

Takapuna Beach Reserve South Concept Plan

DRAFT REPORT JULY 2014



Acknowledgements:

Devonport-Takapuna Local Board

Parks Advisors - Nicki Malone and Matthew Woodside

Auckland Council Parks Design Team - Liz Oldfield and Trina Jashari

Neil Coleman, Architectural Sketches and Perspectives (ASAP), *Artistic Impressions*

Auckland Council Environmental Services Unit (Stormwater), Boffa Miskell and AR Civil Consulting (*Takapuna Beach Southern Sector - Stormwater Outfalls: Draft Concept Design Report 2012*)

Contents

Section 1: Introduction and background

1.1	Introduction	7
1.2	Public & stakeholder engagement	7
1.3	Time line	8
1.4	Aerial Photography	9

Section 2: Site analysis

2.1	Site context	12
2.2	Character imagery	13
2.3	Circulation and built form	14
2.4	Cultural heritage	15
2.5	Natural heritage	16
2.6	Unitary Plan context	17

Section 3: Design guidance

3.1	Design principles	20
3.2	Design guidance for parks and furniture	21

Section 4: Concept plans

4.0	Concept plan area and design statement	25
4.1	Concept plan project area 1: Te Uru Tapu/Sacred Grove of Pohutukawa	
4.1.1	Existing site context	26
4.1.2	Concept plan: Te Uru Tapu/Sacred Grove of Pohutukawa	27
4.2	Concept plan project area 2: Gould Reserve and The Strand	
4.2.1	Existing site context	28
4.2.2	Gould Reserve spatial arrangement plan	29
4.2.3	Concept plan: Gould Reserve and The Strand	30
4.2.4	Artists impression	31
4.2.5	Play space design considerations	33
4.3	Concept plan project area 3: Blomfield Spa	
4.3.1	Existing site context	34
4.3.2	Concept plan: Blomfield Spa	35

4.4	Concept plan project area 4: Sanders Avenue	
4.4.1	Existing site context	36
4.4.2	Concept plan: Sanders Avenue	37
4.5	Concept plan project area 5: Park Avenue	
4.5.1	Existing site context	38
4.5.2	Concept plan: Park Avenue	39

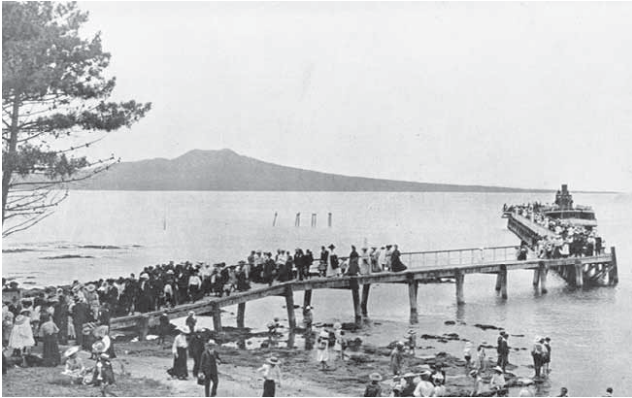
Preliminary concept options developed by Auckland Council Stormwater team:

4.6	Concept plan project area 6: Rewiti Avenue	
4.6.1	Existing site context	40
4.6.2	Concept plan: Rewiti Avenue	41
4.6.3	Artists impression	43
4.7	Concept plan project area 7: Ewen Street	
4.7.1	Existing site context	44
4.7.2	Concept plan: Ewen Street	45
4.8	Concept plan project area 8: Hauraki Road	
4.8.1	Existing site context	46
4.8.2	Concept plan: Hauraki Road	47

Section 5: References	47
-----------------------	----



1.0 Introduction and
background



1	2	3
4	5	6

Figure 1. Looking North towards Rangitoto. Sir George Grey Special Collections, Auckland Libraries, 7-A256. 1906.
 Figure 2. View of Lake Beach, Takapuna (now known as Takapuna Beach). William A Price. 1909.
 Figure 3. Takapuna Beach. Richardson, James D. Sir George Grey Special Collections, Auckland Libraries, 4-7110. 1901.
 Figure 4. View of Lake Beach, Takapuna (now known as Takapuna Beach). William A Price. 1909.
 Figure 5. Two women digging in the sand on Takapuna Beach. 'Sir George Grey Special Collections, Auckland Libraries, 7-A5607. 1910
 Figure 6. Takapuna Beach. Richardson, James D. Sir George Grey Special Collections, Auckland Libraries, 4-7110. 1920

1.1 Introduction

Objectives of the concept plan

The objective of the concept plan for Takapuna Beach Reserve South is to provide high level design moves that will guide future development and meet the objectives of the Takapuna Beach Reserve Management Plan - putting the words of the management plan into pictures.

The project area covers the reserve south of The Promenade to Hauraki Road.



1.2 Public and stakeholder engagement

Purpose of engagement

To achieve a well informed concept plan it was necessary to find out how the park users and key stakeholders currently use and perceive the reserve, and how they would like to use it in the future.

Consultation was carried out in two stages:

- **Stage 1:** January 2014 and April 2014
Engagement with key internal and external stakeholders and iwi.
Two workshops were held with each stakeholder group during this phase
- **Stage 2:** from 12 May to 8 June 2014
Engagement with the wider community. Awareness of the consultation was raised via media releases, the local board Facebook page and a flyer drop to local residents.

What we heard from the consultation:

Stage 1 workshop A: presentation of design principles and gathering of any additional suggestions

Six design principles were agreed on and prioritised by the stakeholders. These are outlined in Section 3.1.

Stage 1 workshop B: presentation of the preliminary concept plan

General support for the preliminary concept plan was expressed by stakeholder groups, in particular on:

- removal of lower portion of the lookout structure at Te Uru Tapu/ the Sacred Grove of Pohutukawa
- the idea of a natural play space within Gould Reserve
- the location of the proposed play space i.e. not too close to the road and not too far from the toilet block
- ensuring sufficient width of pathways for all abilities access.

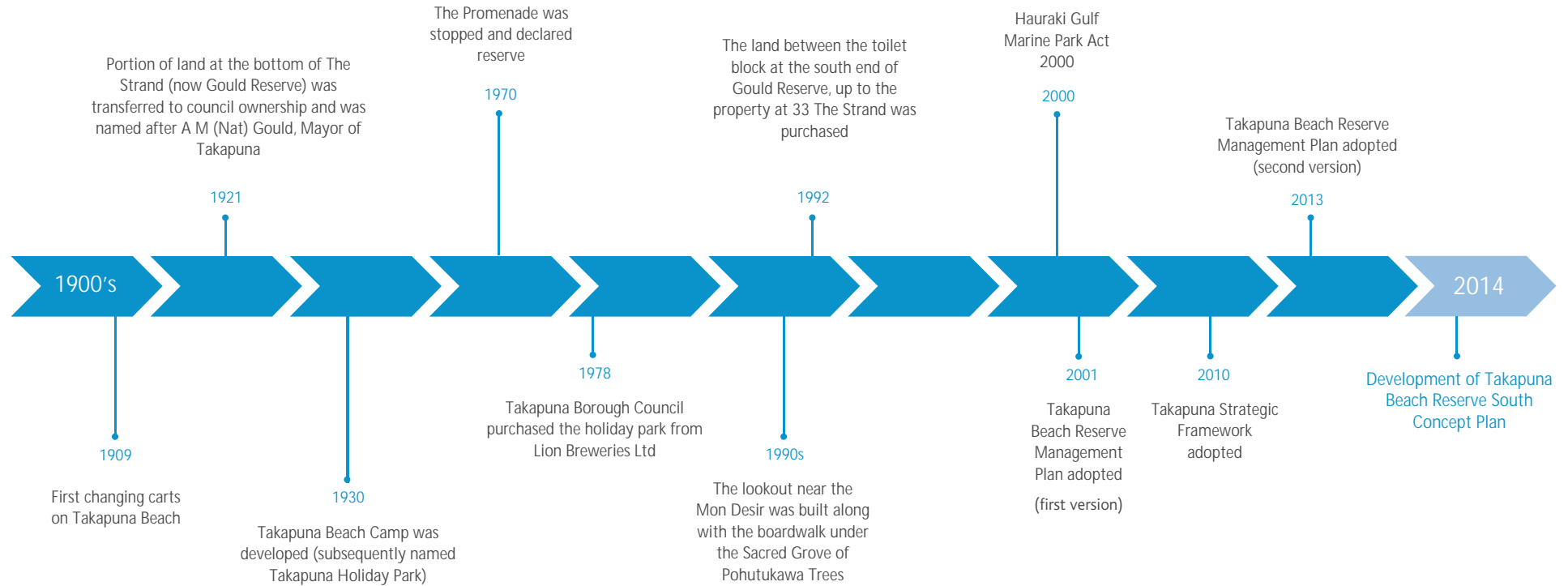
Stage 2: Draft Concept Plan released for feedback from community

Feedback was collated and used to inform and improve the concept plan. The main feedback themes were:

- support for play space at Gould Reserve
- parks furniture - desire for more rubbish bins/ opposition to removing the stone walls and associated seating at Gould Reserve
- changing rooms/toilet at Gould Reserve - some opposition to relocating the toilet; concerns about sufficient lighting, air flow, etc
- boardwalk at Gould Reserve - mix of support and opposition; concern about use of timber in coastal environment
- all abilities access - general support, with feedback around required width of paths, etc

1.3 Timeline

A timeline of development of the park from the 1900's to today



1.4 Historic photographs

Aerial photography showing the development of the new Gould Reserve area following its purchase in 1992



1959



1996



2010



2.0 Site analysis



LEGEND:

- | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Devonport-Takapuna Local Board | State Highway Network | Shipping route |
| Park and Reserve Land | Te Araroa Walkways | Ferry route |
| Rail Line | | |

2.1 Site context

Takapuna Beach Reserve is located on the East Coast of Auckland within the Devonport-Takapuna Local Board area. It comprises of beachfront land adjoining Takapuna's central business area and offers spectacular views towards Rangitoto Island.

Takapuna Beach also forms part of a coastal route along the East Coast Bays and the wider Te Araroa walkway (The long pathway), a continuous 3000km walking track from Cape Reinga to Bluff.

The concept plan on the following pages looks at ways to improve this coastal route.



2.2 Character imagery

Analysis of the existing character of the park through photography



2.3 Circulation and built form

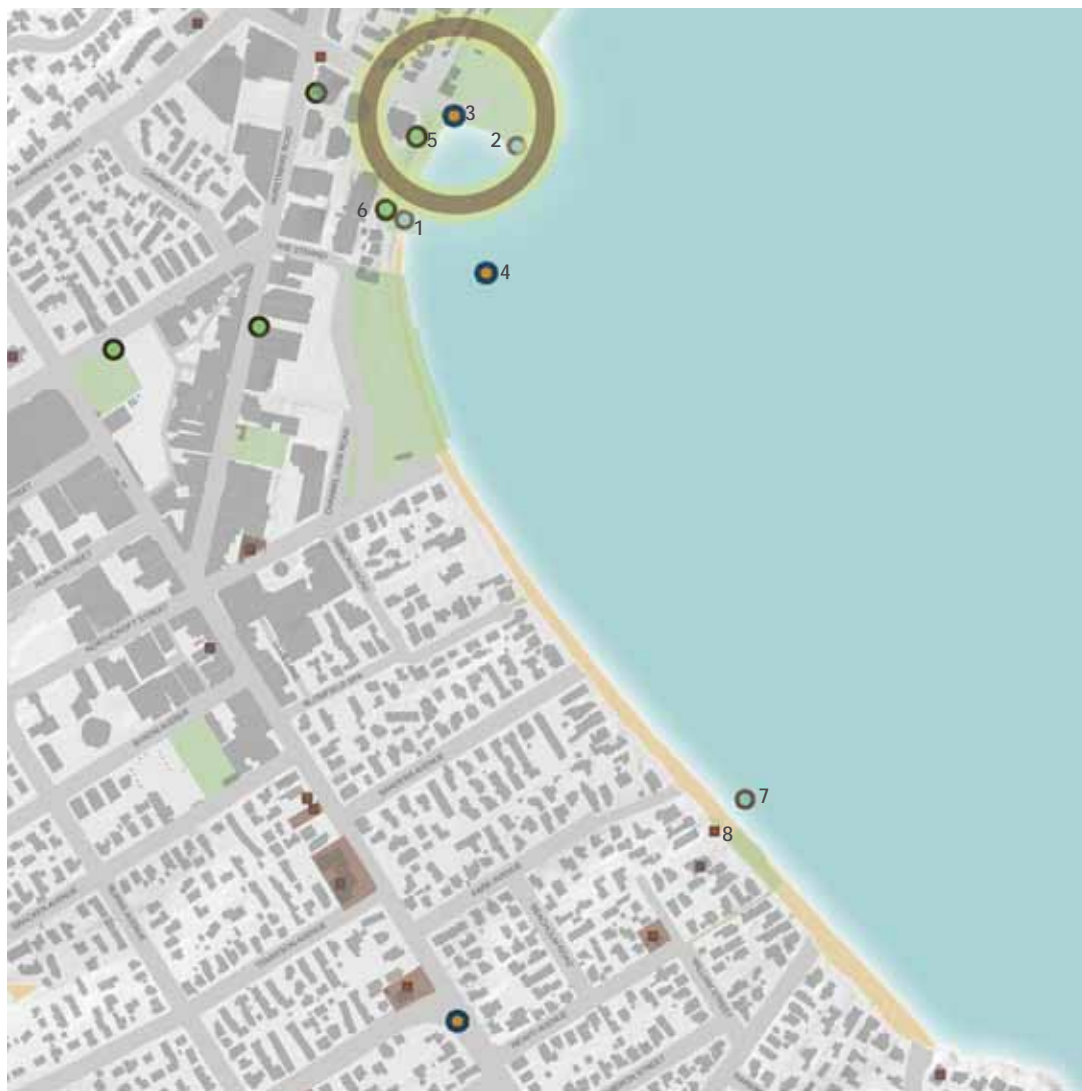
Connecting people between the reserve area, town centre and public transport is a key consideration when developing a concept plan. This map shows the location of existing bus stops, footpaths/access routes, road access and key retail frontages within the vicinity of the reserve.










LEGEND:

- B Bus Stop
- Pathways/tracks
- Access routes
- Minor road
- Medium road
- Arterial road
- Beach
- Existing open space
- Building footprints
- active edges/ key retail frontage





LEGEND:

-  Sites and places of value to Mana Whenua (Unitary Plan overlay)
-  Maritime site
-  Archaeological site
-  Historic botanical site
-  Historic Structure
-  Historic extent of place
-  Existing Open space



2.4 Cultural heritage

This map shows sites that have been identified within the Cultural Heritage Inventory (CHI) that was established by the former Auckland Regional Council. The CHI was established to promote sustainable management of cultural heritage by providing easy access to cultural heritage information that should be used as a resource during concept, developed and detailed design.

For additional information including a statement of Maori values and early European history of the reserve area, refer to the Takapuna Beach Management Plan 2013.

CHI sites within the Takapuna Beach Reserve South area:

- 1. Maritime site:**
D.L. Murdoch's Bathing House
CHI Places Number: 986
- 2. Maritime site:**
Site of former Takapuna Wharf
CHI Places Number: 218
- 3. Archaeological site**
Midden
CHI Places Number: 13933
- 4. Archaeological site**
Takapuna Beach
CHI Places Number: 12099

Sites and places of value to Mana Whenua (Unitary Plan overlay):

- 5. Historic botanical site**
Te Uru Tapu - Pohutukawa
CHI Places Number: 2115 (Crown owned CHI site)
- 6. Historic botanical site**
Trees - Pohutukawa
CHI Places Number: 19267
- 7. Maritime site:**
Sewer
CHI Places Number: 250
- 8. Historic structure:**
Changing rooms
CHI Places Number: 19695

2.5 Natural heritage

This map shows areas that have been identified within the Natural Heritage section of the Proposed Auckland Unitary Plan.

Natural heritage features of note are as follows:

- Takapuna Beach contains scattered remnants of original pohutukawa trees that would once have formed a coastal forest that clothed the Takapuna Coast. The Sacred Grove of Pohutukawa/ Te Uru Tapu is one of the finest mainland pohutukawa groves and one of the only remnants of its type remaining in the Auckland region.
- Takapuna Beach possesses one of only two examples of pohutukawa on volcanic deposits from Lake Pupuke eruptions - the other being at North Head

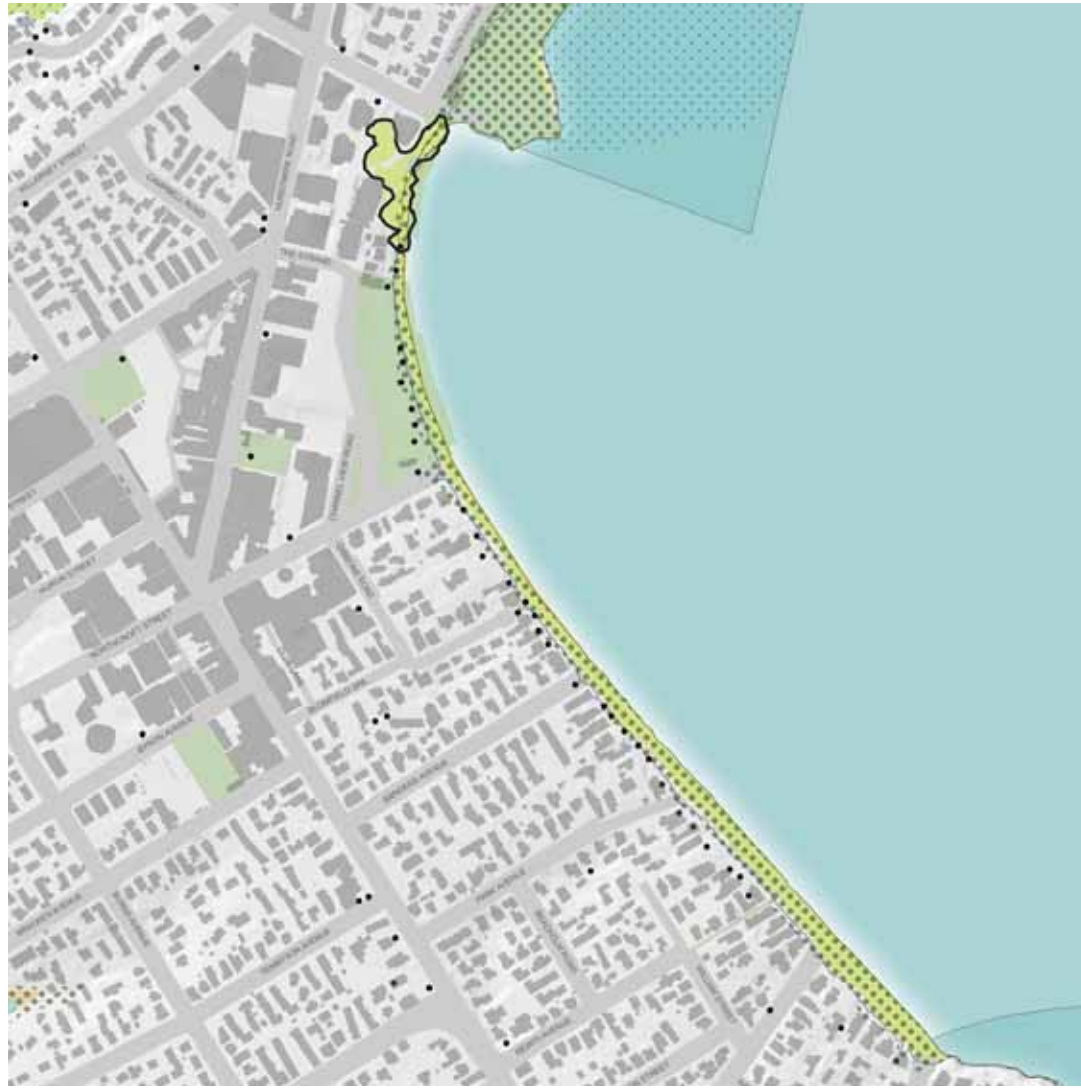
(Recorded in the 2005 Ecological Survey of the North Shore Area)

The Proposed Auckland Unitary Plan also identifies an Outstanding Natural Feature, the 'Takapuna Reef fossil forest and cliff lava exposures' which is located to the north of the Takapuna Beach Reserve South area.

This site encompasses two contiguous areas of lava flows from Pupuke volcano in which there are well preserved lava moulds and casts of trees, many of which appear to have been in growth position at the time of the eruption. Takapuna Reef Fossil Forest is one of the best examples in the world of a lava-preserved fossil forest. There is evidence that multiple lava flows passed through a standing forest here. In the cliffs to the north, there are tree moulds up to 2 metres in diameter as well as good examples of gas blisters and segregation vesicles in the lava.

(Proposed Auckland Unitary Plan, Schedule for the Outstanding Natural Features overlay)

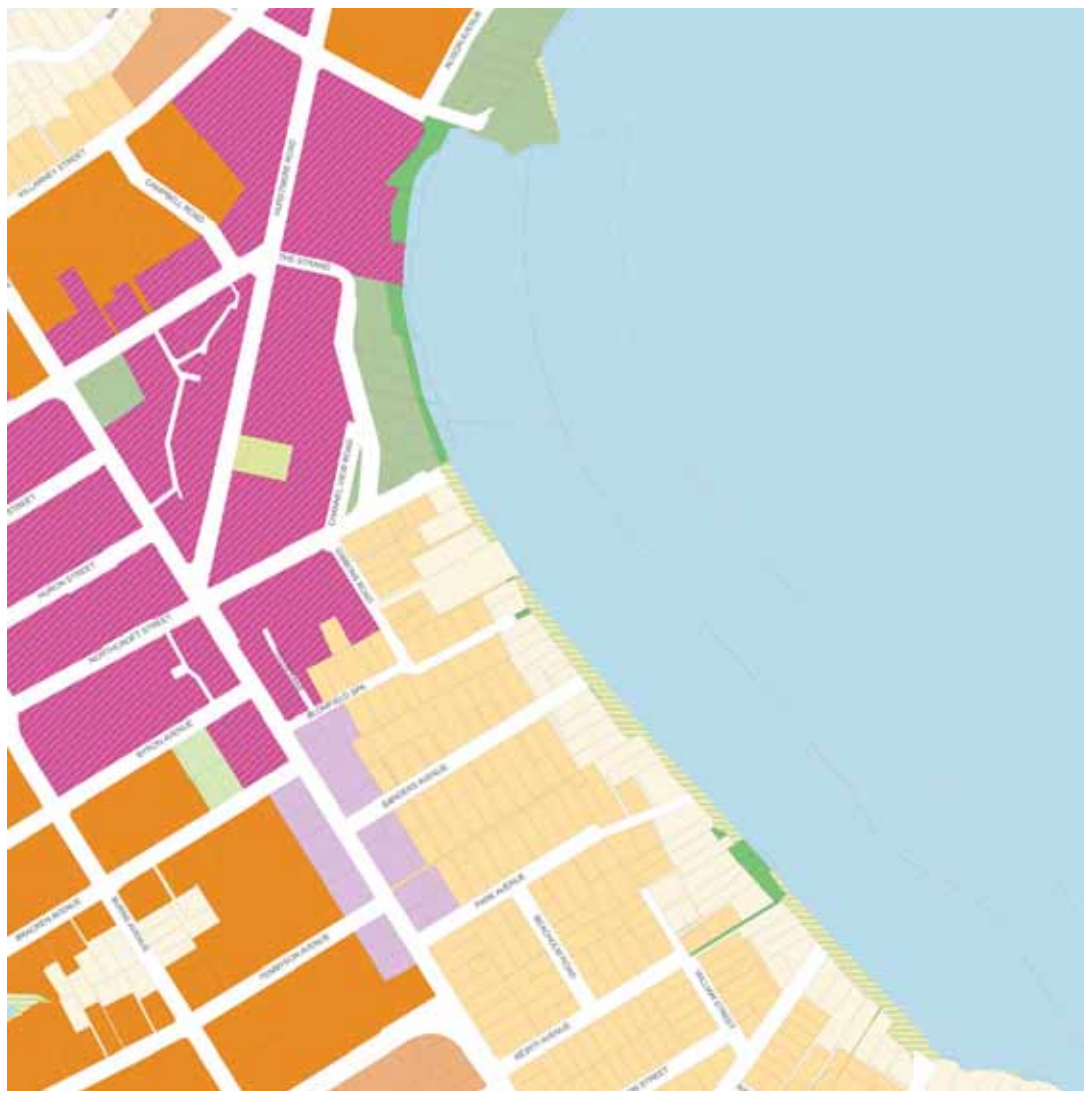
For additional information refer to the Takapuna Beach Management Plan 2013.



LEGEND:

- | | |
|---------------------------------------|------------------------|
| Significant Ecological areas - Marine | Notable tree |
| Significant ecological areas - Land | Notable grove of trees |
| Outstanding natural features | Existing open space |
| Natural hazard - Coastal Inundation | Building footprints |





LEGEND:

- | | | |
|-----------------------------------------------|------------------------------------------|---------------------|
| Public Open Space - Conservation | Single house | Mixed use |
| Public Open Space - Informal recreation | Mixed housing suburban | Metropolitan centre |
| Public Open Space - Sport & active recreation | Mixed housing urban | Coastal transition |
| Public Open Space - Civic spaces | Terraced housing and apartment buildings | |



2.6 Unitary Plan context

This zoning map has been extracted from the Proposed Auckland Unitary Plan and identifies the proposed zoning within and surrounding Takapuna Beach Reserve South. There are three zones within this area: Public Open Space Conservation, Public Open Space Informal Recreation and Coastal Transition. The northern part of this area sits adjacent to the Takapuna central business area, while the southern area adjacent to the residential zone.

The following objectives are proposed for the zones that sit within the Takapuna Beach Reserve South area:

Public Open Space - Conservation

Objectives:

1. *Public open spaces with natural, ecological, landscape, and heritage values are protected and enhanced and available to the public to use and enjoy.*
2. *Recreational activities and associated buildings and structures complement and protect the values and qualities of the public open space*

Public Open Space - Informal Recreation

Objectives:

1. *Informal recreation and small-scale community uses are catered for through a network of quality public open spaces.*
2. *The open and spacious appearance of public open space is protected to maintain the amenity values, character and any historic and natural values of the public open space and surrounding area.*
3. *Small-scale, informal marine recreational facilities are provided on public open spaces while protecting public access to the coast and the natural values of the public open space.*

Coastal Transition

Zone description

This zone applies to land which is above Mean High Water Springs that was typically unzoned in previous district plans. This zone has been introduced to account for improvements in the quality of information on the location of Mean High Water Springs.

This zone does not presume that the land is either public or private land. Rather, it clarifies which zone and precinct provisions apply once the tenure of the land has been determined.

The seaward boundary of the land approximates the location of Mean High Water Springs as at 2012. However a survey may be required to confirm its exact location

Objectives:

If the land is privately owned land and contained in a Certificate of Title, the objectives of the zone and any precinct that applies to the balance of the land apply. If it is not, the objectives of the Public Open Space Informal Recreation zone apply.



3.0 Design guidance

3.1 Design principles

Design principles to guide development

The following design principles were established through stakeholder consultation. They provide design guidance for the concept plan and for any future development of the park.


- 1 Support and encourage a mix of structured and unstructured activities, with a focus on community use and enjoyment of the reserve, beach and sea
- 2 Protect and enhance Takapuna's natural values and coastal landscape
- 3 Design an accessible and safe place
- 4 Integrate and reinforce the local character of Takapuna Beach Reserve and the urban environment of Takapuna metropolitan centre
- 5 Protect and enhance cultural heritage and tangata whenua values
- 6 Design in line with:
 - Objectives of the Takapuna Beach Reserve Management Plan 2013
 - Auckland Council Design Manual - Parks and Maori Design Principles
 - Takapuna Strategic Framework

3.2 Design guidance for park furniture and lighting

The following design guidance is provided for use when renewing or installing new park assets in the reserves. The design style should build on the Milford road ends suite if possible. For additional guidance refer to the online Auckland Design Manual Parks Section.

Seating/picnic tables

- Provide additional seating and picnic tables (as per the concept plans).
- Provide a variety of seating suitable for all ages, abilities and physical needs e.g. some seats should have arm and back rests.
- Provide seating in both shaded and sunny positions.
- Deck seating should build upon or reflect the design style of the Hurstmere Green suite.
- Consult with families when memorial plaques or seats are affected by a proposal.
- Opportunity to include interpretative text in timber surface.




Bins

- Incorporate bins at all reserve entrances and road ends - suggest stainless steel bin as per Milford suite.
- Investigate opportunity for larger bins/and or recycling bins.
- No dog bins to be provided, however stainless steel plastic bag holders to be installed with bins.



Cycle stand

- Incorporate cycle racks wherever possible.




Lighting and events infrastructure

- Potential to consider lighting within Gould Reserve as part of detailed design as per policies and objectives in Reserve Management Plan i.e. lighting is not to detract from the dark contrast of the gulf at night and the silhouette of Rangitoto.
- No lighting proposed on any other reserve or road end.
- Provide two access points for 3-phase power and water supply for events within Gould Reserve.
- Ensure the lighting, power and water access point assets are suitable for the coastal environment.
- All lighting shall use low-energy LED fittings and comply with AS/NZS 1158 for both lighting design and placement.

Bollards

- Bollards should only be used where required. Alternatives e.g. inclusion of garden beds or basalt stones, should be considered during detailed design.
- Bollards should be spaced at 1.5m centres (standard) to allow for wheelchair/pram access.
- 3 types of bollards suggested:
 - Type A: Timber bollards along lawn edge (with concrete edge to minimise maintenance costs).
 - Type B: Removable stainless steel bollard (as per Milford suite), designed to withstand vandalism.
 - Type C: Milford design bollard for high profile areas and road ends (non-removable).



Beach showers

- Retain beach showers at all current locations.
- Include foot showers at shower locations.
- Provide additional showers at Gould Reserve by boating club ramp.



Drinking Fountains

- Incorporate drinking fountains at shower locations.



BBQs

- Provide mostly in Northern Activity Zone.
- Potential to consider provision at Gould Reserve picnic area during detailed design.

Signage

- All signage should conform to the Auckland Council Signage Manual and/or the Interpretative Signage Manual.
- Consider including historical images of the reserve in interpretative signage. Opportunity to include interpretative text in timber surface that explains history of the reserve.
- Identify where regulatory and/or license compliance signage should be located.
- Indicate level of accessibility on signage.
- Not to obscure views or provide places to hide, and be relative to human scale.
- Consider vandalism deterrent surfaces and finishes.
- Avoid signage clutter. Rationalise signage by incorporating into one structure where possible.
- Investigate relocation or removal of parking signage and infrastructure from the reserve.



4.0 Concept plans



4.0 Concept plan area and design statement

Concept plan area

The project area covers the reserve south of The Promenade to Hauraki Road. A high-level concept has been developed for each of the eight areas identified on the plan, setting out a spatial layout. This will provide a guide to aid developed design of the reserve land in the future.



Concept plan design statement

The concept plan for Takapuna Beach Reserve South aims to retain the open space qualities of the existing site while updating those assets that need renewing, improving access and reintroducing a 'sense of place' into the landscape.

Currently the reserve area consists of eight individual sites connected by the beach. The concept plan assists in creating a design language that acts as a 'constant' across the road ends and reserve areas. A high quality, simple palette of natural and 'weathered' materials and native plantings has been proposed to withstand the prevailing salt-laden winds and other coastal processes. This has also been chosen to reinforce the character of the location across the sites.

The aim was for a relatively light touch that acknowledged the sensitivity and beauty of the existing coastal landscape. The concept provides increased opportunity for individual, or group social gatherings by creating flexible and comfortable outdoor 'spaces' in both shaded and sun-lit areas of the reserve.

The concept plan also acknowledges the need for a dedicated play space for children of all ages.

The following pages outline the concept plans for each of the eight road ends and reserve areas and provide a scope for the progression of developed and detailed designs.

4.1 Concept plan project area 1: Te Uru Tapu/Sacred Grove of Pohutukawa

4.1.1 Existing site context



4.1.2 Concept plan project area 1: Te Uru Tapu/Sacred Grove of Pohutukawa



LEGEND:

Stone wall:

1. Complete unfinished stone wall on property boundary.

Stormwater outflow:

2. Remove existing path at southern end of the Sacred Grove and provide area for stormwater treatment and outflow. Design to be determined by Auckland Council Stormwater team.

Boardwalk:

3. Consider upgrade and widening of boardwalk to 2.5m when due for renewal.
4. Remove obsolete walkway that extends under boardwalk and plant with low-growing natives.

Vegetation maintenance:

5. Eradicate weed species from existing planted areas and replant with low-growing native species. Manual or organic weed control preferred by iwi. Canopy uplift (non-scheduled trees only) to improve sight-lines.

Scheduled trees:

6. Consider a maintenance strategy for heritage pohutukawa (current issues with collapse of canopy), including replacement planting through the use of eco-sourcing or selected cuttings from parent plants.

Interpretation:

7. Work in conjunction with iwi to provide interpretation and acknowledgement of iwi values through placement of pou, design of and signage along the boardwalk, placement of basalt stone and the design of navigational disc.

Stone lookout structure:

8. Remove lower and upper portions of unfinished basalt stone structure. Re-clad necessary areas with stone to match existing and revegetate area with low-growing native plants.

The Promenade viewing platform:

9. Retain existing platform. Improve interface between beach edge and platform by providing an accessible ramp and localised pruning/canopy uplifting where possible.
10. Complete unfinished footpath to connect to existing platform.

General comments:

Te Uru Tapu/ Sacred Grove is an isolated area with little community surveillance and potentially attracts antisocial behaviour. No lighting is proposed at the site as it is likely encourage this behaviour.

4.2 Concept plan project area 2: Gould Reserve and The Strand

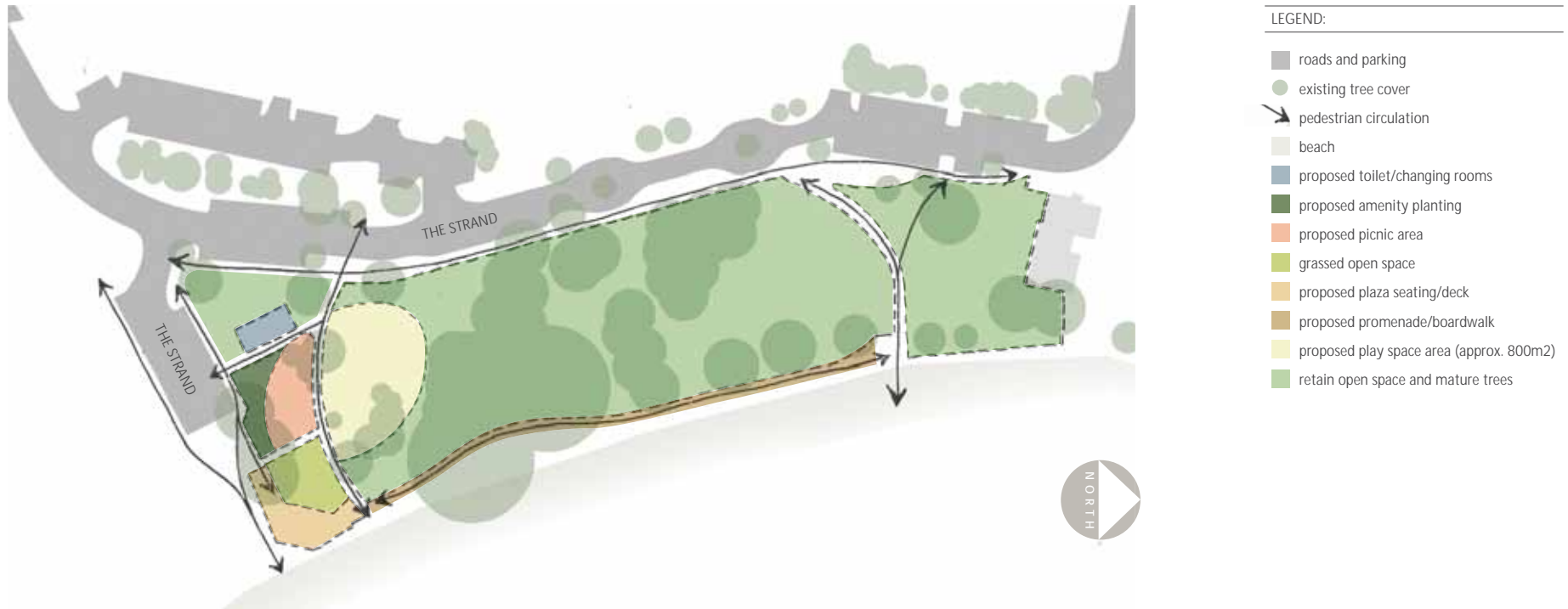
4.2.1 Existing site context



4.2.2 Gould Reserve spatial arrangement plan

The spatial arrangement plan follows an investigation of the current uses and activities on the site. It seeks to improve connectivity between the Takapuna central business area, the reserve and the coastline. It also looks to maintain the large area of existing open space.

The spatial arrangement plan has informed the development of the concept plan in section 4.2.3



4.2.3 Concept plan project area 2: Gould Reserve and The Strand



LEGEND:

- S beach showers — seat ■ picnic table

Play space:

1. Play space that reflects the natural and coastal character of the reserve. Area designated for play is approximately 800m². Work with relevant community stakeholders on design and implementation.

Toilet/changing rooms:

2. Existing toilet and changing rooms to be removed to allow for a future picnic area and seating. Amenity gardens, planted with native species, to act as a buffer to the road.
3. Proposed toilet and changing rooms. Exact location to be confirmed during developed design. Ensure building sits into the landscape and does not interrupt important view shafts. Potential to include lookout on top of changing rooms in detailed design. Work with relevant stakeholder groups to address concerns.

Stone walls and associated seating:

4. To be retained, with potential to remove in future, should this be required for projects.

Open space:

5. Grassed open space suitable for informal recreation, social gatherings or events.
6. Retain open space and existing mature tree cover.

Plaza seating/deck:

7. Plaza-type deck suitable for informal activity, small social gatherings, festivals, markets or performances. Further design investigation required during developed design to ensure deck structure is viable within the vicinity of underground trans-pacific cables, is of an appropriate height above Mean High Water Springs (MHWS) and considers coastal inundation. 'Folded' timber seating along edge of beach.

Coastal promenade/boardwalk:

8. 2.5 - 3m wide boardwalk to meander through lower part of reserve. Exact location of boardwalk to be determined during detailed design, taking into consideration MHWS and coastal inundation. Designed to be at an appropriate height from the beach edge to avoid the need for a handrail or safety barrier. Mix of materials to be used, as natural as possible.
9. Stairs and break-out areas (platforms) below boardwalk level.
10. Stairs and informal seating down to boat ramp. Shower provided at top of existing boat ramp.

Pathways and accessibility:

11. Proposed new concrete pathway to be a minimum of 2.5m wide, with link through amenity gardens to The Strand. Consider access to the water for all abilities. Potential to provide beach wheelchairs that could be stored in the proposed toilet/changing rooms.

Events access and facilities:

12. Reinforced high-use grass areas.
13. Re-design access ramp to a more accessible grade for pedestrians and events.
14. Lighting could be considered in Gould Reserve during detailed design (refer to section 3.2 for design guidance).

Fitness equipment:

15. Potential to include outdoor exercise equipment.

Ramp and road surface:

16. Realign ramp to make best use of the site and design to an accessible grade.
17. Shared vehicle and pedestrian surface. Subject to approval by Auckland Transport.

Stormwater outflow:

18. Existing stormwater outflow. To be redesigned by Auckland Council Stormwater team in future.

Credits: Image 8 - 'The City Deck' courtesy of Stoss Design and Planning Studio, Boston.

4.2.4 Artists impression



Artist Impression: Neil Coleman, *Architectural Sketches and Perspectives (ASAP)*



4.2.5 Play space design considerations

Sense of Place

- Consider a site-specific theme.
- Consider education within the play space on coastal vegetation and coastal processes.

Materiality and maintenance

- Use natural/recycled materials where possible.
- Provide a combination of soft and hard landscaping to ensure the design sits within the landscape.
- Ensure equipment is suitable for the coastal environment.

Accessible for all

- Provide a play space that is suitable for varying ages and levels of ability.

Community ownership

- Encourage community participation through design e.g. schools/ kindergartens.

Gathering spaces, seating and shade

- Provide picnic spaces, seating, bins, drinking fountains and signage adjacent or as part of the play space.
- Provide shade within and surrounding the play space.

Site specific constraints

- Investigate all site specific constraints such as works within the vicinity of scheduled trees, drainage and other coastal issues e.g. ground stability/ footing depths.

Play experiences

- Provide a range of play equipment and experiences including:
 - Physical play (climbing, balancing, hanging, running, spinning)
 - Social play (experiences that involve other children or groups)
 - Cognitive play (using imagination etc).

CPTED and safety audit of play equipment

- Consider Crime Prevention Through Environmental Design (CPTED) principles e.g. avoid hiding spaces, tall vegetation that encloses the play space, etc.
- Conduct safety audit of the design and construction.



4.3 Concept plan project area 3: Blomfield Spa

4.3.1 Existing site context



4.3.2 Concept plan project area 3: Blomfield Spa



LEGEND:

bd bollards

Pathway:

1. 2m wide modular pedestrian pathway to conceal overland flow path and infrastructure. Mix of materials to be used that are suitable for the coastal environment (to be determined during detailed design).

Stormwater:

2. Garden bed/potential raingardens planted with native species. Stormwater design and flow capacities to be determined in developed design.
3. Rip-rap and stormwater outlet.

Tree cover:

4. Existing trees to remain.

Amenity vegetation:

5. Native low-growing planting along northern boundary.

Credits: Image 1 - 'The City Deck' courtesy of Stoss Design and Planning Studio, Boston.

4.4 Concept plan project area 4: Sanders Avenue

4.4.1 Existing site context



4.4.2 Concept plan project area 4: Sanders Avenue



LEGEND:

bd bollards (removable) S beach shower picnic table

Emergency vehicle and pedestrian access:

1. Emergency access ramp (3m wide). Increase length of access ramp to improve accessibility, not to impact private driveways (note that ramp will be built to a grade steeper than an accessible grade).

Stormwater:

2. Stormwater raingardens planted with native species. Stormwater design and flow capacities to be determined in developed design.

Timber deck and seating:

3. Deck with folded timber seating suitable for informal activity or small social gatherings. Investigate exact location of seating above MHWS. Consider coastal inundation as part of detailed design.

Tree cover and amenity vegetation:

4. Maintain existing trees and under plant with low growing native species.

4.5 Concept plan project area 5: Park Avenue

4.5.1 Existing site context



4.5.2 Concept plan project area 5: Park Avenue



LEGEND:

bd bollards (removable) **S** beach shower picnic table

Pedestrian access:

1. Opportunity to re-align ramp to make best use of the site and increase length to improve accessibility (note that ramp will be built to a grade steeper than an accessible grade). Min. 2m wide.

Stormwater:

2. Amenity garden planted with native species. Design to be determined during developed design stage.
3. Maintain existing stormwater outflow (Auckland Council Stormwater team to redesign)

Shared vehicle/pedestrian surface (subject to approval by Auckland Transport):

4. Shared vehicle/pedestrian road surface.
5. Maintain driveway access to adjoining residential properties.

Seating:

6. 'Folded' timber seating suitable for informal activity or small social gatherings.

Exercise equipment:

7. Potential to include outdoor exercise equipment.

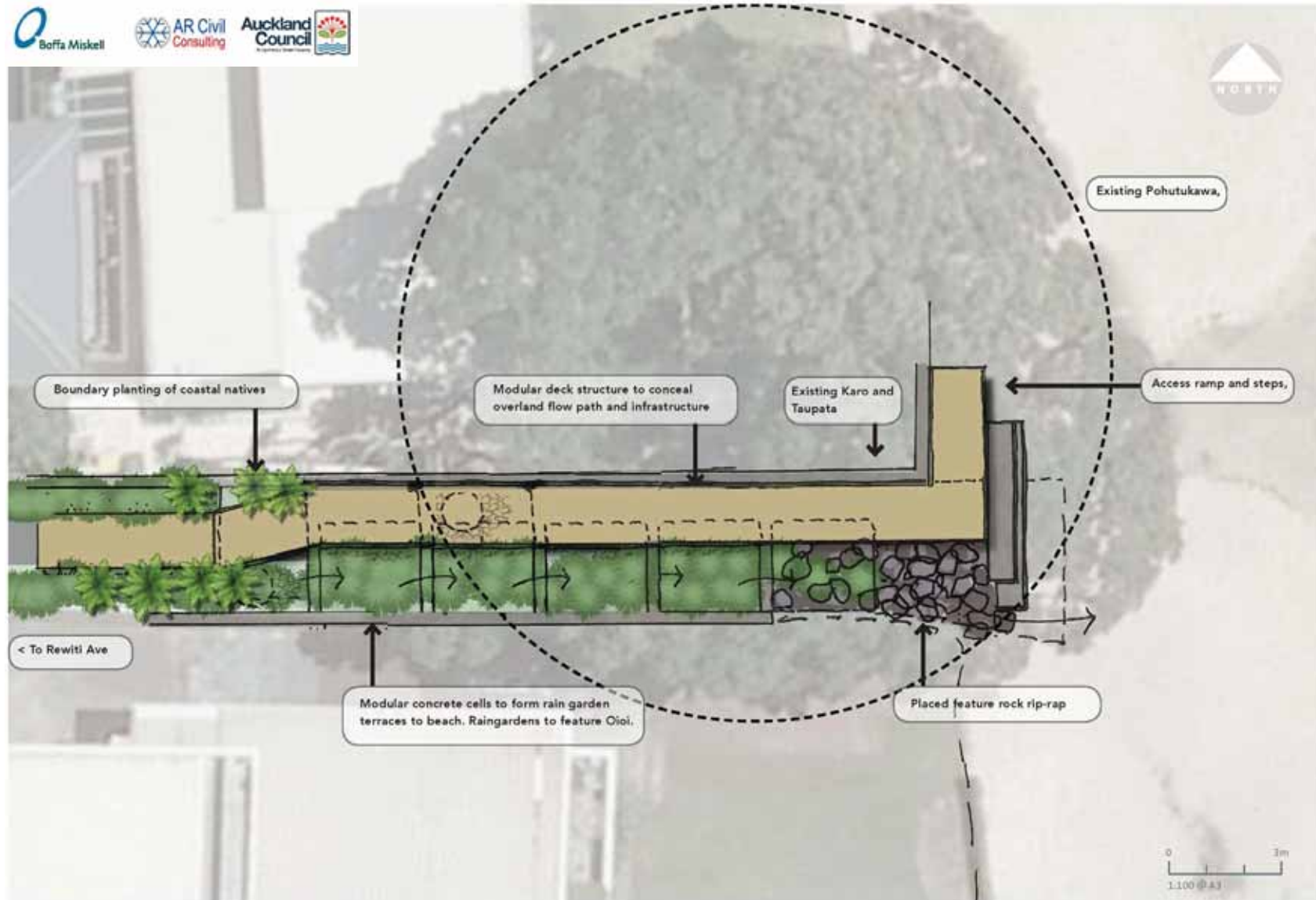
4.6 Concept plan project area 6: Rewiti Avenue

4.6.1 Existing site context



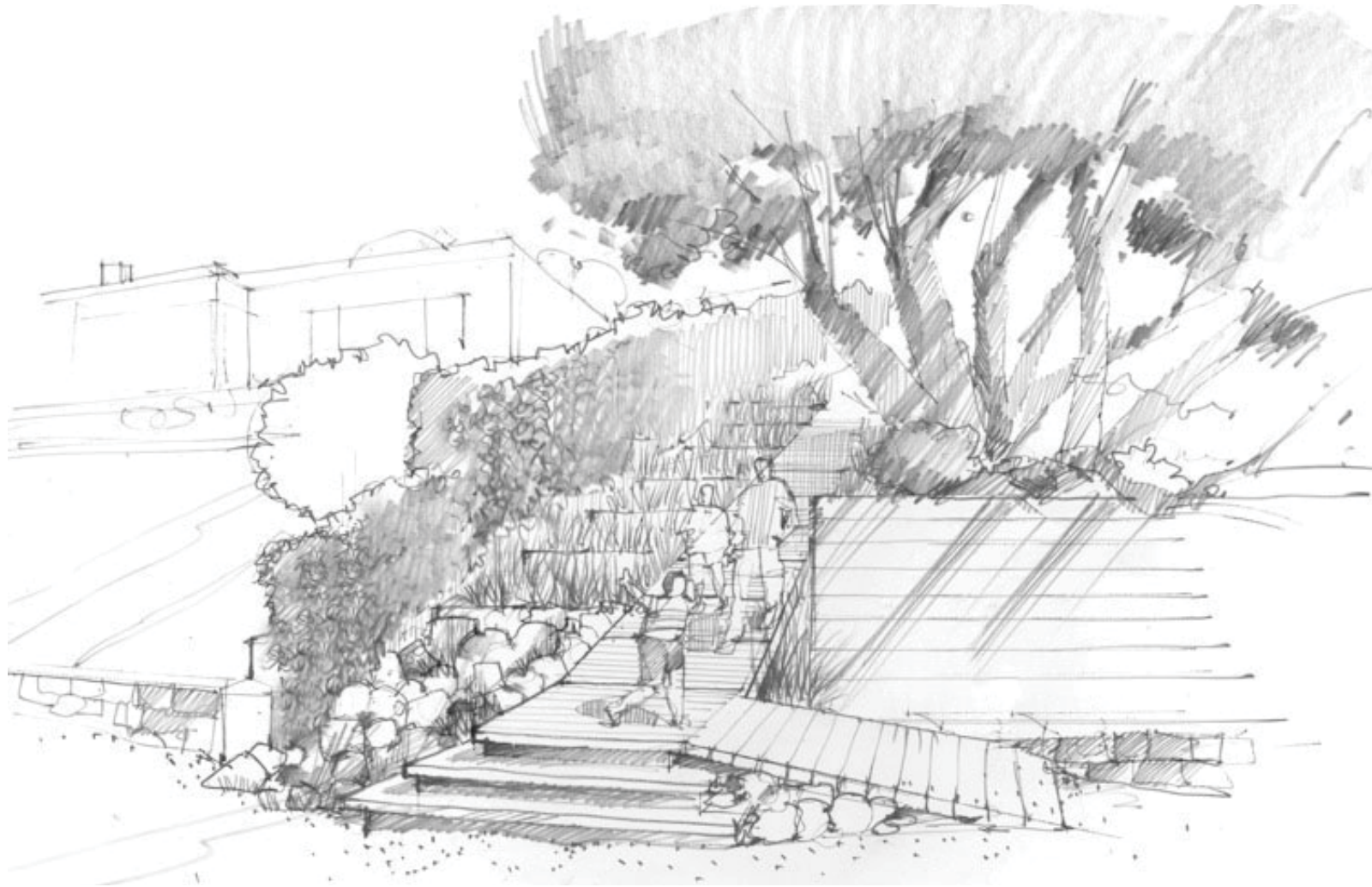
4.6.2 Concept plan project area 6: Rewiti Avenue

(Preliminary concept option developed by Auckland Council Stormwater team)





4.6.3 Concept plan project area 6: Artists impression
Rewiti Avenue



Artist Impression: Neil Coleman, Architectural Sketches and Perspectives (ASAP)

4.7 Concept plan project area 7: Ewen Street

4.7.1 Existing site context



4.7.2 Concept plan project area 7: Ewen Street

(Preliminary concept option developed by Auckland Council Stormwater team)



4.8 Concept plan project area 8: Hauraki Road

4.8.1 Existing site context



4.8.2 Concept plan project area 8: Hauraki Road

(Preliminary concept option developed by Auckland Council Stormwater team)





References

Document references

Cultural Heritage Inventory, Auckland Regional Council, 1995
Geospatial Data, Auckland Council
North Shore City Ecological Survey, North Shore City Council, 2005
Proposed Auckland Council Unitary Plan, 2013
Takapuna Beach Reserve Management Plan, 2013
Takapuna Beach Southern Sector - Stormwater Outfalls: Draft Concept Design Report, 2012
Takapuna Strategic Framework, 2010

Image references:

Various pages:
Auckland Council stock photography
Pages 27, 29, 33, 35 and 37:
Etched wood seat, Isabelle Giasson, Canada (Photographer)
Page 29 and 33:
'The City Deck', Stoss Design and Planning Studio, Boston
Pages Title page, 30, 41
Artist Impressions, Neil Coleman, Architectural Sketches and Perspectives (ASAP), Auckland

**Devonport-Takapuna
Local Board**



Auckland Council