5.4WatermansQuay

VISION

Watermans Quay is a unique street in the context of the entire Master Plan of Barangaroo. It defines a clear connection from the city to the water and therefore offers excellent opportunities for clear views out across the Harbour. In addition, it also has an excellent engagement with Hickson Park to the north. These two characters of the street offer important opportunities to showcase the inherent connectivity of the different spaces within the Stage 1B public domain. With these two very distinctive characters comes a need to maintain its own personality as a key defining street.

In addition, the street will fulfil a range of important urban, access and service functions for people living and working within the precinct. The street is particularly wide – in relation to other existing streets in the development - it will accommodate two-way vehicular traffic and a designated taxi rank on the south western end, near the junction of Barangaroo Avenue. It will cater for vehicles, pedestrians and cyclists, naturally bringing the life, activity and variety of typical inner Sydney streets during most times of the day and evening. In the context of the two important connections to the park and the harbour we have carefully placed street trees and light poles in a particular rhythm to ensure that the street also maintains an overarching personality as an important urban streetscape environment. With this as one key inspiration we have always seen Watermans Quay as a distinctive "green street" and have been very rigourous throughout its development to retain one key principle that is should be the greenest of all of Barangaroo street.

Significant pedestrian connections through to Hickson Park, Watermans Cove and various residential and commercial lobby entrances, as well as a wide offering of retail, food and beverage outlets will define significant activation at the street level throughout all times of the day. Watermans Quay will be an authentic variety of urban uses that will not only draw a significant mark on the character of the public realm at Barangaroo but will also define news ways of engaging and enjoying the city's streets.

PHYSICAL PARAMETERS

Watermans Quay is approximately 113 metres in length from the Hickson Road intersection to Barangaroo Avenue. The street corridor is 23 metres wide between the ground level facades of the T1 tower podium and the residential buildings R4 and R5. Watermans Quay is effectively a level street with generous pedestrian footpaths on both sides however the street's pathway section is asymmetrical. A wider footpath is proposed on the southern side which allows for the integration of a dedicated taxi parking zone and several licensed dining areas.

The street has two main basement entries that are proposed on either side of the street. They provide the only entries to the future residential buildings around Hickson Park and the basement of all of the towers that have been constructed in Stage 1A.

CONNECTIVITY AND CONTINUITY

Watermans Quay will provide clear visual and physical continuity from Hickson Road to the Harbour for both vehicles and pedestrians. Of equal importance will be the north south connection of the street to Hickson Park and its connection to T1. A raised pedestrian crossing has been proposed to align with the entrance to the T1 tower and the opening to Hickson Park this will define a key component of the street, will help mitigate traffic speed and will also allow for the significant pedestrian movements that are expected at peak times during the day. This crossing will be paved in granite pavers selected from the City of Sydney approved paving palette.

Other important connections, primarily to Barangaroo South Stage 1A include the T1 through site link and Scotch Row that terminates in the south eastern side of the street.

INTEGRATION OF STAGE 1A WORKS

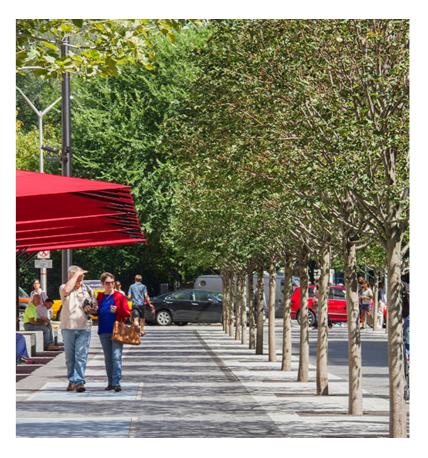
Parts of Watermans Quay have been constructed in Stage 1A as "temporary works". In order to complete the ultimate design of the street these will be required to be removed, and where possible retained for re-location. The most significant alternation will be the removal and relocation of the southern kerb alignment of the street that will be relocated northwards to accommodate the new taxi rank. All of the existing street tree planting is temporary, they will be removed and replaced with new species in accordance with the tree planting strategy section of this report.

PUBLIC DOMAIN CHARACTER

Watermans Quay is envisaged as a distinctive generously planted tree lined boulevard, providing a dramatic entry into the precinct from Hickson Rd. It will have generous footpaths lined with trees and will be defined by a comfortable retail and pedestrian environment. It is anticipated that the street will have many of the characteristics that are to be expected in a high density, mixed-use city environment. There are however no direct precedents within central Sydney for the concentration of works, residents and visitors adjacent Barangaroo South.

In summary Watermans Quay will be developed to follow these general principles.

- Frame the street with a regularly spaced boulevard of trees and light poles to re-enforce the east west orientation of the street and its connection to the Harbour
- It is the main east-west movement corridor within Barangaroo South





- It will fulfil a range of important urban, access and service functions for people living and working within the precinct. In particular this will clearly define the connection with T1 and the entry to Hickson Park.
- It is a slow speed street, equitably shared by vehicles, cyclists and pedestrians.
- It will promote a continuity of paving materials and furniture palette defined by Stage 1A.
- Generous footpath widths that accommodate expected pedestrian traffic volumes and outdoor seating.
- Successful integration of driveways into the streetscape to ensure pedestrian priority.

MATERIALITY AND STREET FURNITURE

The selection of paving and furniture and street furniture reflects the City of Sydney standard palette and is a continuation of the design language that has already been established for the streetscapes in Stage 1A.

USES

Watermans Quay will have the following primary user groups.

- Residents of R4 and R5
- Visitors to and from Hickson Park, Watermans Cove throughout all times of the day particularly at lunch time.
- Workers travelling north and south through Hickson Park to key public transport destinations
- Office workers and residents moving around the precinct or using the retail and service facilities at ground floor level.
- Vehicles entering the basement entries of T1 and the future residential buildings.

BUILDING INTERFACES AND STREET TREE COORDINATION

The ultimate success of Watermans Quay will be achieved through a combination of mixed-use active edges, a well-designed public domain and the creation of human scale in the context of the new large scale buildings. One significant important component of the visual interest and amenity will be the street tree planting.

Significant co-ordination work has been conducted through the development of the design of the street to ensure that a distinctive evergreen boulevard of trees will not just form a part of the street but be one that will be its defining character. They must however clearly respond to the constraints of urban street tree planting and have been selected particularly due to their suitability for planting in these environments. This includes straight clean trunks and dependable crown forms to ensure that all of the visual connections and sightlines are met. For Watermans Quay we have suggested a slightly closer spacing of the street trees (8m centres) to ensure that we could maximise the number of trees along each side of the street given the need to keep clear access for the two basement entries.

ACCESS TO CAR PARKING BASEMENTS

Watermans Quay is required to provide safe vehicular access to the Stage 1A and 1B basements. These are located adjacent to the junction with Barangaroo Avenue – in the case of access for the future Residential Towers - and adjacent to Scotch Row for the existing basement entry Stage 1A. The location of these entries had demanded that we carefully consider all tree and street furniture locations to mitigate the visual effect of these entries on the streetscape as much as possible. The driveways will be integrated with the paving designs so, like elsewhere on the existing Barangaroo Avenue, that the City of Sydney granite paving continues across the driveways and provides an unbroken and unified pavement across all areas of the footpath.

SERVICES INFRASTRUSTURE AND BASEMENT SLABS

Most of Watermans Quay is proposed over building basement slabs with the exceptions of space between 1A and 1B basements, where the trunk drainage is located. One has already been constructed as part of the construction of Stage 1A and accommodates the southern half of the street. The final northern sections of the street include the new section of basement for the Residential Towers. All services infrastructure and slab depths have been co-ordinated to ensure the provision of adequate soil volume for the proposed number of street trees.

ORIENTATION AND CLIMATE

Watermans Quay will be overshadowed for most periods of the day. Not unlike many Central Sydney east-west streets, it will however receive good solar access during the middle of the day and late afternoons. Watermans Quay's east-west alignment offers potential for a street environment that is exposed to cold westerly winter winds and may impact the relative comfort of the street for outdoor pedestrian activities. Cold winter winds from the south however will not be an issue. Trees have been placed in the eastern side of the proposed R4B building to mitigate winds in accordance with the recommendations of the wind report.

SAFETY

Compliance with universal accessibility codes and standards requirements is to be provided for all public areas including footpaths and level-grade pedestrian crossings. In order to maximise safety for all users, care has been taken with the placement of all street trees and furniture to promote a low speed environment, with appropriate sight lines and pedestrian priority. Day time and night-time safety is to be considered and integrated into the design through application of CPTED principles – Crime Prevention Through Environmental Design.

PEDESTRIAN MOVEMENT AND CAPACITY

Pedestrian volumes on Watermans Quay are expected to respond to the peak arrival and departure times associated with the population of the T1 tower. Until the completion of the connection to Hickson Park, and the future Metro Station, it is expected that the majority of the pedestrian movement will be to and from the new Hickson Road bridges at Exchange Place and Shipwrights Walk. In addition to the main raised pedestrian crossing that is proposed in the centre of the street – aligned with the T1 tower entry – there are two other at-grade paved pedestrian crossings that are proposed at the junction with Barangaroo Avenue

KEY SUSTAINABILITY REQUIREMENTS

Public domain sustainability initiatives specific to Watermans Quay that are appropriate for the urban character of this street include the provision of.

- Two bins types that encourage recycling of selected waste
- City of Sydney compliant granite pavers that provide low levels of maintenance and ease of cleaning
- Generous evergreen street tree planting to provide shaded planted footpaths
- Informatics and way-finding signage
- Bicycle parking provisions on smart poles and designated cycle stands
- Public safety through application of CPTED principles

Development application by others
 (Works not in public domain scope)

..... Awning over

1 Elaeocarpus eumundi street tree planting

2 R4B Basement entry

3 City of Sydney granite paving

4 Smart pole

5 Cast iron tree grate

6 Raised pedestrian crossing

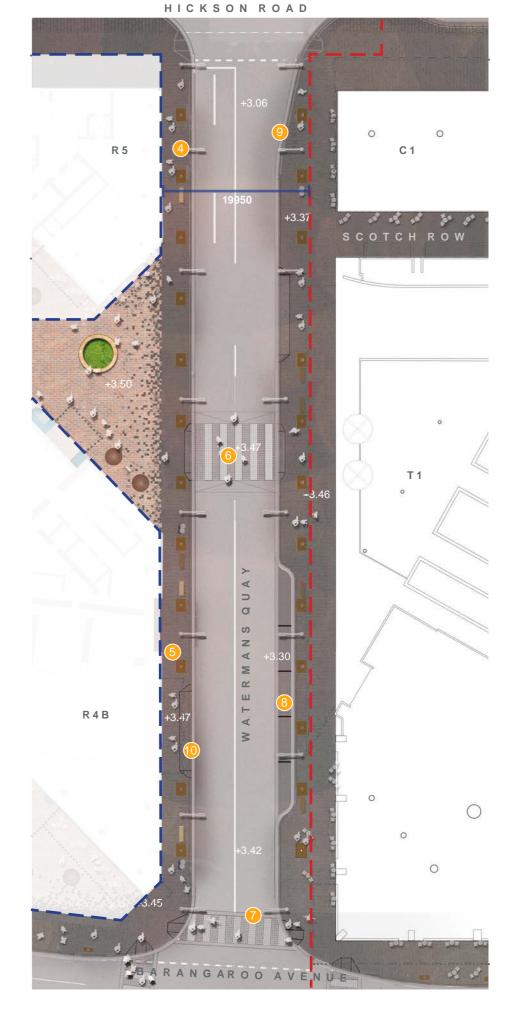
On grade granite paved crossing

8 Taxi rank

9 City of Sydney cycle parking hoops

10 Driveway cross over approved under One Sydney development application







WATERMANS QUAY DETAIL PLAN

- **— —** Development application boundary
- Development application by others
 (Works not in public domain scope)
- ····· Awning over
- 1 Ficus sp.signature tree planting
- 2 T1 basement entry
- 3 Raised granite paved pedestrian crossing
- 4 Elaeocarpus eumundi street tree planting
- 5 Watermans Quay





Development application by others (Works not in public domain scope)

····· Awning over

1 Watermans Quay

2 Tower one, International Towers Sydney

3 City of Sydney granite paving

4 City and park transition paving

6 Porphyry paving

6 Smart Pole with bike hoop

7 City of Sydney standard bench

8 Raised granite paved pedestrian crossing

Ocast iron tree grate

City of Sydney standard bin

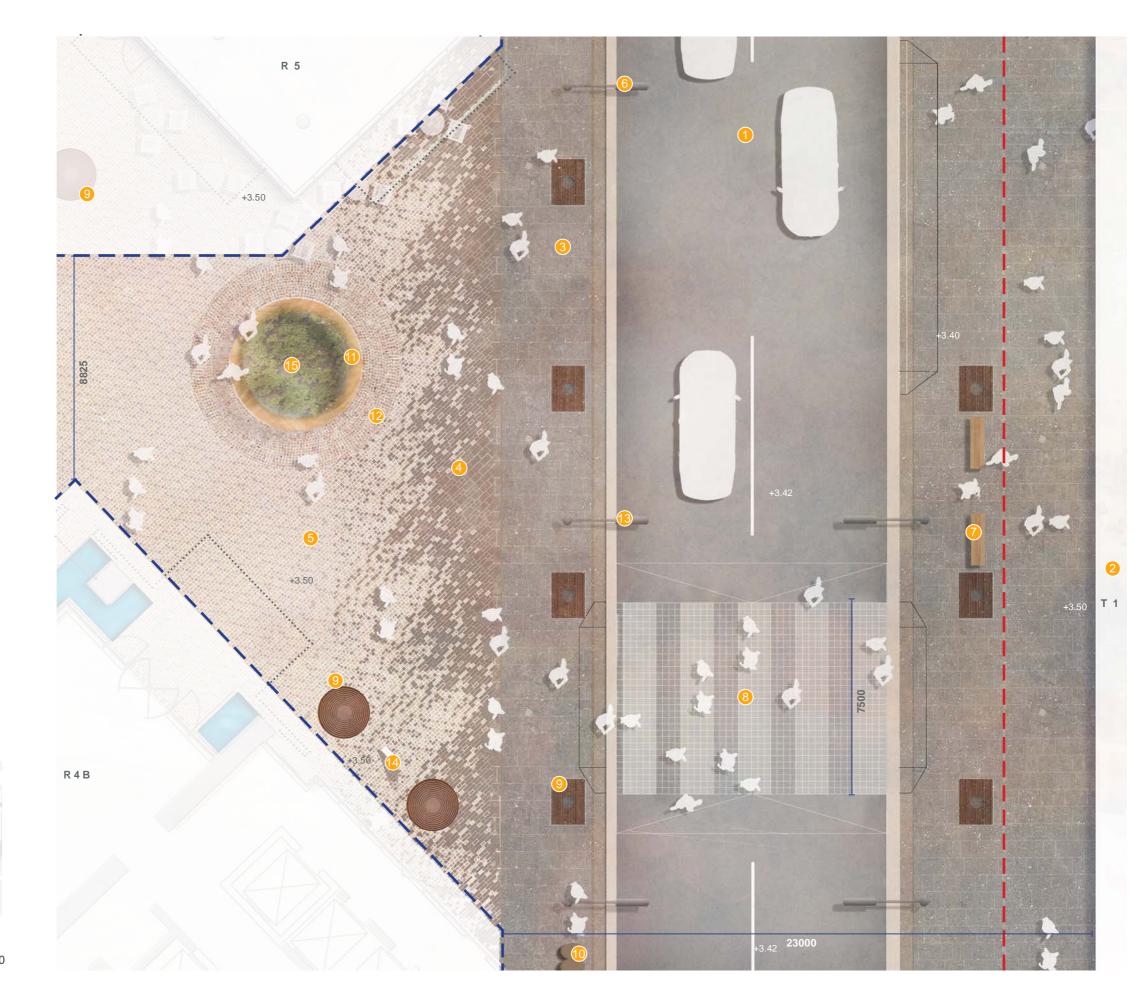
1 Raised sandstone planter seat

12 Feature porphyry paving

(8) Smart Pole without bike loop

14 Precinct signage

15 Fig raised planter garden



1:150 **KEY PLAN**

3 Elaeocarpus eumundi street tree

4 Smart Pole

5 Tower one, International Towers Sydney

6 City of Sydney standard bench

7 Stage 1A basment slab

8 Stratacell gen 6

9 Stage 1B basement slab

10 Fig Raised Planter Garden





2 Ficus sp. signature tree planting

3 Elaeocarpus eumundi street tree

4 Hickson park entry porphyry paving

6 City of Sydney Austral Black paving

6 Stage 1B basment slab

Raised sandstone planter/seat

8 Stratacell Gen 5

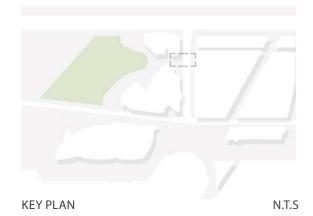
Soil

① Drainage layer

1 Stage 1B basement slab







2 R5

3 Stage 1B basement slab

4 Stage 1A basement slab

6 Watermans Quay

6 Watermans Quay tree pit

Watermans Quay bronze tree grate

(3) City of Sydney Austral Black Paving

Gravel pavement levelling layer

10 Drainage cell and no fines layer

1 Soil type A

2 Soil type B

Stratacell Gen 5 (6 layers)

Services trench (refer engineers drawings)

