



SUB BASE PLATYPUS

33.8440° S, 151.2165° E

Torpedo Factory Concept Design (RANTME Building 1)  
February 2019



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Existing RANTME Building

## Introduction

The Sydney Harbour Federation Trust (Harbour Trust) owns and manages the Sub Base Platypus site on the foreshore of Neutral Bay, Sydney. This former gasworks and Naval establishment was transferred to the Harbour Trust in 2005, to facilitate its remediation and renewal as a public urban park with remnant buildings restored for a mix of suitable new uses. The Harbour Trust has undertaken extensive community consultation in its planning for the site. The vision for Sub Base Platypus is set out in the Harbour Trust's Comprehensive Plan and Management Plan, which are available at [www.harbourtrust.gov.au](http://www.harbourtrust.gov.au).

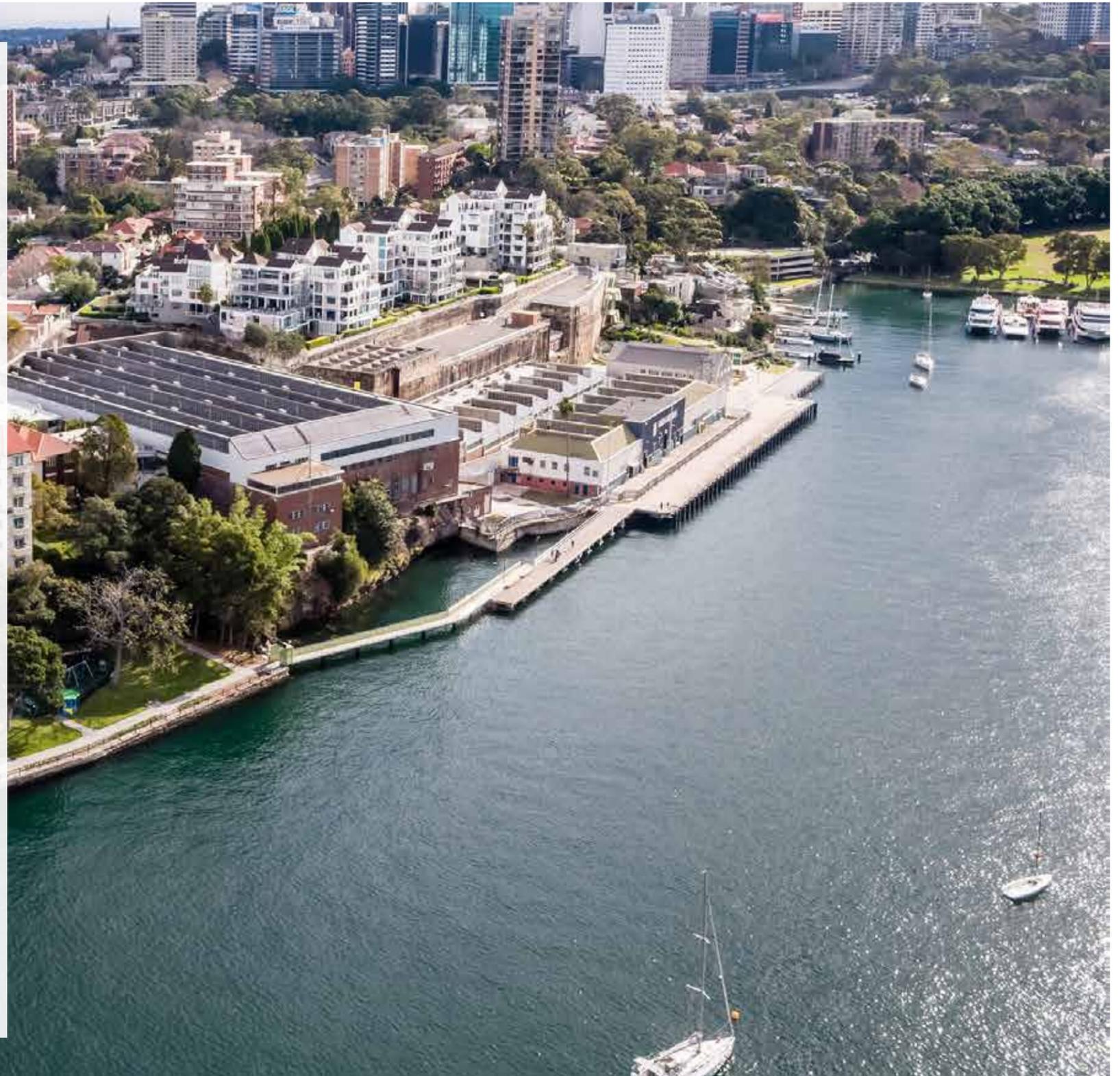
To date the Harbour Trust has remediated the site of contamination and demolished a number of buildings, enabling the foreshore area (including a newly created park and over-water walkway) to be opened to the public in May 2018. The Harbour Trust's renewal project is continuing elsewhere on the site, to refurbish the Fleet Workshop, Submarine School and Gatehouse for new uses; create new public open spaces; provide additional car-parking; and improved access.

The next stage of works – which would include restoring the Retort House, Exhauster House and Coal Stores and adapting the Torpedo Factory – will be implemented when funding becomes available. The Torpedo Factory (referred to in the Harbour Trust's Management Plan as the 'RANTME Building', an acronym for 'Royal Australian Navy Torpedo Maintenance Establishment') is the large building at the southern end of the site. The Torpedo Factory stretches from High Street through to the foreshore. At the High Street end, the upper level of the building is at street level. This level sits upon a sandstone shelf for much of its length, which steps down towards the harbour, where the building has a lower level.

The Harbour Trust has appointed lahznimmo architects to prepare this concept design for the Torpedo Factory, to provide more detail about how the Management Plan vision for the building would be realised when funding becomes available. In broad terms the concept involves removing the sides of the building's upper level and some roof sheeting, and introducing landscaping, to create a partly-covered area of public open space. Parking for site visitors would be provided at the High Street end. In keeping with the Management Plan, this space could be used for passive recreation, with the possibility of a pop-up café, and occasional community activity such as a small-scale market. Community groups have also expressed an interest in using the area for active sports.

Retaining the steel framework of the upper level will enable the creation of covered public space while interpreting the site's heritage values. This would provide a unique space with a high level of amenity, offering shelter from sun and rain, while opening up elevated views across the harbour. Landscaping would soften this space, and help to screen parking and provide privacy for residences to the south. Adapting the upper level in this way will radically reduce the building's bulk when viewed from all angles, be it from the harbour, street, or nearby residential areas. The lower level, at the harbour end, would be adapted for commercial uses in accordance with the Management Plan.

The Harbour Trust will consult with the community in February 2019 about this design concept, with feedback being used to inform the final design.

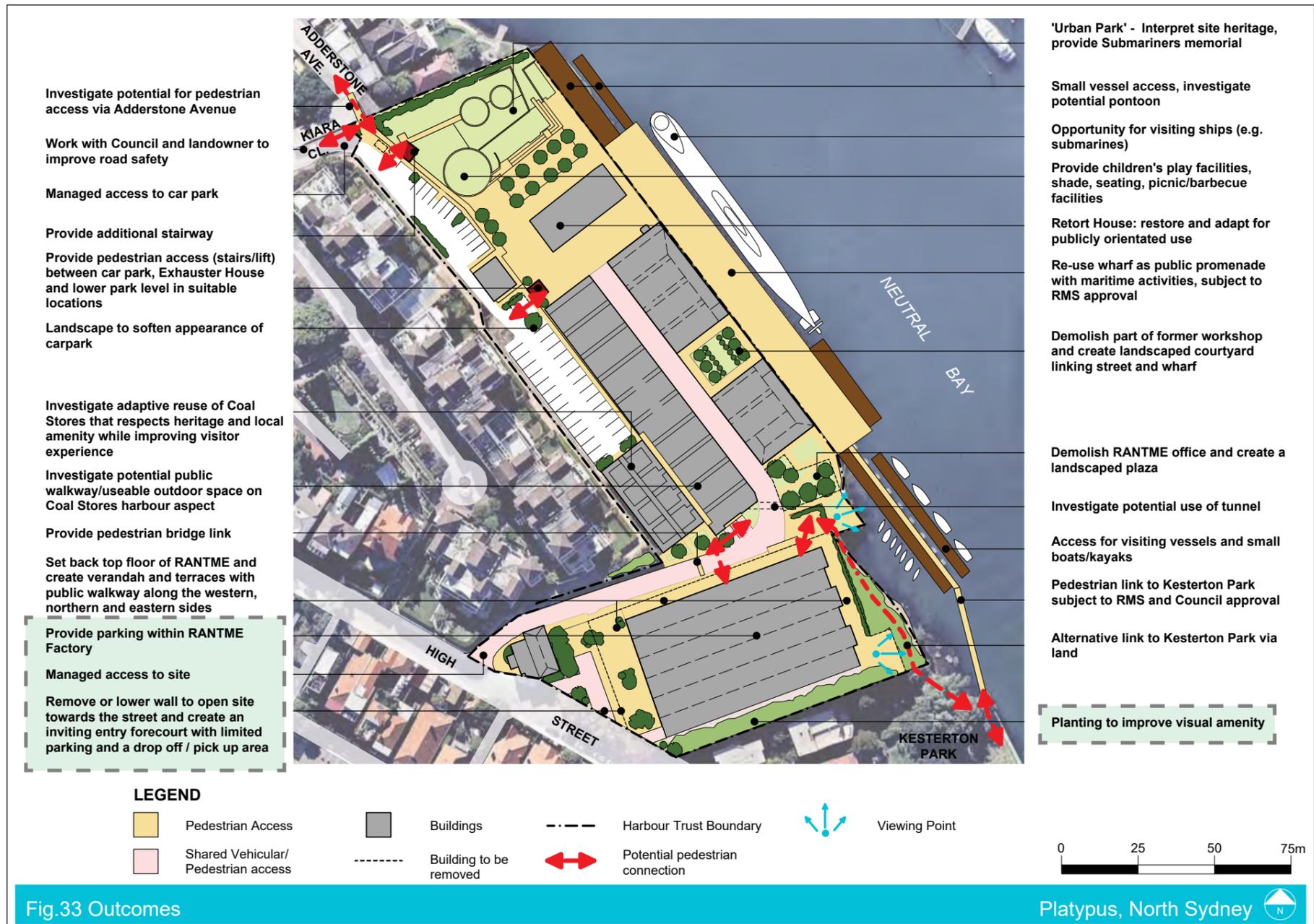


# SUB BASE PLATYPUS SITE KEY MANAGEMENT PLAN OUTCOMES

The Harbour Trust's Management Plan for Sub Base Platypus was adopted in December 2016. The Plan sets out detailed outcomes for the site, as shown in the Figure on this page.

The Concept Design for the Torpedo Factory (RANTME) would realise relevant Management Plan Outcomes:

- *Set back top floor of RANTME and create verandah and terraces with public walkway along the western, northern and eastern sides* – The existing building cladding and roof sheeting will be removed along the west, north and eastern sides. Gateway Plaza on High Street will provide a landscaped terraced edge to the west, whilst the Torpedo Factory Park does the same along the east edge. A public walkway along the north edge links these spaces and provides an accessible path of travel into the rest of Sub Base Platypus.
- *Provide parking within RANTME* – Approximately 40 parking spaces are provided which occupy approximately half of the upper level of the Torpedo Factory.
- *Pedestrian bridge link* – The existing pedestrian bridge between RANTME and the Coal Stores will be rebuilt and will provide direct access to the new lift and existing car park.
- *Remove lower wall to open site towards the street and create an inviting entry forecourt with limited parking* – The brick boundary wall to High Street will be lowered and Gateway Plaza will provide an inviting entry forecourt. Parking has not been provided in this area, to maximize the public amenity of the space.
- *Planting to improve visual amenity* - Along the southern edge of the building the roof sheeting will be removed and the boundary wall lowered, which will introduce additional natural light to the neighbouring property and reduce the bulk and scale. A continuous planter will provide cascading greenery.



**RANTME Entry Forecourt and Terrace Walk**

The upper level of the RANTME Factory will be set-back on all four sides to provide sheltered terraces offering public access on the northern, eastern and western elevations, vantage points, and useable outdoor spaces that are connected visually and functionally to the building's interior. The effect of this will be to significantly enhance views of the site and amenity for neighbouring residents by reducing the building's bulk and prominence. (See Figures 43-45)

The set-back of the building from High Street will provide a more welcoming entry forecourt. The boundary wall fronting the street will be removed or lowered to open the site to the street. The forecourt will be attractively paved and landscaped around its edges. The entry forecourt will provide vehicle drop off/pick up, deliveries, a turning area and some limited car parking.

The new terraces/facades will need to be designed in such a way that protects the amenity of neighbouring properties from potential noise and privacy impacts.

The design of the southern side of the building will make use of planting to soften its appearance and external cladding will be removed to increase solar access for its southern neighbours. To protect the privacy of these adjoining residences, there will be no external public access along the southern edge of the RANTME Building.

The eastern harbour-facing terrace will provide generous useable space for dining and public vantage points.

Along the northern edge, above the cutting, the setback will provide an alternative, higher level walkway into the site and open up views towards the bay. The terrace will be connected by a pedestrian bridge to the upper level car park. The possibility of stairs and/or a lift linking the terrace to the waterfront level will be explored.

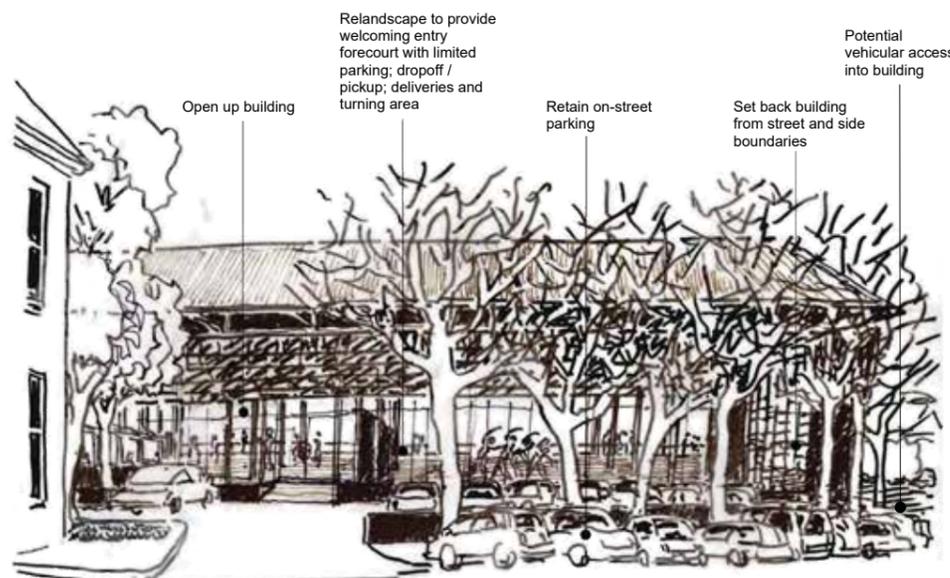


Figure 43: RANTME Factory – Proposed Terrace Walk



Figure 44: RANTME Factory – Proposed Vantage Point

(above) Setback to create generous useable space for dining and public vantage points, a more welcoming forecourt with extensive planting around edges



(left) Front of RANTME reduced in scale with mass planting to soften appearance. Southern side set back and planted to reduce noise, provide privacy and increase solar gain to southern neighbours

**7.3. Adaptive Re-use of Buildings**

Platypus will be revitalised through the introduction of a diverse mix of cultural, recreational, community and commercial uses.

The full or partial demolition of buildings will enhance the appearance and public amenity of the site while providing additional space and reducing the bulk of buildings. Works to buildings, and their fabric treatment, will be carried out according to their levels of significance to ensure the protection of heritage buildings.

Potential noise, transport and parking impacts will be a key consideration in the selection of uses for buildings (See Section 7.6). In addition, the design of any adaptive work will consider appropriate acoustic treatment to minimise noise impacts on surrounding properties.

The refurbishment of buildings will include the sustainable use of materials, and installation of energy and water saving measures, while uses will be selected that are compatible with managing transport demand.

The scale and footprint of the existing buildings will be reduced through selective demolition of buildings (in full or part). Once this plan is fully implemented the total gross floor area (GFA) of the site's buildings will have been reduced by approximately 35% since the transfer of Platypus to the Harbour Trust in 2005 (when total GFA across the site was approximately 16,512 m<sup>2</sup>).

**RANTME Factory (Building 1)**

The top level will be set back on all four sides to create a terrace with public access along three sides. The light weight cladding of the building's upper level will be removed around its perimeter. A new or adapted roof around the set-back edge of the building will provide a verandah along three sides of the building and help to reduce the bulk of the building.

The terrace will be roofed to create a covered walkway, and useable space that is weather protected. The effect of roof and shade will help to articulate the facade, further reducing its visual bulk, and provide increased solar access for the southern neighbours. Further opportunities to open up the building by providing additional and larger openings and recessed balconies within the brick walls will be investigated.

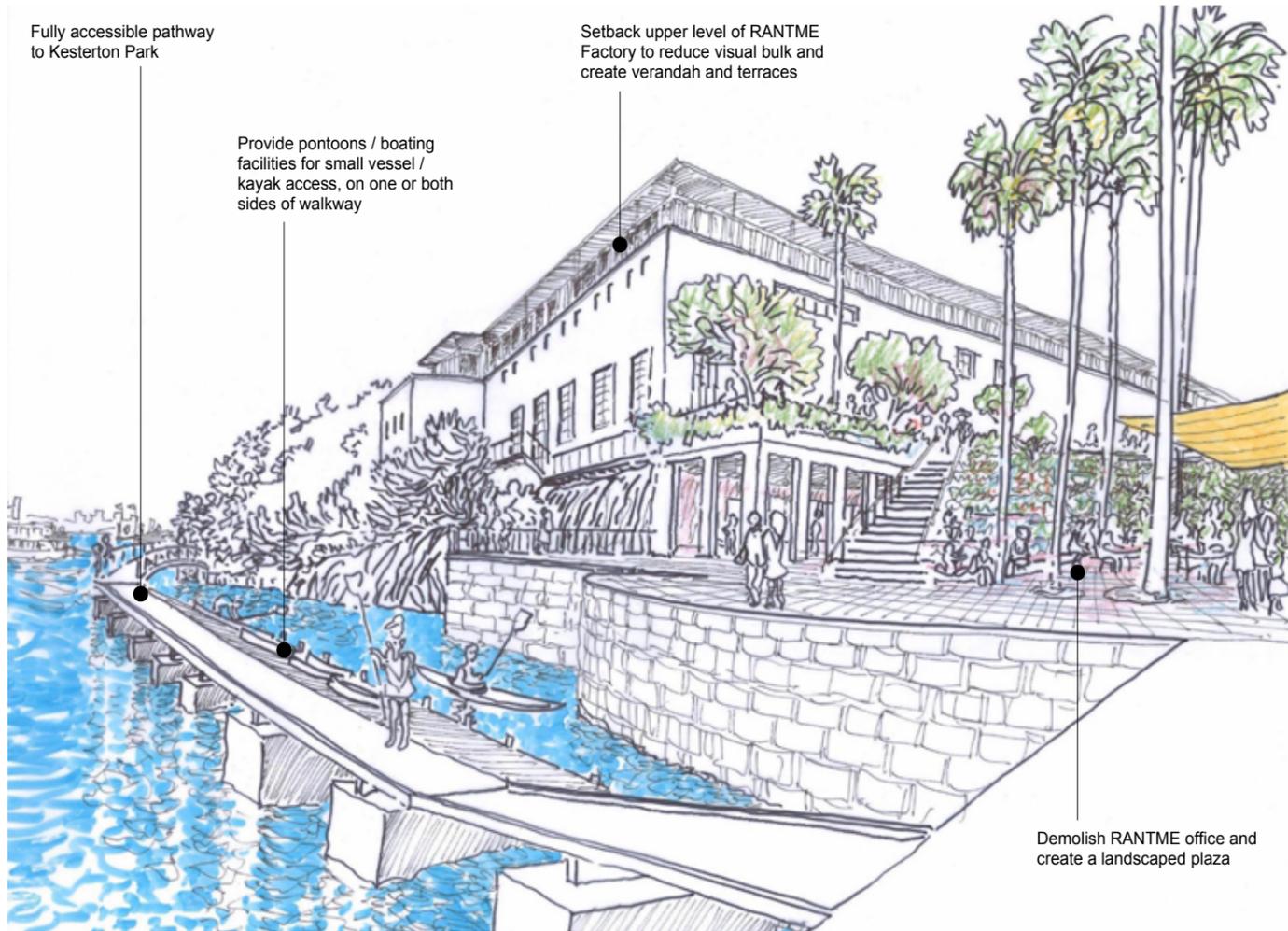
The large volume space with natural roof lighting and partial partitioning would suit a range of cultural and community uses. These may include uses such as studio/workshop/offices with a central exhibition space, rehearsal and performance spaces, health and fitness facilities, restaurant/cafe, or training and hospitality. It could also provide visitor information about the site and its heritage.

The former Officers' Mess and Club, on the lower level, would suit uses such as restaurant/functions. The openings towards the water will be enlarged.

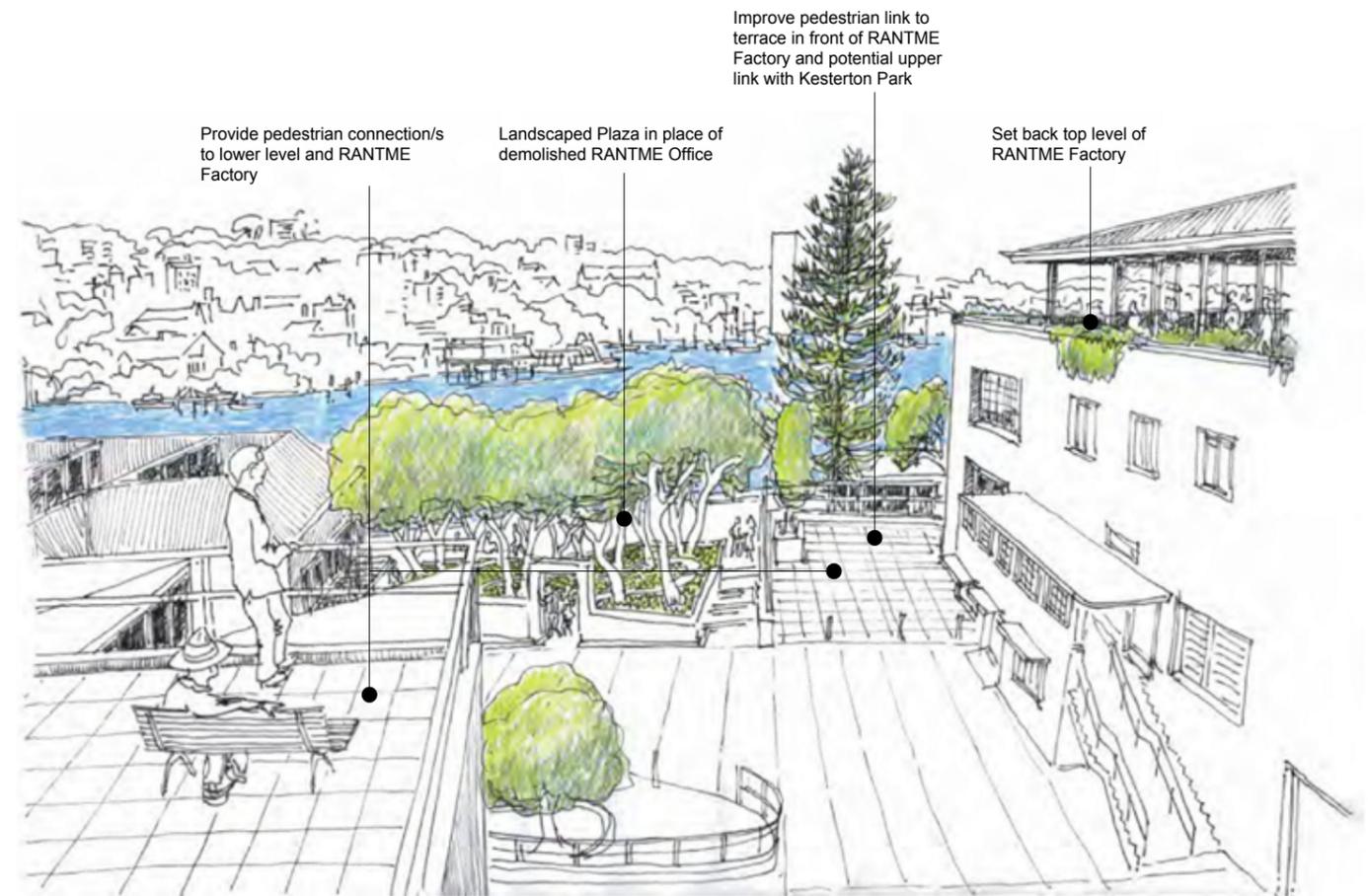
The entry forecourt will create a welcoming site entrance by setting back the RANTME Factory and providing an area for drop-off/pick-ups and limited parking (See Section 7.6). Parking may be provided within part of the upper level of the Factory

# TORPEDO FACTORY MANAGEMENT PLAN OUTCOMES

Extract from Harbour Trust's Management Plan for Sub Base Platypus. pages 57+59

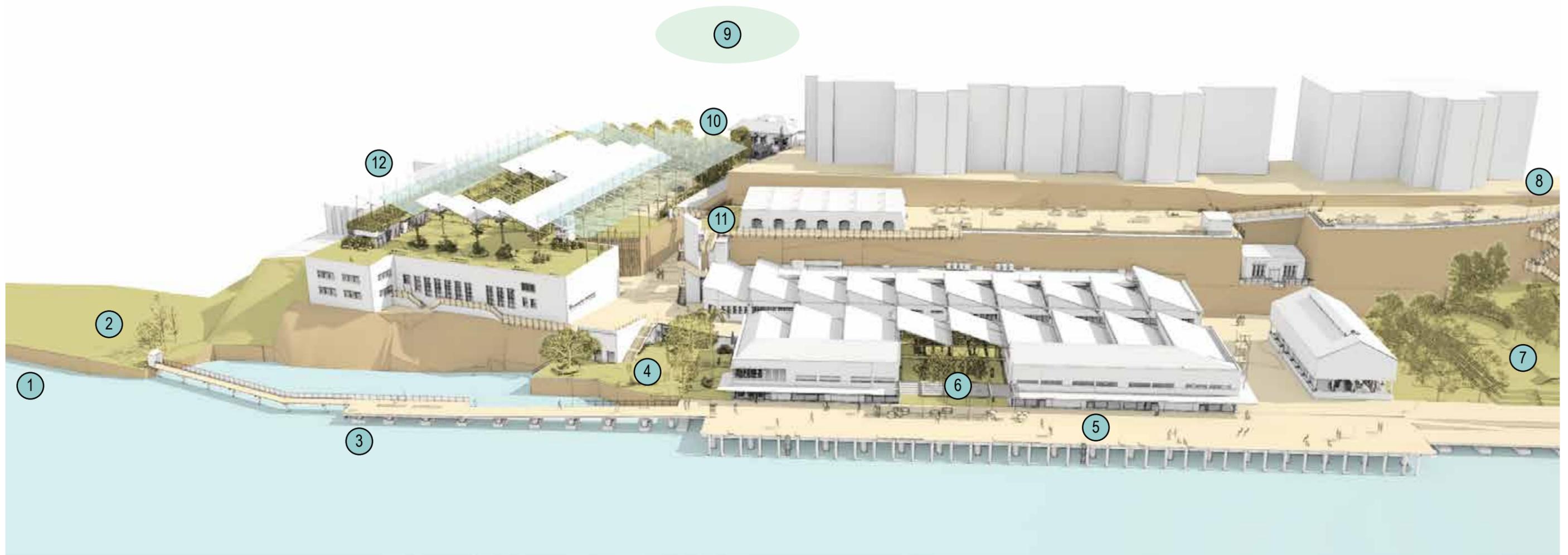


Setback upper level of RANTME to reduce visual bulk and create verandah and terraces



Pedestrian bridge link to lift and stairs (stage 1B) down to Arrival Square





LOCATION KEY:

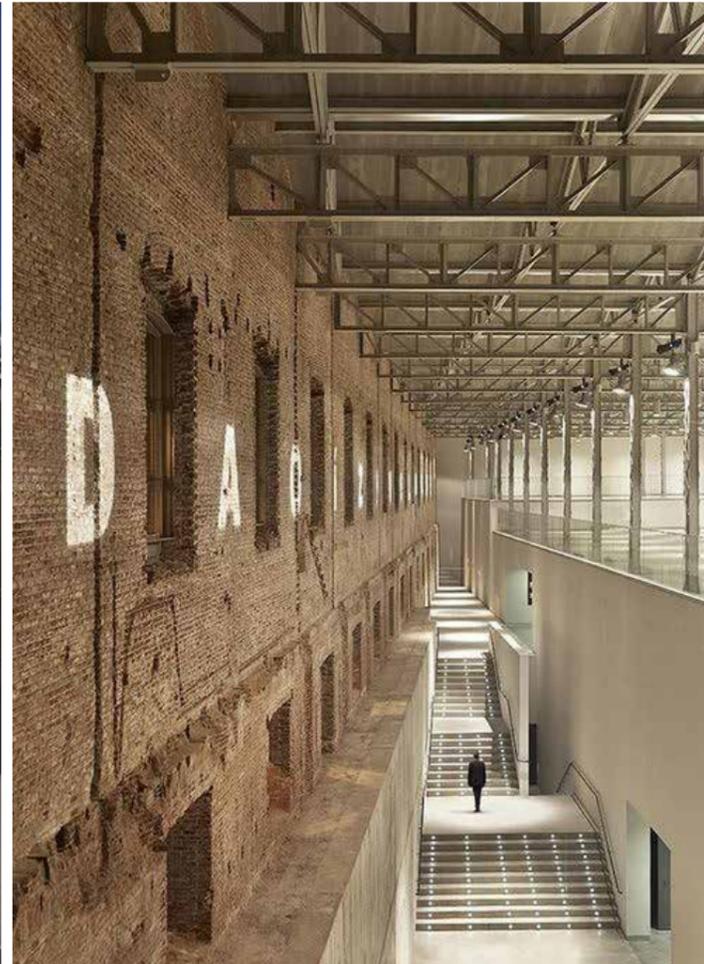
- 1. North Sydney Ferry Terminal (existing)
- 2. Kesterton Park (existing)
- 3. Kesterton Park Link (completed)
- 4. Arrival Square (works underway)

- 5. Waterfront (completed)
- 6. Building 10 - Courtyard (works underway)
- 7. Northern Park + Play Area (completed)
- 8. Stair to Kiara Close (completed)

- 9. Milson Park (existing)
- 10. Gateway Plaza (works underway)
- 11. Pocket Park + RANTME Bridge (works underway)
- 12. Torpedo Factory (subject to funding)



The existing sandstone cliff as it turns into the Torpedo Factory - the point proposed to be exposed to view



Void separation between new and old - precedent image



The large natural sandstone cliff face that separates the upper and lower site, adds an expressive topological feature to the site that is emblematic of the Sydney locale. Both conceptually and physically this sets up a break line through the Torpedo Factory, which this proposal looks to express and celebrate publicly for the first time since the sites establishment as the Gasworks in 1876.

The excision of the Torpedo Factory at this point allows for expansive views and an opportunity for physical connection down to the rest of the Sub Base Platypus site through the use of 'clip-on' stair elements that have been used elsewhere on site.

In this scheme, the proposed urban park and parking area is shown finishing at the top of the cliff, overlooking a large circulation void, giving users of the site an appreciation of the scale of the site and helping with site orientation.

Extent of existing natural sandstone cliff running though the Sub Base Platypus site, shown as red





LOCATION KEY:

- |                                |                                   |                              |                                 |                     |
|--------------------------------|-----------------------------------|------------------------------|---------------------------------|---------------------|
| 1. North Sydney Ferry Terminal | 5. Waterfront                     | 8. RETORT House              | 12. Coal Stores                 | 15. Torpedo Factory |
| 2. Kesterton Park              | 6. Building 10 - FIMA Workshop    | 9. Northern Park + Play Area | 13. Lift, Stairs and Cliff Walk | 16. Gateway Plaza   |
| 3. Kesterton Park Link         | 7. Building 02 - Submarine School | 10. Exhaust House            | 14. Pocket Park + RANTME        | 17. The Gatehouse   |
| 4. Arrival Square              | 11. Upper Carpark                 |                              | 17. The Gatehouse               | 18. High Street     |





## TORPEDO FACTORY - key points:

- Upper level adapted as an urban park with car parking
- Approximately 40 car parking spots
- Lower level becomes commercial space and or food and beverage
- Generous shaded public park with access to water views
- Good potential for public activation of Upper Level with markets, bbqs, shaded picnic areas, pop-up cafes, possible active sports activities etc.
- Public access to views on Upper Level
- Accessible access to all floors plus roadway, linking Torpedo Factory to the activity of the whole site
- Activities with limited carparking demands
- Additional green urban space to the North Sydney area - providing a critical role in cooling the urban environment
- The creation of a very large semi covered public space, few of which still existing in Sydney
- Public access to a significant industrial heritage space

## LOCATION KEY:

1. Main Pedestrian Entry
2. Carpark Entry + Exit
3. Carparking - Approximately 40 spaces
4. Palm Tree Courtyard
5. Pocket Park Bridge Link
6. Torpedo Factory
7. Bike Parking
8. Lift + Stairs access
9. Observation Deck

The RANTME former Torpedo Factory concept is a generous urban park, linking the new public open spaces within the Platypus site, and beyond to the nearby Kesterton and Milson Parks.

With its elevated position over Neutral Bay, the park holds fantastic recreational potential for both the local and wider Sydney public. Large open and breezy, generously sheltered from the summer sun, with substantial pockets of dense and lush foliage.

The address to High Street is proposed to be opened up to allow public views through the building to the Urban Park within that extends to the eastern edge that overlooks the Harbour. Entry is through the Gateway Plaza pocket park, where the existing brick boundary wall has been lowered and a mix of soft and hard landscaping is provided. The visual bulk of the building will be reduced through removal of the wall cladding and substantial areas of roof sheeting. Some roof sheets would be replaced with clear sheets to allow sunlight in. The fine lattice of steel trusses will be exposed, forming a delicate high level pergola, supporting a hanging garden and allowing a cool dappled light to reach the ground plan.

The planting and landscaping in this zone will serve to screen the proposed carpark which would provide for approximately 40 spaces for site visitors. This carpark would be carefully managed through measures such as time restrictions and/or paid parking.

The harbour side of the Torpedo Factory building will be given over to public use as an urban park with elevated views over the water. Sections of roof will be removed whilst other sections will remain to create a flexible, shaded, all weather park. Central to the urban park will be a large, mounded grassy area. Each structural column will be an opportunity for high level planting that will cascade down as well as grown along trellises. The park will include public amenities and the opportunity for a small kiosk. Although car parking is supplied, there is easy access provided via ferry and other forms of public transport. Local residents within walking distance will be the main beneficiaries of this public park.

The existing natural sandstone cliff will be exposed and highlighted in the circulation void that will link the top-level urban park with the lower level commercial and food and beverage tenancies. These tenancies will have expansive views of the harbour.





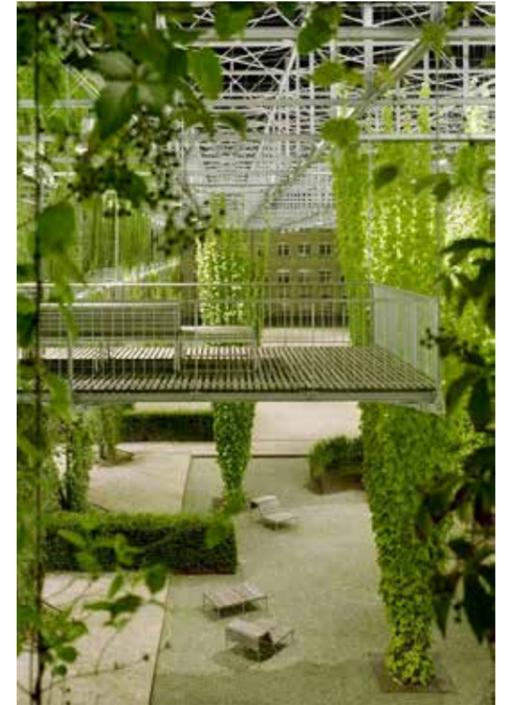
**Paddington Reservoir Gardens**  
Tonkin Zulaihkha Greer and JMD

Sydney 2009



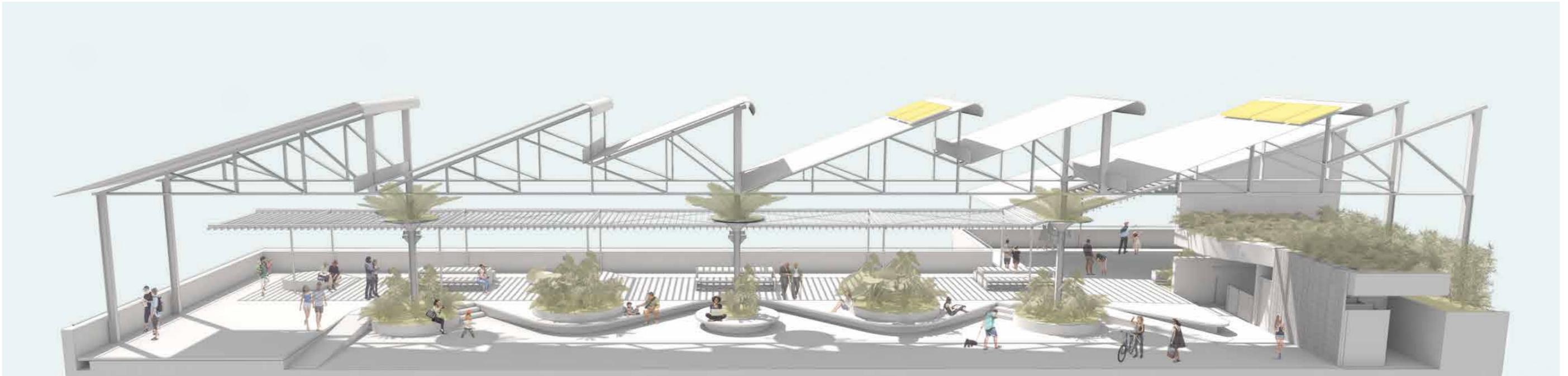
**Tonsley Innovation District**  
Oxigen, Woods Bagot, Tridente Architects, KBR, WSP

Adelaide 2016



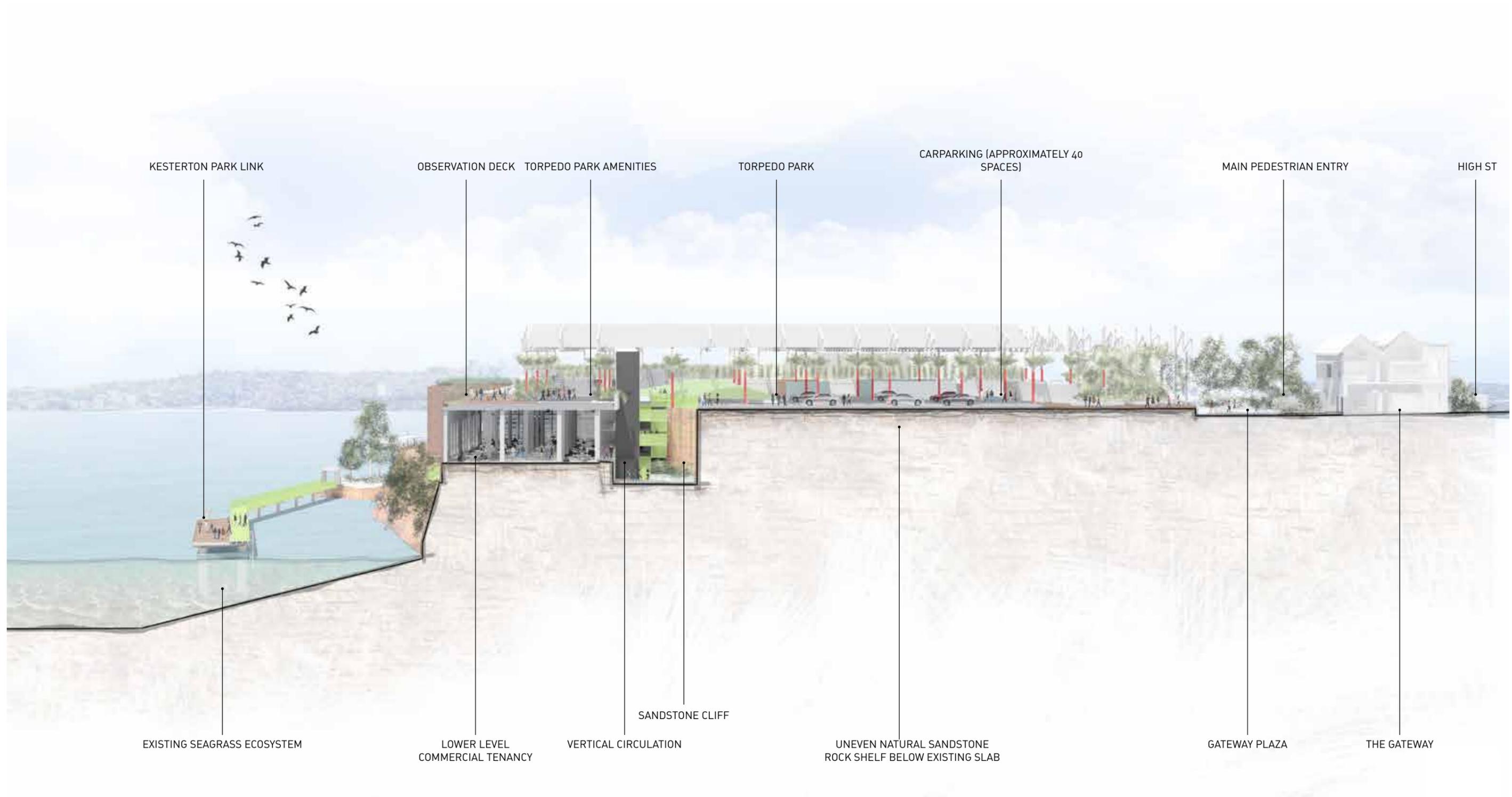
**MFO Park**  
Burckhardt + Partner and Raderschall

Zurich 2002



**RANTME (former Torpedo Factory) - Indicative Cross Section**

The opportunity exists for large banks of solar panels on north facing saw tooth roof. The expanse of roof also offers the opportunity of large-scale water harvesting, collection and storage on site for watering





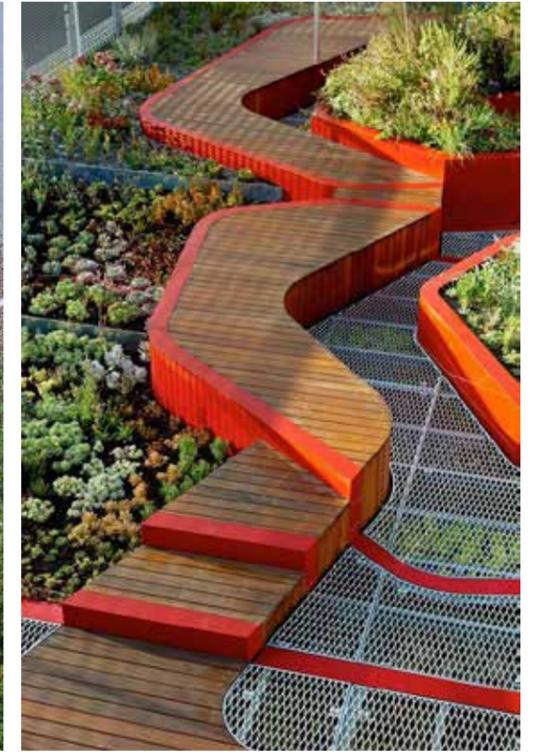
**Bears Park Amenities**  
Sam Crawford Architects



Sydney 2009 **MFO Park**  
Bucrkhardt + Partner and Radershallpartner



Zurich 2002



**The Burnley Living Roofs**  
HASSELL



**Tonsley Innovation District**  
Oxigen, Woods Bagot, Tridente Architects, KBR, WSP

Adelaide 2016 **Water Curtian**



**Raised bed community vegetable gardens**



**MFO Park**  
Bucrkhardt + Partner and Radershallpartner

Zurich 2002



**EXISTING VIEW - Waterfront**

Existing view of Torpedo Factory RANTME Building, looking south from waterfront.



**CONCEPT VIEW - Waterfront**

Concept view of Torpedo Factory RANTME Building, looking south from waterfront.



**EXISTING VIEW - Aerial**

Existing view of Torpedo Factory RANTME Building, looking south from aerial view.



**CONCEPT VIEW - Aerial**

Concept view of Torpedo Factory RANTME Building, looking south from aerial view



**EXISTING VIEW - High Street**

Existing view of Torpedo Factory RANTME Building, looking east from High St.



**CONCEPT VIEW - High Street**

Concept view of Torpedo Factory RANTME Building, looking east from High St.



