# Merewether Beach Reserves Public Domain Plan

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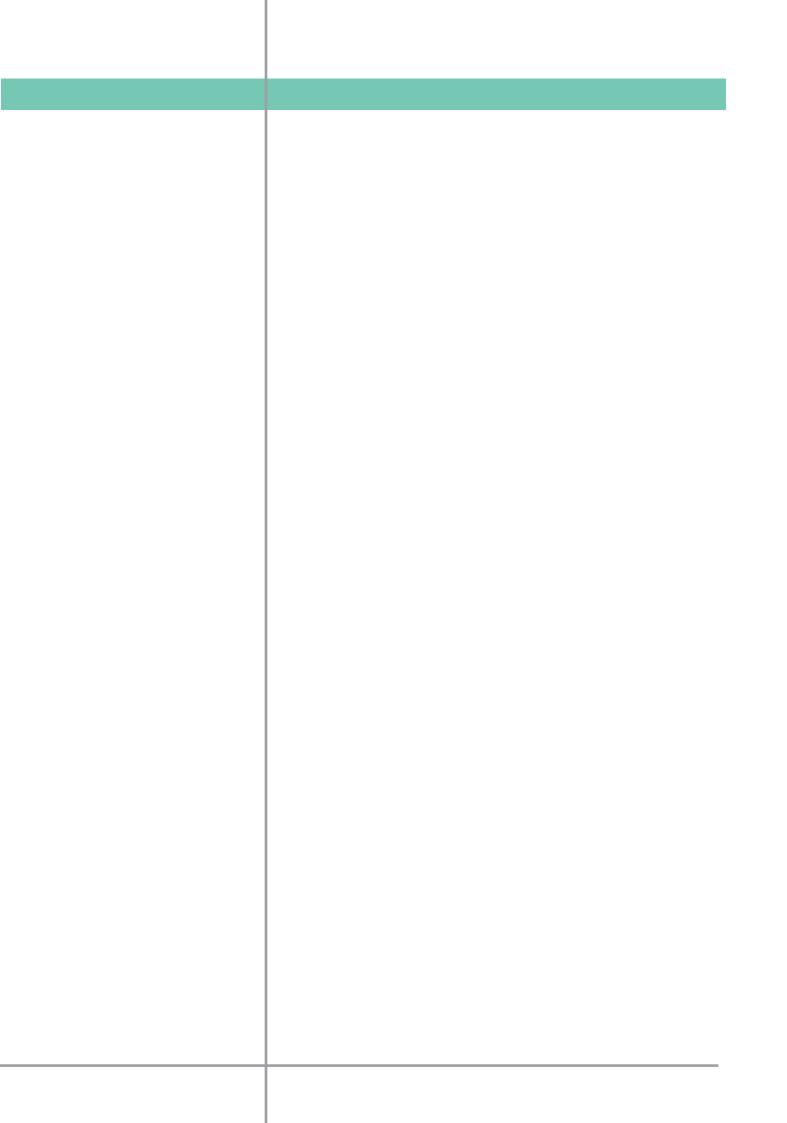


# Merewether Beach Reserves

Public Domain Plan



Prepared for Newcastle City Council and Land & Property Management Authority July 2010



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# HILL THALIS ARCHITECTURE AND URBAN PROJECTS

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# 1.0 INTRODUCTION

#### 1.1 MEREWETHER BEACH

The study area encompasses Merewether Beach and the streets, walkways and open spaces most closely associated with the beach and facilities, from the northern end of John Parade, to the southern edge of the ocean baths. It includes Robinson Reserve on the headland and Scenic Drive up to the Lloyd Street intersection. The western boundary of the site is formed by Scenic Drive and Frederick Street up to its intersection with John Parade. The site also includes Watkins Street up to Coane Street.

#### 1.2 PURPOSE OF REPORT

The Merewether Beach Public Domain Plan has been commissioned by Newcastle City Council to provide a framework for public domain improvements, and possible expansion of commercial activities in the public lands and facilities of Merewether Beach. The Public Domain Plan references the Plan of Management, 2009.

The Plan incorporates a Technical Manual, which gives details of the materials that furnish the public domain. Amenity, usability, efficiency of commerce, and durability in the harsh environment are major considerations that the Technical Manual address.

#### 1.3 STRUCTURE

The public domain manual is broken into five sections - The first three sections outline the principles and site analysis that underpin the design. Section 4, the Public Domain Plan breaks the plan down into key areas with additional information for each on traffic, architectural and landscape elements. Finally section 5, the Technical Manual provides details of the materials, fixtures and setout of the design plan.

Additional appendices cover historical research, traffic analysis and additional design elements and analysis.

#### 1.4 RELATED DOCUMENTS

- Merewether Beach Reserves Plan of Management, March 2009.
- Any landscape reports Draft Street Tree Masterplan etc.

#### 2.1 THE PUBLIC DOMAIN

Merewether is one of Newcastle's most exposed beaches. The greater terrain provides minimal protection; facing south east it is situated at the edge of a sand dune margin between the ocean and the Hunter River. Despite its exposure it is a popular destination for runners and walkers, swimmers and surfers. The protection offered by the lower promenade and embankment behind, the surf club, inboard portions of the baths promenade and the lower promenade pavilion are all popular gathering places.

Merewether Beach holds a dramatic vantage point at the headland end of a chain of beaches, and due to the terrain provides views back along to Dixon Beach, Bar Beach and the headland beyond. Rehabilitated dunes soften the urban edge while also stabilising beach morphology and protecting against sand drift. A language of concrete paths, walls and steps is rendered distinctive through the use of locally sourced aggregates. Simple features like the white post and rail fence unite the upper promenade and define the pedestrian zone from the dunes. The site's topography affords a range of vantage points throughout, from Robinson Reserve to the multilevel beach promenade, Jefferson Park and along John Parade. Due to the exposure of the site tree planting remains a challenge and shade is identified as one of the key elements missing from the beach reserves.

The existing configuration of Merewether Beach is less suited to larger events like Surf Fest. Identification as a National Surfing Reserve, one of only 7 in New South Wales, is an opportunity to consolidate its best attributes while correcting its shortcomings in this plan.

The public domain is generally considered to be the land that is in public ownership and freely accessible to the public: at Merewether the public domain is made up of streets, parking areas, promenades, pedestrian and cycle routes, parks and vegetated landscape spaces, swimming pools and associated amenities.

It is essential that all elements of the public domain are considered together. Measures to control traffic should be balanced with pedestrian comfort and convenience, the geometry of streets, and the desired future character of Merewether Beach. The PDP aims to maximise amenity for all users of the public domain, and to upgrade the image of the locale while retaining and enhancing the characteristics that form the precinct's identity.

The principles set out in this section provide a design framework for the public domain of Merewether Beach. These principles underpin the strategies and improvements outlined in Section 3.

#### 2.2 IDENTITY

The character of Merewether Beach is primarily fixed by its natural setting; the beach, rock platforms and ocean, framed by steep landforms form a powerful, memorable landscape. These natural qualities have been enhanced by recent revegetation works, reinforcing the image of the beach landscape as a remnant of the wild coastal edge. It is essentially a transition zone between the urban environment and wild nature.

Design of public domain can recognise and enhance the coastal character by reinforcing the primacy of the natural elements. Colours, artworks, furniture should be secondary to the view, and built to respond to the erosive forces of the sea and wind.

- Maintain ocean and beach views from the public domain
- Continue revegetation program to restore coastal ecosystems
- Use materials that weather well, and that fit with the muted colour palette of the coastal environment.



Ocean Baths



Dunes + Beach



Rock shelf + cliffs



Southern headland



Beach debris

Merewether Beach also has a history of use and development that is reflected in physical remnants, street layout and pathway systems. Early rail lines for mining fore shadowed the alignments of Watkins Street, John Parade and the upper promenade. Retaining walls, the lower level promenade and the ladies baths persist from a previous period of site interventions for occupation.

Although some are buried within past and recent developments these remnants could make a much stronger contribution to the image and character of the area through:

- Interpretation of historic alignments in the configuration of elements and placement of new buildings
- Adaptive public reuse;
- Referencing the elements in design of the public domain through materials etc;
- Signage and interpretation.

Three public buildings occupying the site provide a range of public facilities with each providing toilets, showers and change rooms. They are of varied character and architectural merit.

The Surf Club is the most animated building of the three buildings on the site with a complementary mix of uses. The building has little architectural merit, yet is a visually prominent building in the round. Swells cafe enlivens the public promenade but restricts movement at a key site threshold.

The Surf House is a well designed yet modest civic building in the round. It is a remarkably good example of this type of beach-side public building, but is in very poor repair; The upper storey is visible from Ridge Street without dominating the street view corridor toward the ocean; The building addresses the public ocean edge promenade with the entry loggia; two colonnades address the promenade and ocean, and it is generously set back; Change rooms and toilets appear to be readily accessible from the promenade and are naturally lit and ventilated. Provision also appears to have been made for a kiosk and storage at this level.

The Baths Pavilion is well situated at the base of the headland, overlooking the baths. Like a greek stoa, its archetype, it quietly fronts the more important space of the heroically scaled pool and coastline. It provides oversight of the pool from a raised terrace; The building is of straight forward design and construction and has large light and airy change rooms and toilets accessed from the back of the structure.

The shade pavilion is well situated, straddling the better defined lower level ocean edge promenade and providing shelter in a very exposed beach front location; It is visible from afar and provides protected over sight of the beach. It is vulnerable to ocean damage during very high seas, it was replaced during the 1980's.

Design of the public domain must understand and reinforce the elements that make this place distinctive, but also support the aspirations of a contemporary resident and visitor community.

#### 2.3 MATERIAL PALETTE + COLOUR

The character of the built elements of the public domain will be defined, to a large degree, by the materials used in its construction. The quality and colour of materials can tie the constructed elements to the dominant elements of the coastal environment. Existing natural features give clues to the desired material character – stone, sand, weathered shells and pebbles, coastal vegetation. Materials are robust, but softened from salt and wind, and colours are muted, soft, washed out. The sea is just as often grey as blue.

Natural bedrock is exposed at points within the site displaying a rick sandstone layered with coal. Retaining walls along the lower promenade utilise recycled concrete broken into pieces and bright green and blue waste material from the BHP smelter process. In the footpaths locally sourced aggregates from the smelter process and the sand mining in Dixon Park provide a distinctive colouration in keeping with the natural sand and shell elements on the beach.

- Use materials that reference the character of the natural environment.
- Materials should be robust, plain and durable.
- The colour palette should respect the dominant landscape character.

#### 2.4 LANDFORM + VIEWS

Landform helps to shape the physical identity and spatial quality of the public domain. Design of the public domain should seek to enhance the patterns that respond to landform, and to retain or open up significant views. The desire for street tree planting, for example, should often be balanced against retaining a view that may characterise a particular place. Layout and placement of elements can contribute to character by orientation of places to a significant view. Design should also work with the qualities of landform to provide appropriate pedestrian connections and ways through spaces.

- Retain/reveal significant views from the public domain to the ocean and beach
- Reinstate the visual connection between Watkins Street and the beach.
- Orientate Jefferson Park to the beach
- Identify significant views, and consider these in the selection and placement of street trees and furniture.

#### 2.5 CIRCULATION + TRANSPORT

A fundamental principle of public domain design is to encourage walking and cycling as forms of transport. At Merewether Beach, there is sometimes intense demand for both parking and pedestrian use that creates conflict in terms of safety and convenience. Streets must comfortably accommodate vehicles, cyclists and pedestrians, and reduce conflict between these forms of access. The aim of plans, through design, should be to give priority to pedestrians, to maximise comfort and safety, and make a livable, walkable place.

Use of public transport should be encouraged through ease of access to public transport, and the provision of comfortable waiting areas.

To balance all forms of transport and reduce conflict the plan seeks to:

- Rationalise the layout of vehicular circulation and parking to provide opportunities to enhance and extend pedestrian space;
- Identify areas of pedestrian/vehicle conflict and rectify where possible;
- Provide seating and shelter at bus waiting areas; and
- Provide cycle facilities in the public domain to encourage cycling.

Promoting pedestrian amenity is central to design of the public domain. Encouraging pedestrian access reduces car dependency, promotes equal access and increases opportunities for social exchange and community life. Streets and public spaces should be comfortable, safe and engaging places that encourage people to visit and to stay. There should also be shelter, seating and visual delight.

Accessibility for all users is a key element of improved pedestrian amenity. A continuous path of travel should be provided where possible, or include areas without steps and steep grades.



View down Watkins Street



Watkins Street carpark



Watkins Street carpark



Robinson Reserve lookout



Watkins Street carpark



Upper promenade



Swells cafe + surf club

Use the opportunity provided by public domain improvements to :

- Provide access to streets, parks and public spaces for all users;
- Eliminate level changes, obstructions and confusing paving patterns as much as possible;
- Provide clear and generous links between high use areas, and improve the relationship of streets to associated public spaces;
- Create a range of spaces for recreation and for social interaction;
- Improve pedestrian environments and encourage use through pavement widening, street tree planting and upgrading of furniture and facilities; and
- Enhance safety and the perception of personal security, and implement the recommendations of CPTED where applicable.

Refer to the Technical Manual for specific guidelines for designing for people with a disability.

#### 2.6 ENVIRONMENT + CLIMATE CHANGE

The lower margins of the site will come under threat from rising sea levels in the future, with the lower promenade and shade pavilion being most at risk; yet for the time being they offer wonderful amenity in proximity to the intertidal zone. Those more fortified parts of the site, above the influence of sea leve rise, behind the sea walls are targeted for improvement in this plan, to consolidate an enduring legacy for the parklands.

A program of coordinated improvements embodied in the Public Domain Plan offers opportunities for review of the relationship of this place to the local and broad scale natural environment, and for incorporating a more immediate environmental agenda. Design of the public domain should consider water use, pollution, environmentally appropriate use of materials, and the long term potential effects of climate change. Potential measures to mitigate impact include:

- Promotion of public transport, cycling, walking
- Use of materials with low embodied energy
- Re use and recycling of materials
- Capture, filtering and re-use of stormwater
- Focus on long term preservation of the environment and adaptation to climate change conditions

#### Water Sensitive Urban Design

Design of streets, parks and small landscape spaces can integrate water sensitive urban design by encompassing and facilitating measures to filter water before it enters waterways or the ocean, and to harvest and reuse water for the public domain. It may be possible and appropriate to integrate these measures where whole streetscapes are to be renewed, or into new landscape spaces including parks.

The potential to integrate water harvesting or filtering will be dependent on topography, and the ability to retrofit or adapt existing storm water systems. Individual systems should also be underpinned by a catchment wide strategy for harvesting, storing and treating storm water.

- Where possible, collect storm water for watering street trees and landscape elements;
- Allow, where possible and appropriate, for future connections to storm water treatment systems when renewing or rectifying storm water infrastructure as part of public domain works;
- Treat storm water as close to the source as possible; and
- Collect and treat storm water from paths and roads in bioretention tree pits, rain gardens and filter gardens, and integrate seamlessly with the design of streets.

See Section 5.1.7 for guideline details for Water Sensitive Urban Design.

### 2.7 URBAN ELEMENTS

Good design in the public domain can reinforce site characteristics and contribute to the identity of a place. Quality street furniture, paving and lighting contribute to quality public domain outcomes and solutions.

Furnishing in the public domain should respond to the scale and character of the place, and the function of each element. There should, however, be a limited range of elements across the study area to promote a uniformity in maintenance practices. A limited palette of materials used in a variety of ways reinforces unity and allows for variation in detail where appropriate.

Urban elements should be selected to suit the environment, and complement the character of Merewether Beach.

A Technical Manual, detailing the layout and type of paving and furniture, has been prepared for Merewether Beach and forms Sections 5 of this document.

#### 2.8 PUBLIC ART

Public art is an important cultural activity. It aids legibility of place, enlivens the public domain and can define and reveal specific identity.

Public art ranges from the monumental to the temporal and can include:

- Free standing art objects;
- Artist involvement in the design and layout of public parks, squares and forecourts;
- Artist involvement in the design of specific elements of the public domain; and
- Festivals and other cultural events.

Merewether Beach has a local and a regional focus. Public art projects should reflect this in scale, funding and level of provision.

The Public Domain Plan promotes a robust design language, using natural, local and ordinary elements that enhance the coastal character. A generosity of scale is also desired in the public domain, to accommodate a high level of use, and to reflect the open quality of beach, ocean and sky. In line with this thinking, public art would best be integrated into the overall public domain design, as artful design of public spaces, or art integrated with public domain elements.

- Create public art that enhances and contributes to the provision of quality facilities and amenities.
- Public art is encouraged as part of building facades and forecourts, and integrated into the design of public spaces.
- Develop public art that will reflect the local identity, diversity and values of Merewether Beach, and that will promote sites of significant cultural and natural heritage.

Planning and design for an artwork to commemorate Merewether Beach as a National Surfing Reserve has been carried out by the Merewether National Surfing Reserve Committee in collaboration with the Merewether Surf Club and Newcastle City Council. This piece has been integrated into the plan for Merewether Beach. See Appendix D.



Exposed sandstone

### 3.0 STRATEGIC OVERVIEW

#### 3.1 REGIONAL CONTEXT

Merewether Beach is located 3.5 kilometres south of Newcastle's CBD, in the Lower Hunter Region, between the Central Coast to the south and Port Stephens to the north. As the sixth largest city in Australia Newcastle forms the economic, administrative and cultural hub for the Hunter region. Established around a working harbour and extensive coastline, the city extends back along the Hunter River to the Mount Sugarloaf Ranges to the west and Lake Macquarie to the south.

The suburb of Merewether lies to the south of Newcastle's CBD and connects to the urban centre through the suburbs of Bar Beach, Adamstown, Merewether Heights and the Junction. Merewether maintains strong links with surrounding recreation areas with beach frontage and access along the Bathers Way to northern beaches. To the south Glenrock Reserve provides walking trails through nature reserves.

#### Strategy

The public domain plan presents an opportunity to reinforce the unique character of Merewether while also strengthening its links to the regional context of Newcastle. This can be achieved through a range of strategies involving:

- Improve public transport connections between Newcastle city centre and Merewether beach.
- Establish cycleways and walks which are clearly sign-posted, and provided with generous public footpaths.
- Strengthen the connection with Glenrock reserve through sign-posting and investigation of pedestrian coastal access.
- Improve links and provisions for the Bather's Way tourist route to highlight the amenities of Merewether ocean baths and beach.











#### 3.2 HISTORIC OVERVIEW

Subsequent to European settlement of the Newcastle region the site was privately owned, represented by the intervention of the Glenrock railway line in 1862.

Since the late 1800's when sea bathing first become popular in coastal New South Wales the site has become progressively more public in support of access to this coastline. This progressive transformation is demonstrated by the series of public projects which left their mark on the site :

- Merewether tram line (1905),
- Lower promenade, shade pavilion and low retaining walls (C1910's)
- First surf club house
- The Ladies' Baths (1928)
- Merewether Ocean Baths, pavilions and low retaining walls (1935)
- Surf House (1937)
- Surf Club

#### Strategy

The public domain plan provides an opportunity to respond to the history of the site by strengthening elements of the public domain that contain historic value. Strategies include:

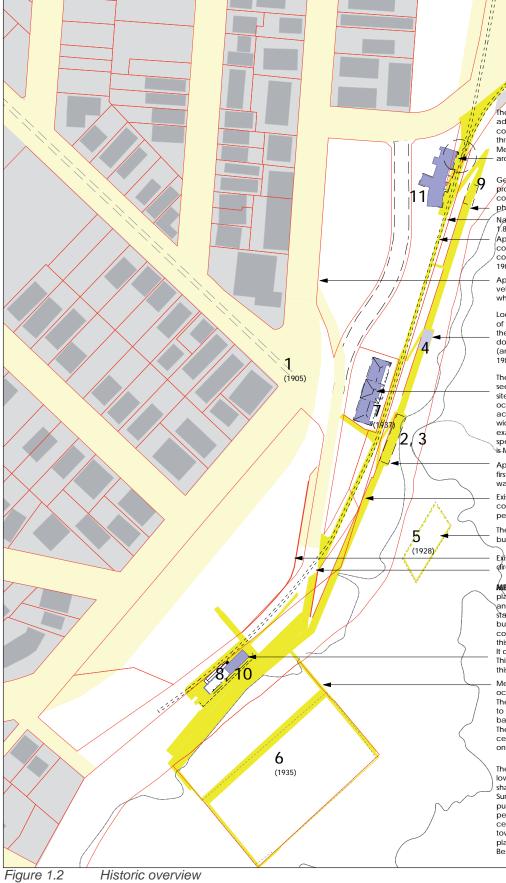
- Reestablish alignment of Watkins Street to the historic rail line and the upper beach promenade.
- Preserve and enhance the character of the upper and lower promenades through material selection and provision of multiple beach access points.
- Public art within the beach reserves provides an opportunity to display the cultural surfing heritage of the site as well as the industrial and civic history of surrounding land use.

\*\* The historic images were sourced online from

1 Newcastle Region Art Gallery, the Newcastle Region Library and the Newcastle Regional Museum using http://collections.ncc.nsw.gov.au/keemu/pages/nrm/index.htm

- and
- 2 the National Library of Australia

http://www.pictureaustralia.org/apps/pictureaustralia?term1=merewether+beach&Submit=sear ch&action=PASearch&attribute1=any+field&mode=search



The **SURF CLUB BUILDING** location and address responds poorly to its urban context and constrains a primary threshold into the site. The building, Merewethers fourth surf club has little architectural merit.

Generously wide lower level promenade - 4.2-6.4M was probably constructed in 1910's (based in historic phoros)

Narrow upper level promenade -1.8-3.1M

Approximate loaction of burwood coal company railway shown dotted. First constructed in 1862 and revived in 1903.

Approximate location of an earlier vehicle access to the ocean baths which predates Henderson Parade

Location of C1910's shade pavilion, one of three pavilion locations occupying the lower promenade (others shown dotted) .\The last remaining pavilion (and in this location) was replaced in 1980's due to extensive storm damage

The existing **SURF HOUSE BUILDING** sitting seems to respond to historic arrival on site by tram. The existing generous ocean side building setback accomodates desirable pavement widening. This is a remarkably good example of a well designed place specific beach front public building. This is Merewethers third surf club

Approximate location of Merewether's first Life Saving Club building or shed was built in 1909.

Existing low retaining walls, varied construction methods from different periods, rich in character

The ladies baths has fallen into disrepair but is a useable "ruin" and a tidal pool

Existing low retaining walls, of robust direct character

MEREWETHER BATHS PAVILION is well

plàced, fronting the baths, occupying an elevated terrace and beside a long stairway to the baths. It is a simple building of straight forward design and construction and is good example of this type of structure.

It overlooks the baths and ocean. This is the second ocean baths pavilion this location

Merewether baths is a tidally flushed ocean pool - 50m x 100m The childrens pool switches from baths

to sandy beach by manually operated baffles.

The arrangement including a generous central promenade is memorable not only for its size.

The ensemble of elements including lower promenade, retaining walls, shade pavilion, ocean pools and the Surf House are noteworthy as a series of public projects undertaken over a period of 15-20 years in the early 20 th century. Each element contributes toward the making of a popular urban place at the south end of Merewether Beach.

#### 3.3 STREET DESIGN + TRAFFIC MANAGEMENT

#### **Traffic Management Objectives**

The Public Domain Plan is focussed primarily on improving the appearance, amenity, usability and access to the range of public spaces and facilities within the precinct, particularly the beach. To achieve this, there is a need firstly to understand how people, cars and traffic use the area currently. Only then can the affects of any changes be assessed and weighed against the potential public benefits. Accordingly, extensive surveys of existing traffic and pedestrian movements within and through the study area have been undertaken at critical (peak) times. The proposals outlined in the plan have been assessed in order to ensure that they not only accommodate these movements, but also respond to existing deficiencies.

Traffic analysis is included in Appendix G

#### Strategy

- One-way northbound flow in John Parade, between Watkins Street and the existing access to the Dixon Street car park. This removes some traffic from the beach front, providing an opportunity to provide a substantially improved and widened pedestrian footpath, that accommodates cycles as part of the recreational cycle route. This also creates an opportunity to reduce traffic volumes and conflicts across John Parade at its intersection with Watkins Street. The effects of the re-routing of southbound traffic that the one-way system creates have been investigated in detail and can be accommodated onto alternate routes.
- Closure of the northern part of Henderson Parade in the vicinity of the Surf Club; and the introduction of a new connection onto Frederick Street.

This enables an uninterrupted open space/pedestrian connection between Frederick Street and the beach front.

To support this, traffic movement would be one way in Henderson Parade between its new junction with Frederick Street and the existing car park access opposite upper Frederick Street, in the vicinity of the swimming pool (which is currently used for both entry and exit movements) This results in improved pedestrian safety along Henderson Parade, and reduces vehicle conflicts that presently occur along this entire route.

Creation of a slow speed environment within the entire study area. This is achieved by the introduction of a roundabout at the intersection of Frederick Street and John Parade, as well as the introduction of right-angled parking in Frederick Street immediately south of Johns Parade. There is also a proposed flush-paved median in Scenic Drive and Frederick Street, which will have the effect of visually narrowing the road and providing opportunities for pedestrians to cross more safely. These measures, in conjunction with the judicious use of kerb blisters and landscaping generally, are intended to create a more attractive physical road environment where lower speeds will be self-enforcing.

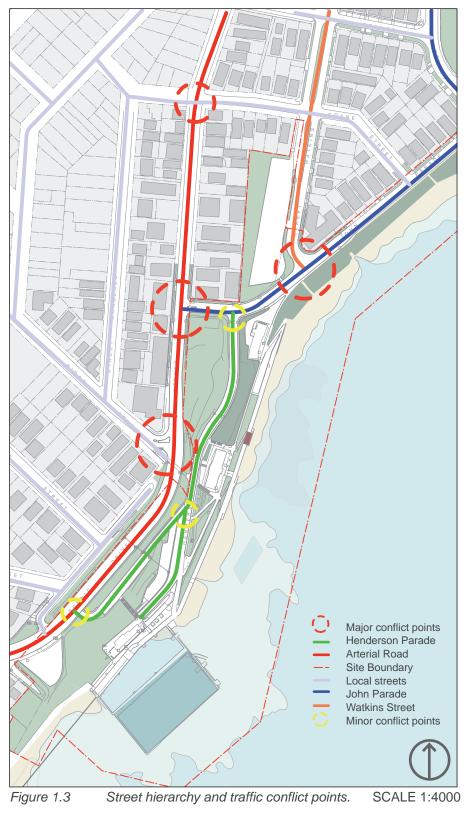




Figure 1.4 Available northbound traffic flow



Figure 1.5 Available southbound traffic flow

#### Parking

The need to maintain parking supply within the beach front precinct is acknowledged in principle as a general objective, as existing spaces are heavily utilised at peak times. In addition, it is considered to be undesirable to displace parking demands (which will increase over time) into residential areas. With most comparable studies, the achievement of significant urban design improvements usually results in a loss of parking and this is generally an unavoidable consequence. In this case however, the overall parking supply is expected to remain unchanged and the scheme is essentially 'parking neutral', through:

- more efficient use is of the Watkins Street car park, and reintroduction of parking in Watkins Street carriageway;
- 90 degree parking on Frederick Street achieves a greater parking yield than parallel parking
- existing parallel parking is generally maintained

#### **Public Transport**

Existing public transport services are maintained and the opportunity has been taken to introduce bus shelters on both sides of Frederick Street in the vicinity of the commercial centre.

#### **Access to Facilities**

The proposed changes maintain access to all existing facilities, though with an improved level of safety through reduced traffic conflicts and more effective control of vehicular access to the beach front. Service vehicle access will be maintained to all properties. Specific improvements include the one-way flow arrangement in Henderson Parade, the control of access to The Great North Walk using bollards, and the construction of a viewing platform in the Robinson Rerserve, with the car park itself remain an informal area for use by cars as well as truck drivers.

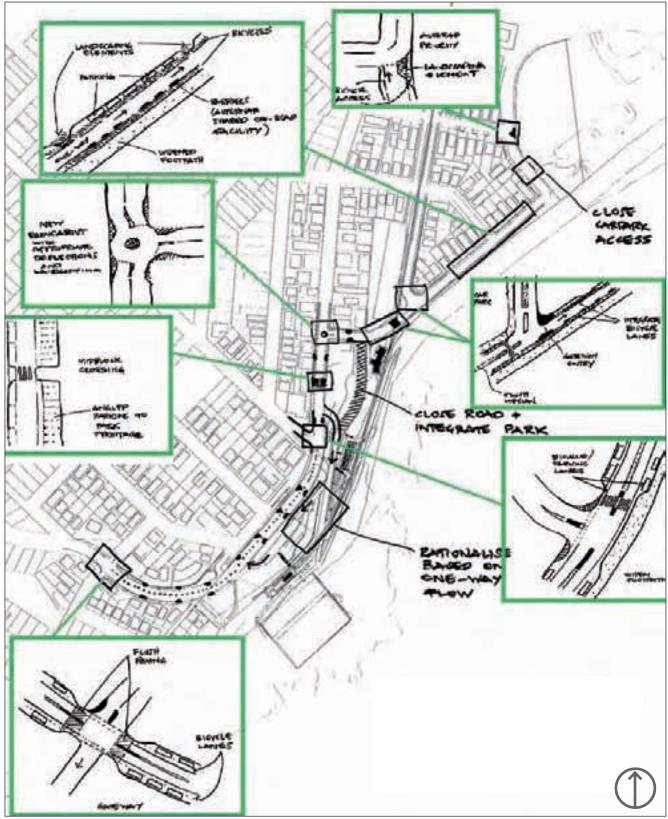


Figure 1.6 Potential traffic strategies for the site.

#### 3.4 PEDESTRIAN + CYCLE CONNECTIONS

#### **PEDESTRIAN CONNECTIONS**

Specific areas of pedestrian/vehicle conflict were identified through traffic analysis and site inspections, and through consultation with stakeholders. These are identified in Figure 1.8 opposite.

#### Strategy

Improvement to pedestrian safety and amenity will result from the interventions described in Section 4.0, based on the premise that slow vehicle speeds must be the main priority. Specific improvements include:

- a 'differential treatment' in John Parade immediately south of Watkins Street to caution drivers that this is a 'special' precinct
- The provision of pedestrian crossings in John Parade and Frederick Street, to supplement the pedestrian underpass
- The creation of a gateway treatment in Scenic Drive on approach to Lloyd Street, to caution and slow drivers approaching down the steep gradient
- Kerb blisters, including refuge islands at the proposed roundabout, intended to provide safer informal crossings and provide pedestrians with improved visibility
- Minor reduction in parking on the lowest level of multi level parking at the Merewether Baths end of the beach, to reduce potentially dangerous reversing movements, creating a shared zone for service vehicles and pedestrians.

The study also identified areas where the density of pedestrian traffic is not catered to on existing pathways and promenades. Specifically, the John Parade footpath on the eastern side, and the upper level beach promenade are generally too narrow, exacerbated by pinch points at the Surf Club and the Baths car park. Strategies for creating a generous and comfortable pedestrian environment include:

- Widening of the John Parade footpath to six metres, to accommodate pedestrians and cycles;
- Widening of the upper promenade to six metres as a standard dimension;
- Creation of a generous plaza space at the Surf Club, as the first point of arrival for the majority of pedestrians;
- Creation of a shared zone at the Baths car park, with vehicular access limited to service vehicles.

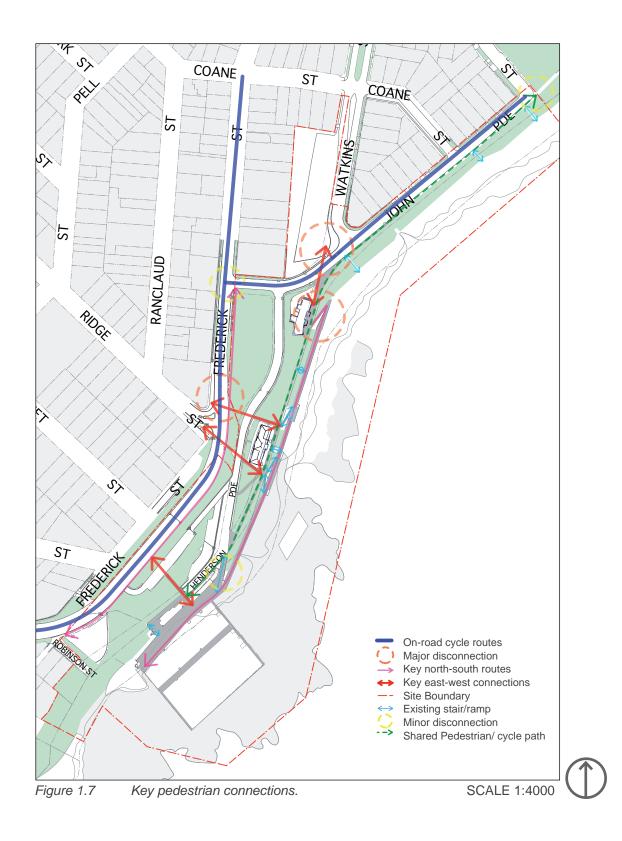
#### **CYCLE CONNECTIONS**

Under the Newcastle Bike Plan 2009, existing off-road cycle paths through Dixon Park meet proposed on-road cycle routes along John Parade and Henderson Parade.

#### Strategy

The Merewether Public Domain Plan proposes extensions to this network to provide on-road cycle routes:

- along Frederick Street connecting to the Junction and back along Scenic
  Drive
- along John Parade linking to the existing off-road coastal link through Dixon Park
- widened footpaths and beach promenade provide a recreational off-road route linking Dixon Park to the Merewether Ocean Baths



#### 3.5 HYDROLOGY + CATCHMENT ANALYSIS

Merewether is a coastal suburb located on a terrain of steep headlands and low flatlands.

This topography produces distinctive micro catchments which flow either directly to the coast or are diverted to areas of impeded drainage - often the site of coastal freshwater wetlands.

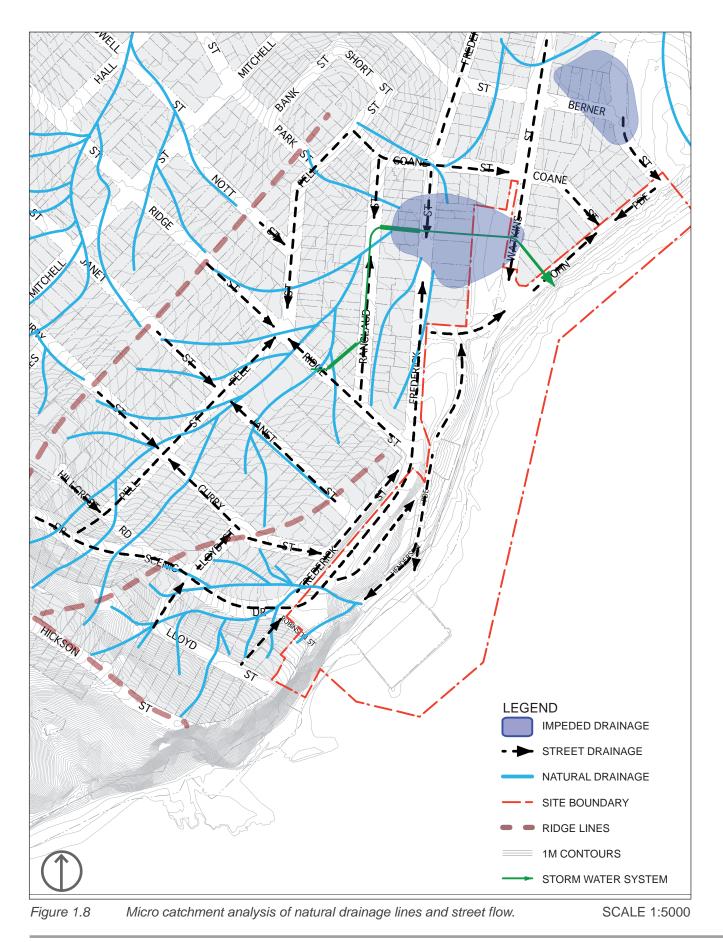
Following the urbanisation of the suburb and imposition of a street grid, these natural drainage lines are diverted to street reserves and storm water systems which bypass the natural areas of impeded drainage and water retention that would naturally filter water along the catchment. Storm water under this new regime is released into the ocean with very little filtration, carrying urban waste and polluted water.

By understanding the urban catchment we are able to identify sites for intervention in the form of swales, bioretention wetlands and other Water Sensitive Urban Design (WSUD) strategies to filter and retain storm water.

#### Strategy

Water Sensitive Urban Design strategies for Merewether Beach include:

- Permeable paving and water filtration swales in Watkins Street car park
- Water filtration swale in Watkins Street, with potential to capture and filter storm water from a wider catchment area, at the bottom of the catchment in an area where water naturally collects. Stormwater would be filtered and retained in swales, then released through existing stormwater outlet on Merewether Beach
  - Collection and filtration of storm water at the base of the Baths car park



#### 3.6 CHARACTER DEFINING ELEMENTS

#### Landscape Strategy

The landscape character of Merewether is to be maintained and enhanced through:

- Interventions of appropriate scale that sit within the existing topography
- Planting which reflects the current precedent set by dune revegetation
- Structures and tree planting which reflect the scale and materiality of Merewether while enhancing view lines and vantage points along the beach

#### **Material Strategy**

Existing built elements along the beach front contain overlays of different periods of building. Generally, walls, paths and steps are solidly built from ordinary materials, incorporating local and recycled aggregates. Many of the existing elements will be retained. New elements should embody the character of the natural environment, and reflect the qualities of existing elements. Strategies include:

- Concrete paving to reflect existing paving treatments
- Locally sourced aggregates
- Robust materials which will withstand exposure to coastal conditions
- Fencing, lighting and furniture to tie into the character of Merewether and the precedent of other Newcastle beaches

#### **Architectural Strategy**

Each of the park buildings should provide protection, prospect and activation as well as providing particular building functions. These park buildings viewed in the round need to engage positively with the spaces they edge. The provision of public amenities in the existing or proposed buildings needs to respond appropriately to adjoining park uses, and to achieve a coordinated approach for the park holistically. Public facilities should be low energy and low maintenance, be naturally lit and ventilated and should feel light and airy. Opening and closing screens and shuttering should be considered in subsequent design stages.

The surf club location is at a site pivot point which is an existing focus of activity and a popular site threshold. A replacement building is needed to rationalise the facilities, make the public promenade more generous and provide a multi use community building. On the promenade level, it would provide a cafe, surf life saver rooms, surf club rooms, public toilets showers and change rooms as well as storage spaces. The upper level would include a serviced mixed use community room surrounded by a publicly accessible deck. Stepped platforms and a unifying shade pavilion are proposed for the edge of park parallel to John Parade.

The Surf House site has an approved DA. It should achieve the relationship to the promenade demonstrated by the DA approved section. If the proposal DA does not proceed, the existing building could be partially reused or interpreted into smaller footprint pavilion on an elevated terrace, with toilets, outdoor showers and shade structure with barbecue facilities.

The Merewether Bathers Pavilion is a very simple structure which could provide higher public benefits. Roof extensions and terraces would improve oversight of the ocean pool. A supplementary serviced community room may be accommodated if the existing amenities on the first floor were accessed and rationalized accordingly, Access would need to be upgraded and reconfigured. The ground floor terrace should be extended northward and be fronted by a modest cafe kiosk in the north east corner of the existing building. Existing ground floor functions would need to be moved southward within the existing building footprint.

#### LANDSCAPE CHARACTER











MATERIAL CHARACTER





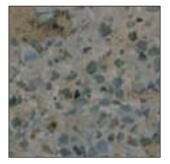


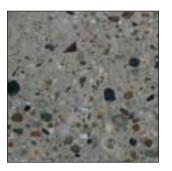


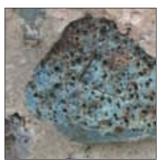














ARCHITECTURAL CHARACTER



Shade Pavilion



Surf Club



Surf House

Strategic Overview



Baths Pavilion



Cupaniopsis anacardioides (Tuckeroo)



Araucaria heterophylla (Norfolk Island Pine)



Revegetated dune between upper and lower promenades



Slope stabilisation techniques

#### 3.7 VEGETATION STRATEGY + STREET TREES

Recent revegetation programs carried out by local groups are successfully establishing a vegetated edge to the beach and steep dune slopes between the beach and the urban areas above. This program is stabilising dunes, and reestablishing the preexisting indigenous vegetation communities that have been degraded through wear and weed growth.

Harsh environmental conditions - onshore salt winds and shallow infertile soils have restricted tree growth, even for the locally indigenous Banksia that would be expected to withstand such conditions. The pressure for uninterrupted ocean views can also be expected to hamper public support for a tree planting program.

Strategies for planting in Merewether Beach and Parklands include:

- Expansion of the revegetation program, replacing grass banks in unused areas to create a unified character through the parklands
- Provide an appropriate low maintenance environment and enhance habitat
- Mass planting of indigenous species at Watkins Street car park to reduce the severity of this environment
- Tree planting to define major streets

Watkins Street:	Cupaniopsis anacardioides
Frederick Street:	Hibiscus tiliaceus Araucaria heterophylla
Ridge Street:	Acronychia imperforata
John Parade:	Araucaria heterophylla Banksia integrifolia

#### **Trees as Placemaking Strategy**

Norfolk Island Pines (*Araucaria heterophylla*) are an iconic tree species along the east coast of Australia. Historically used as a navigational marker for ships along the coast, these trees are specifically adapted to the exposed conditions of beachs and headlands. Norfolk Island Pines, due to their resiliant characteristics, have been planted along beaches, coastal avenues and parks.

In Merewether, Norfolk Island Pines are recommended for Frederick Street as a single row. These trees will provide a grand scale for the street and define the ridge and entry to Merewether Beach. In the larger landscape of Newcastle they can act as a point of orientation visable above the surrounding built environment.

The selection of Norfolk Island Pines reflects cultural planting elsewhere in Newcastle with King Edward Park displaying the largest planting of this species.

On local streets the species selection reflects two criteria: resistance to the coastal exposure and scale of planting. Smaller tree species have been selected for local streets to reflect the scale of the street reserve and houses, and define the hierarchy of streets.

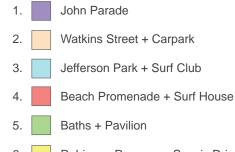


*Figure 1.9* Vegetation strategies for beach reserves and adjacent streets.

# 4.0 PUBLIC DOMAIN PLAN

#### 4.0 DESIGN PLANS

This section of the Public Domain Plan includes detailed design proposals for each portion of the site. Each portion addresses key areas of the overall site, and reflect the intended future staging of works. There is some overlap in the division of key areas.



6. Robinson Reserve + Scenic Drive



Figure 2.1 Public Domain Plan

NOT TO SCALE



Existing footpath along John Parade



Narrabeen sculptural walk



Balmoral beach promenade



Narrabeen dune planting

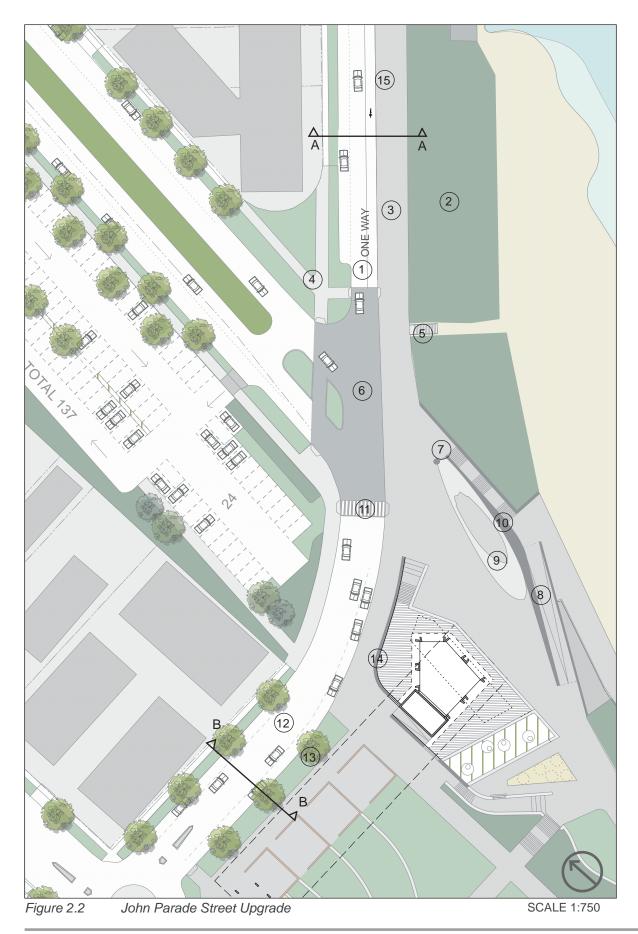
#### 4.1 John Parade

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**Design Objectives** 

- Resolve traffic and pedestrian conflict at intersection of Watkins Street.
- Provide generous pedestrian promenade linking Merewether Ocean Baths to Dixon Park and beyond.
- Allow for mixed use of promenade, walkers, surf watch, dogs, cyclists, family groups.
- John Parade is converted to single lane one way system northbound. Combined parking and cycle lane on the western side.
- Retain and protect dune planting along John Parade.
- 3 Provide continuous 4-6 metre promenade along John Parade. Kerb moves into carriage way, existing beach boundary retained.
- 4 Extend corner to provide safe pedestrian crossing point and reduce speed of traffic in the intersection.
- 5 Replace existing beach access stairs with timber structures built over existing concrete steps, to meet current standards.
- 6 Textured surface at grade with surrounding street to distinguish area of high pedestrian activity.
- (7) New stair access to lower beach promenade.
- (8) Extend and widen ramp access to beach to reduce steep grade.
- 9 New feature retaining wall to define viewing area at grade with upper promenade. Defined by change in surface paving with seating and public art. A generous pedestrian plaza is formed at this busy entry. Refer to Appendix D for Surf Sculpture design guidelines.
- (10) Lifeguard facility incorporated into construction of retaining wall below viewing platform. Recommend investigation during detailed design.
- (1) New marked pedestrian zebra crossing to provide direct link from carpark to the beach and promenade.
- (12) John Parade south widens to two lanes with parallel parking on both sides of road. Medium size street trees are proposed for both sides of street.
- Use Verge is planted and sloped to accommodate level change from John Parade to the platforms in Jefferson Park.
- (14) New retaining wall as part of proposed Surf Club upgrade.
- (15) Separate on-road cycle lane contro flow heading southbound.



Public Domain Plan

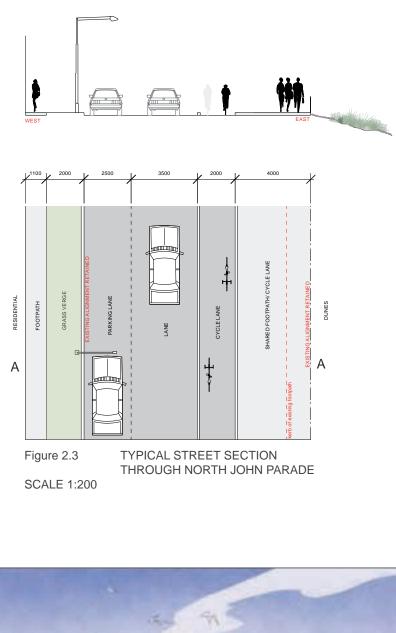
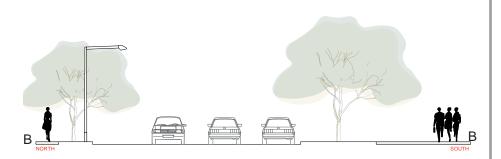


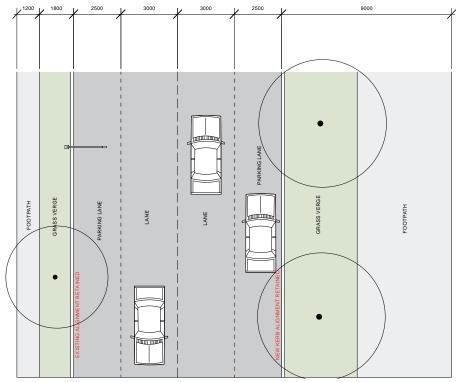


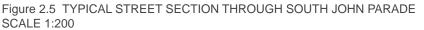
Figure 2.4 Sketch perspective down John Parade

#### **STREET IMPROVEMENTS - NORTH JOHN PARADE**

- Footpath widened to 4-6m from existing beach side edge (and seawall) . inwards.
- New kerb line
- Street one-way northbound from Watkins Street to Ocean Avenue.
- Single traffic lane northbound, 4m
- Combined parking/ cycle lane, 3.5m on western side Retain existing kerb line







#### STREET IMPROVEMENTS - SOUTH JOHN PARADE

- New kerb line southern side
- Street two-way from Frederick Street to Watkins Street.
- Two-lane carriageway, 3m wide lanes
- Parallel parking both sides of street, 2.5m
- Retain existing kerb line on northern side.



Central road swale



Parking bay swale and tree planting



Existing Watkins Street carpark



Wide central swale with tree planting

#### 4.2 Watkins Street + Carpark

**Design Objectives** 

- Reinstate alignment of Watkins Street.
- Rationalise parking.
  - Provide safe pedestrian access to the beach and Promenade.
- (1) Dune vegetation to screen between carpark and private residences.
- (2) New marked carpark. Carpark spaces permeable gravel surface.
- (3) Central drainage swale with tree planting surrounded by permeable paving.
- 4 Planted spaces provide relief from hard surface and retain water. Tree planting provides shade to cars and people.
- 5 Flexible space can be utilised for Surf Fest administrative area, extra parking, and small grassed picnic area.
- 6 New alignment of Watkins Street opens up parallel parking on western side of Watkins Street.
- Central wide bioswale median retains and filters water along Watkins Street.
- (8) Width of intersection is reduced to extend corner and provide safer pedestrian crossing points along John Parade.
- 9 New marked pedestrian crossing to provide direct link from carpark to beach.
- (10) Textured surface treatment of intersection at grade with the road reserve. Signals change in traffic condition in this area, reduces traffic speed and allows safer pedestrian crossing points.
- (11) John Parade reduced to one way northbound with widened promenade.
  - Other traffic strategies for Watkins Street include:
    - Four-way stop signs at the intersections of Watkins Street and Berner Street, and Watkins Street and Coane Street.
    - Pedestrian refuge at the intersection of Coane Street and Frederick Street.

(12)



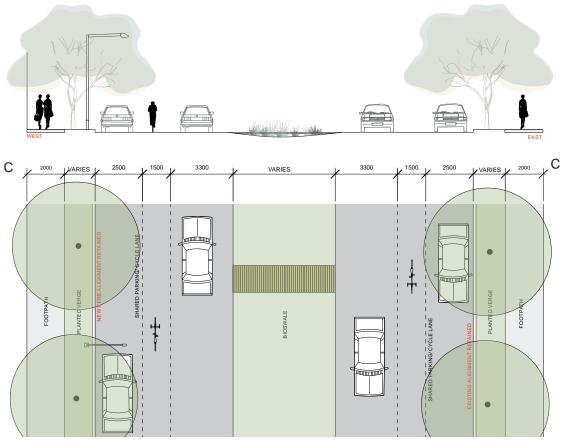


Figure 2.7 TYPICAL STREET SECTION THROUGH WATKINS STREET

SCALE 1:200

# STREET IMPROVEMENTS

- Reestablish street alignment.
- Retain kerb line on eastern side of street
- 5m wide swale down centre of street
- Carriageway 3.5m wide each lane
- Combined parking/ cycle lane, 3.5m on both sides of street
- New kerb on western side.
- Street tree planting.



Figure 2.8 Sketch perspective of proposed Surf Club and promenade upgrade



Terraced grassed levels, Dee Why Beach



Seat walls and steps



Shade structure, Pyrmont Park



Existing Jefferson Park from Henderson Parade

# 4.3 Jefferson Park + Surf Club

**Design Objectives** 

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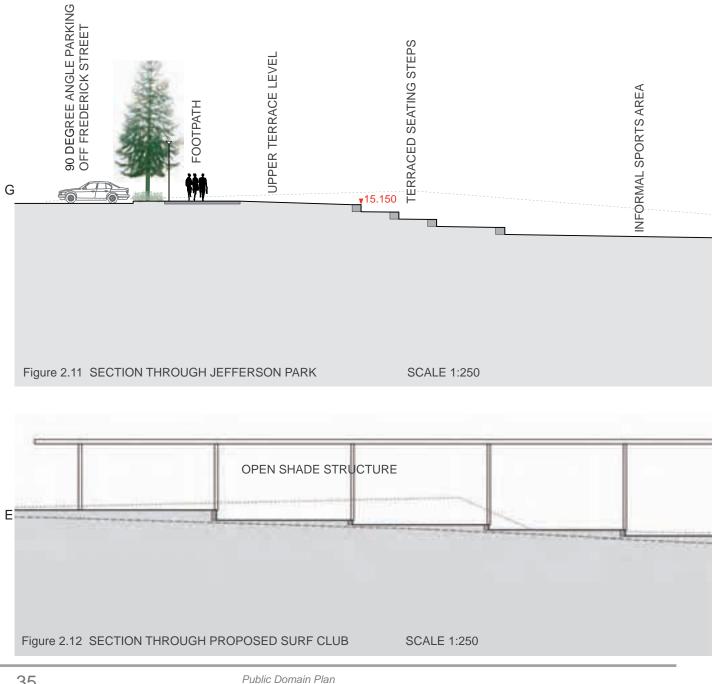
- Reorientate part of park to Frederick Street.
- Improve pedestrian connection to Promenade and Beach.
- Provide generous pathways for shared use.
- Resolve terrain difficulties to provide usable park spaces.
- New round-about at intersection of Frederick Street and John Parade
- Frederick Street upgrade to reduce traffic speed and create safe crossing points for pedestrians (see figure 2.10)
- Avenue of Norfolk Island Pines define ridge and Frederick Street. 5 metre wide footpath provides strong link from Jefferson Park to Frederick Street commercial strip and links to adjacent terrace. Terrace at grade with Frederick street provides flexible site for market stalls and functions.
- Wide grassed terrace seating provides informal amphitheater within park while also resolving steep terrain.
- Grassed terraces lead into paved platforms which form adaptable spaces for locating park amenities (e.g. barbecues). Future potential as enclosed lightweight commercial spaces to be investigated as part of any future review of the Merewether Beach Reserves Plan of Management process. These platforms can also function in conjunction with terrace on Frederick Street as the site for festival booths and market stalls. Most significantly they provide fixed shade structures within the park.
- Closure of the top section of Henderson Parade allows a strong connection to form between the park and beach. Retaining a pedestrian pathway at this level still allows access at the lower side of the park and views down to the beach.
- New public change rooms and toilets on lower level of surf club. Light wells in roof structure allow for natural light and ventilation. Green roofs provide water retention area and visual amenity to the upper terrace of the Surf Club.
- Outdoor showers close to change facility and entry to promenade.
  - Reestablished dune vegetation provides buffer along this edge of the park while also stabilising steep slopes.
- New access stairs provide direct link to upper promenade.
- Flat grassed area provides level surface in park for ball games and picnics.
- Bus stop with overhead shade structure provides point of scale and definition at the public transport entry to the beach.
- New community function room on upper level of Surf Club.
- (14) Upper terrace of Surf Club provides function space and public access down to beach promenade.
- (15) Shaded picnic area.

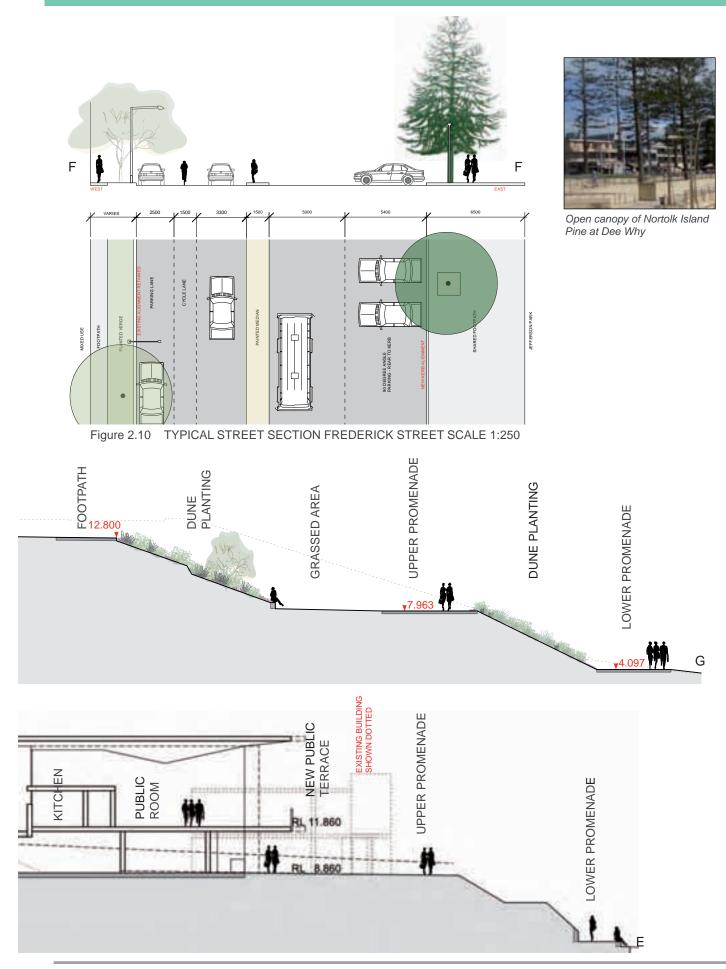


Public Domain Plan

## STREET IMPROVEMENTS

- Retain existing kerb line on western side.
- Parallel parking on western side, 2.1m lane
- 4m lane northbound.
- Central marked median, 2m
- 5m lane southbound
- 90 degree angle parking on eastern side, rear to kerb.
- New kerb line abutting Jefferson Park





Public Domain Plan



Seat wall on Glebe foreshore



Merewether promenade



Sloped bank, retaining wall and promenade

#### 4.4 Beach Promenade + Surf House

**Design Objectives** 

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- Provide consistent generous upper promenade.
- Maintain and improve upon pedestrian connection to the beach.
- Provide mix of vegetation zones, dune planting and turf to accommodate habitat and needs of people.
- 1 Retain existing underpass and reduce entrance speed to Ridge street as traffic calming strategy.
  - Tightening of intersection of Scenic Drive and Ridge Street to reduce traffic speed and pedestrian risk.
- 3 Extension of corner to reduce gradient and provide safe pedestrian zone outside the Beach Hotel.
  - Formal pedestrian zebra crossing at grade in conjunction with pedestrian underpass.
  - New stair access to Henderson Parade with textured road surface and pedestrian blister opposite.
- (6) Marked Pedestrian crossing at top of new entry to Henderson Parade.
  - New section of Henderson Parade with five minute parking for surf check. Henderson Parade now one way system southbound. (see section 2.12)
  - Henderson Parade still maintains parallel parking on eastern side with service area in front of Surf House.
  - Dune vegetation maintained and protected on steep slopes.
  - Pocket lawns along upper promenade provide area for families to picnic. (see detail section 2.13)
  - Upper promenade widened to 6 metres from existing eastern edge. Consistent treatment and width from John Parade to the Baths.
  - Dune planting is maintained on slopes between promenade levels.
  - Ramps shortened to accommodate new promenade width.
  - Provide safety barrier at the end of the underpass. Extend kerb on opposite side to provide pedestrian blister, with textured road surface at crossing point.

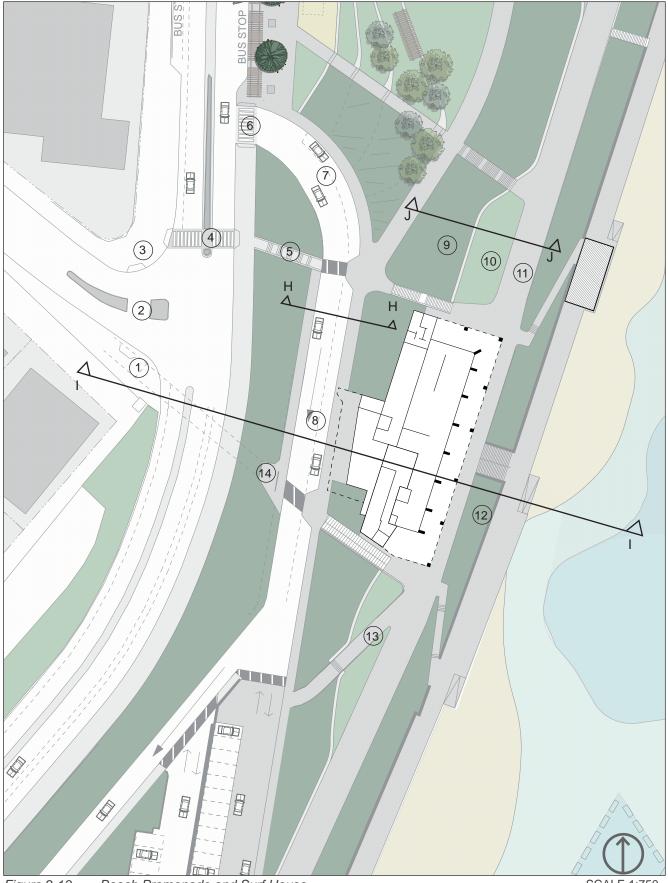
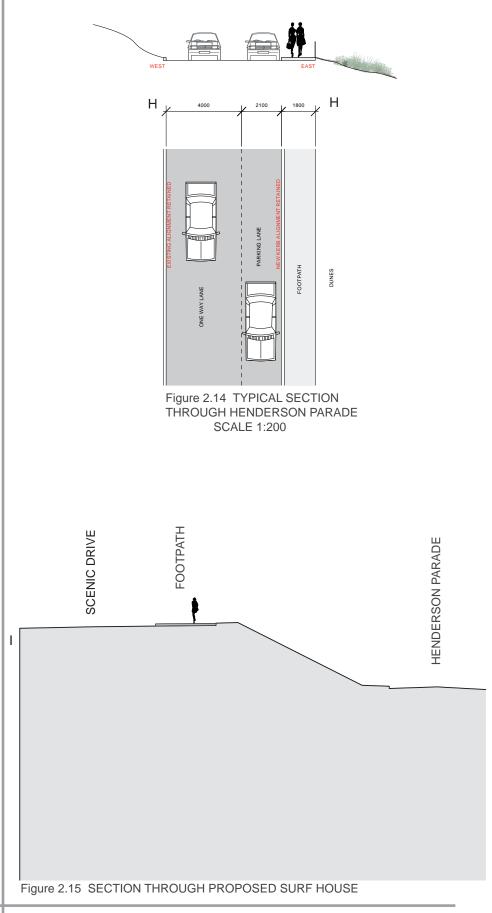


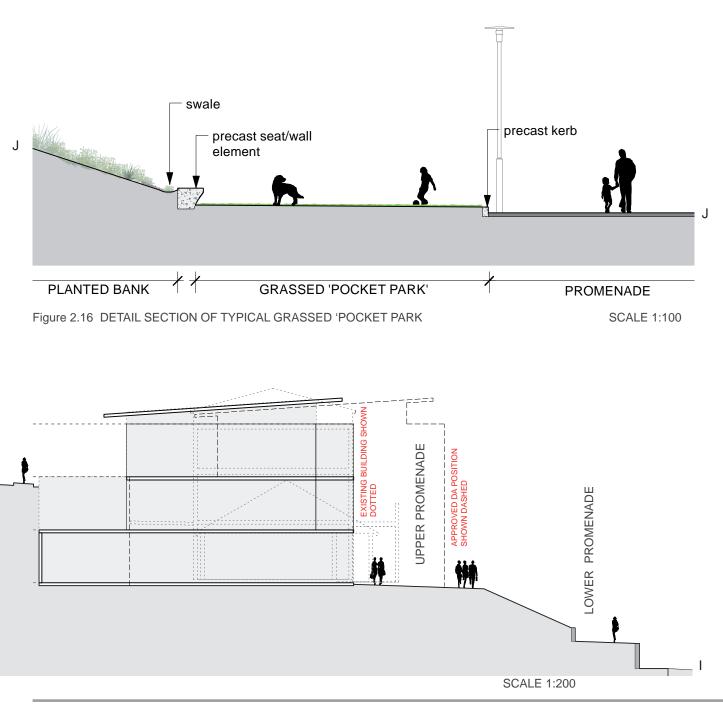
Figure 2.13 Beach Promenade and Surf House

SCALE 1:750



# STREET IMPROVEMENTS

- Northern section of road closed
- New entry drive to street.
- Retain western kerb
- Single traffic lane southbound, 4m
- Parallel parking lane eastern side, 2.1m
- 1.8-2m footpath along eastern side.





Ocean Baths



Swale, Armory Wharf



Existing levels at Merewether Baths

# 4.5 Baths and Pavilion

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**Design Objectives** 

• Upgrade areas surrounding the Baths Pavilion, including resolving level differences and pedestrian/ traffic conflicts.

- Resolve parking in three levels carpark.
- Provide legible link along upper promenade to the BATHS PAVILION.
- Resolve changes of level along lower portion of baths promenade.

Reconnect terrace in front of BATHS PAVILION with area to the north through consistent level and rebuilt access stairs.

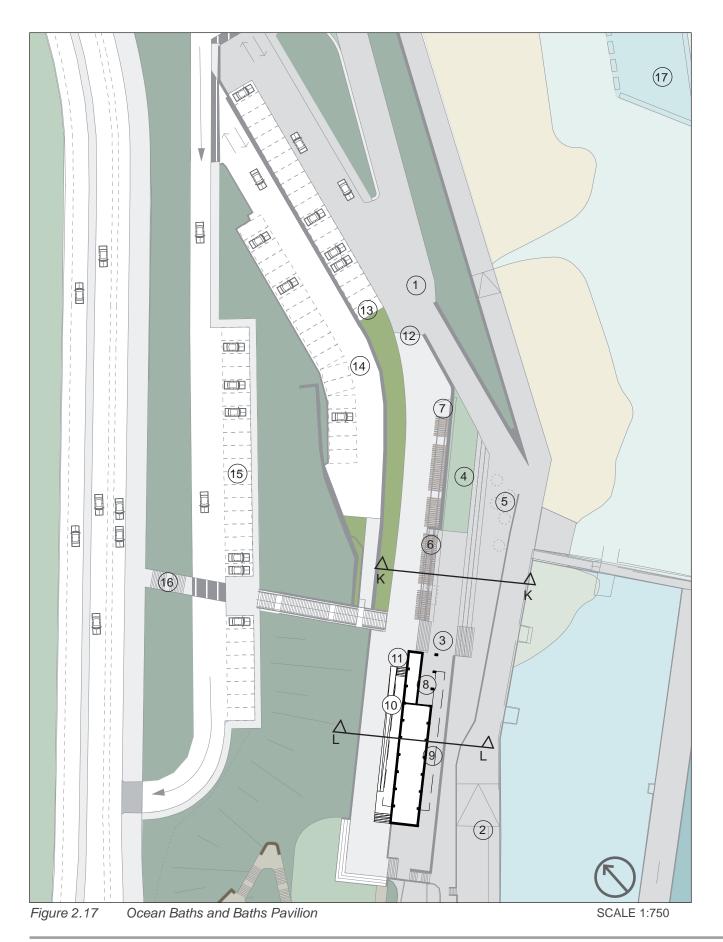
- New pocket grassed area to provide shaded seating area near baths.
- New outdoor showers area.

Shade Pavilion, hardwood post and beam structure. Bleacher seats run underneath.

- Viewing terrace.
- New kiosk cafe, relocate existing facilities into southern end of building.

Improve the buildings outlook over the pool. Change rooms and toilet facilities to be reduced in extent and introduce a new public room and kitchen in upper pavilion level. Investigate future commercial potential of buildings as per Merewether Plan of Management.

- New porch with awning above.
- New stair and access ramp to bring level with northern edge of building.
- Limited access past this point to Baths Pavilion, using boom gate or retractable bollards.
- Bioswale system to capture and treat water from upper carparks.
- Parking spaces widened and turning area identified at end of this level.
- 90 degree angle parking marked in carpark with path at edge.
- New access stair to footpath on Scenic Drive.
- Ladies Baths Strategic repair to remove hazards. Historic remnant not maintained for formal use.



Public Domain Plan

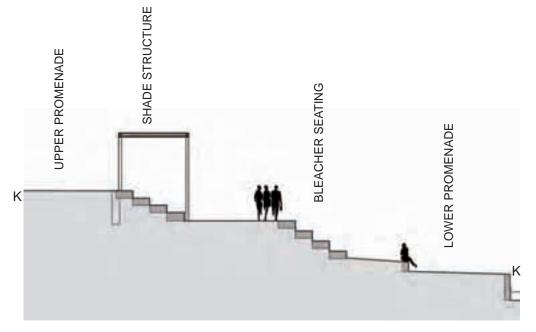


Figure 2.18 SECTION THROUGH PROPOSED BATHS SHADE STRUCTURE SCALE 1:200

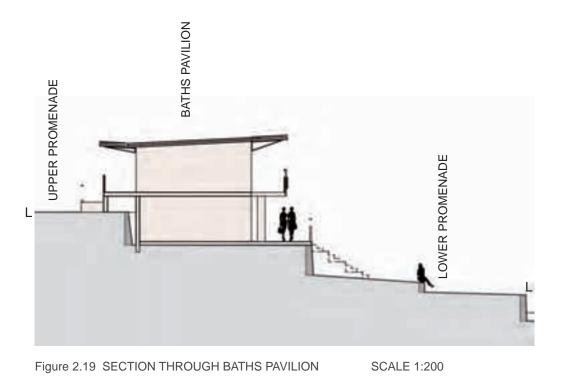




Figure 2.20 Sketch perspective of Baths, pavilion and shade structures



Robinson Reserve carpark



Viewing area at Narrabeen



Timber walkway, Ballast Point

## 4.6 Robinson Reserve

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Design Objectives

- Maintain existing informal parking structure of lookout.
- Resolve traffic speed and risk areas along Scenic Drive.
- New 4 metre wide footpath from edge of Jefferson Park to the Robinson Reserve. Path can act as shared pedestrian and cycle path for informal use by families.
  - Central median of textured or painted surface to reduce carriage way and slow traffic. Within this strip pedestrian refuges can be located where applicable.
  - Raised median from Robinson Reserve up to the intersection with Lloyd Street to reduce speed of traffic. Breaks in raised median have been allowed for individual driveways and streets.
    - Kerb blister to either side of the entry to the reserve carpark, ensures no parked cars to either side of entry and reduces risk to pedestrians.
    - Informal dress circle parking, unmarked.
  - Timber viewing platform to provide space beyond carpark to view ocean and whale watch. Can be investigated to link up with walkway proposal from Baths Pavilion up to the lookout via Heritage Park.
  - Proposed site for Heritage Park. Further investigation required including geological survey of slope. Possible site for cultural and historical interpretation. Refer to Appedix C for Heritage Park design guidelines.

