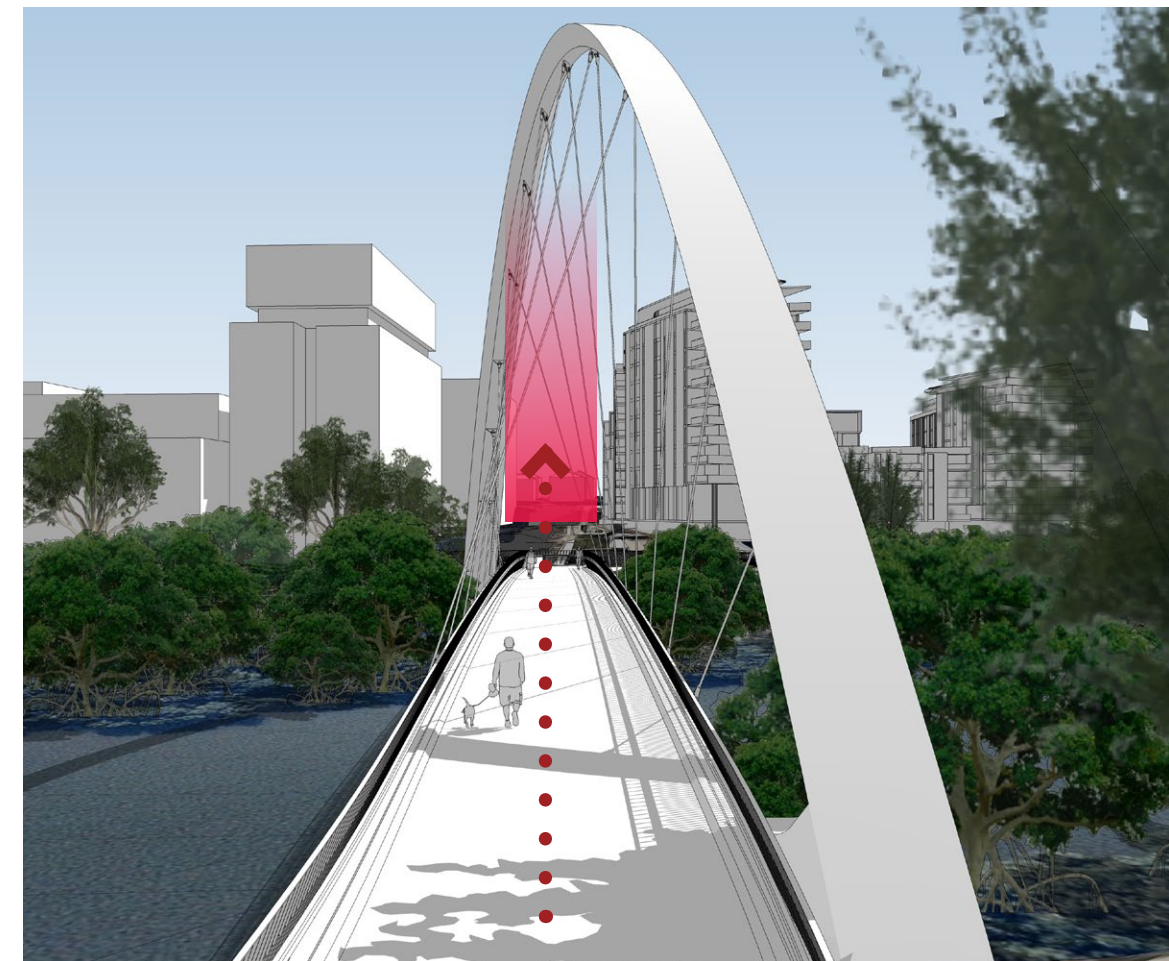
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BALUSTRADE DETAIL



BRIDGE DECK SECTION



NORTH ALIGNMENT TO OPEN SPACE



POTENTIAL LIGHTING DESIGN

Key Features

- The generous deck width of 4.5m takes into account the potential future volumes of pedestrians and cyclists, being mindful that a light rail stop will be located in close proximity to the southern landing.
- Both ends of the bridge visually align with the streets at each end, orienting pedestrians and cyclists towards open public space.
- The southern approach to the bridge has been carefully located to the east of the Alfred Street road reserve providing space between the abutment and existing apartment blocks, but also defines a meaningful public space to the west.
- An opening under the bridge deck at the southern end has been incorporated to ensure the existing riverside path can be extended along the river foreshore to the CBD.
- At the northern bank the bridge bifurcates into a stair to the west and a gently sloping ramp down to the foreshore path.
- Lighting will be an integral part of the bridge design and seeks to highlight the engineering elegance of the main span.

KEY DIMENSIONS

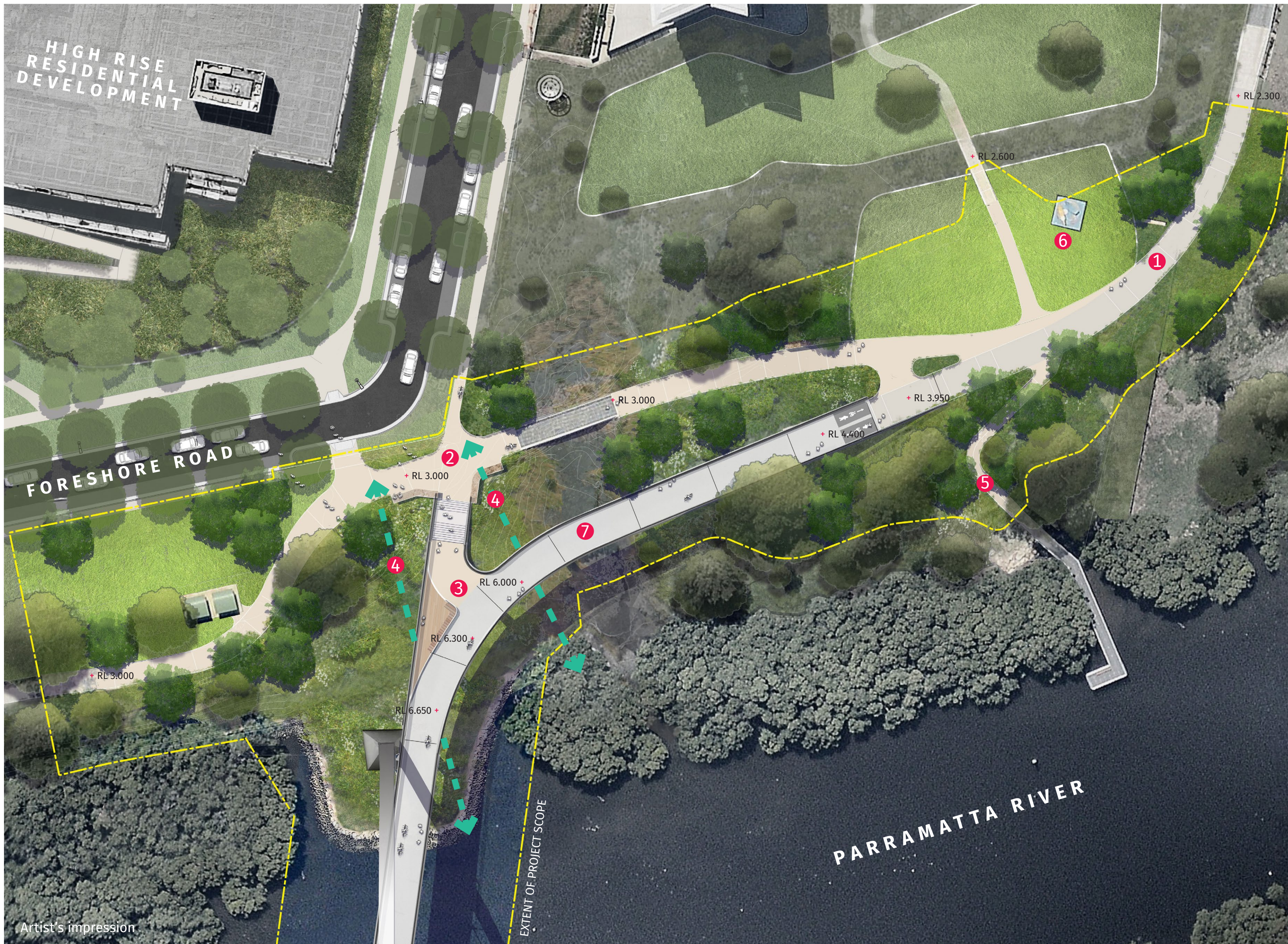
Main span	Height	30m above the high water mark
	length	80m
Overall Length	Just over 300m	
	175m Elevated steel/concrete decks	
	130m Concrete Pathways on ground	
Clearance	5.9m above hte high water mark	
Clear Deck Width	4.5m	



ELEVATION FROM EAST


Pedestrian and Cyclist Bridge across Parramatta River at Alfred Street

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North Landing - Design Elements

- 1 Existing path re-aligned and re-graded to ensure a smooth and easy transition to the bridge ramp.
- 2 Stairs are aligned with the main span and the new street to the north, and located to facilitate access to the bridge from the west.
- 3 From the perspective of a cyclist riding from the south, the path diverges 'beyond the bend' which is designed to prevent cyclists inadvertently riding towards the stairs.
- 4 Visual connection along riverside is maintained beneath the bridge, with low vegetation and high trunk clearance trees.
- 5 Access to existing river pontoon is maintained with a new connection.
- 6 Existing artwork re-located and open space maximised.
- 7 Bridge ramp gently descends at a 1:33 gradient to connect with the existing foreshore path.

 Extent of Project Scope.



0 5 10 15 20 25m

North Landing Concept Plan: Connection to Baludarri Wetlands and Western Sydney University

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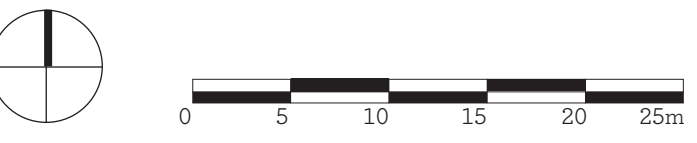
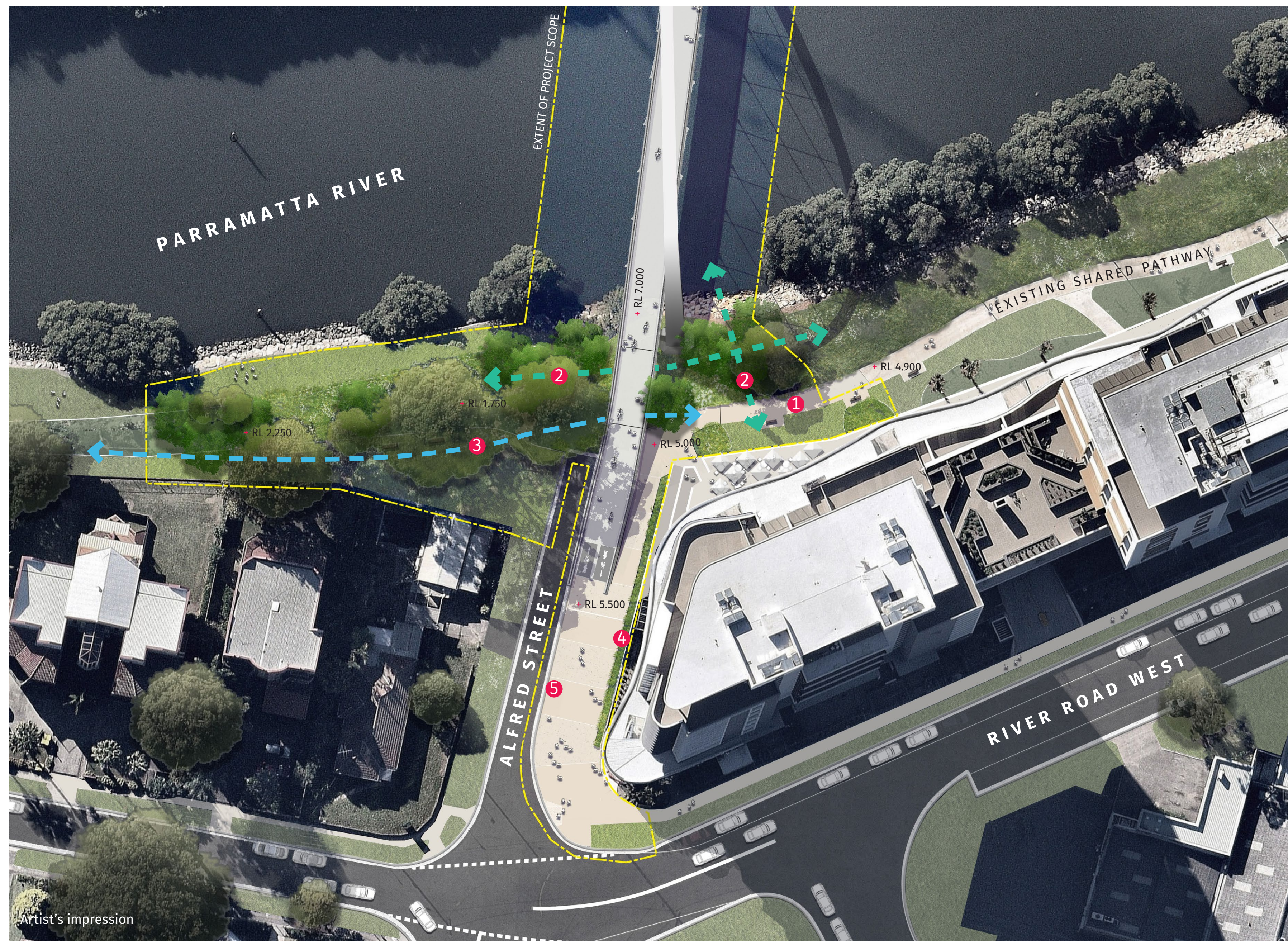


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South Landing - Design Elements

- 1 Connection to existing pathways.
- 2 Visual connection along riverside is maintained beneath the bridge, with low vegetation and high trunk clearance trees.
- 3 Provision for future, upper bank connection towards the City.
- 4 Buffer planting to adjacent property.
- 5 As part of this project, the north end of Alfred Street is proposed to be closed as a road and converted to a shared zone, but maintaining access to the adjacent property. The final configuration of the public space west of the bridge will be a separate project.

 Extent of Project Scope



South Landing Concept Plan: Connection to Alfred Street and Future Light Rail

Pedestrian and Cyclist Bridge
across Parramatta River at Alfred Street
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View of bridge arch and deck from south

Pedestrian and Cyclist Bridge

across Parramatta River at Alfred Street

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View of ramp and bridge arch from east

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View of bridge arch and stairs from north

Pedestrian and Cyclist Bridge
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View of bridge main span from river east

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