Waitai Coastal-Burwood Community Board Briefing
MINUTES ATTACHMENTS

Date: Monday 4 July 2022
Time: 3.01pm
Venue: Boardroom, Corner Beresford and Union Streets, New Brighton

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Ōtākaro Avon River Corridor (OARC) Update

July 2022

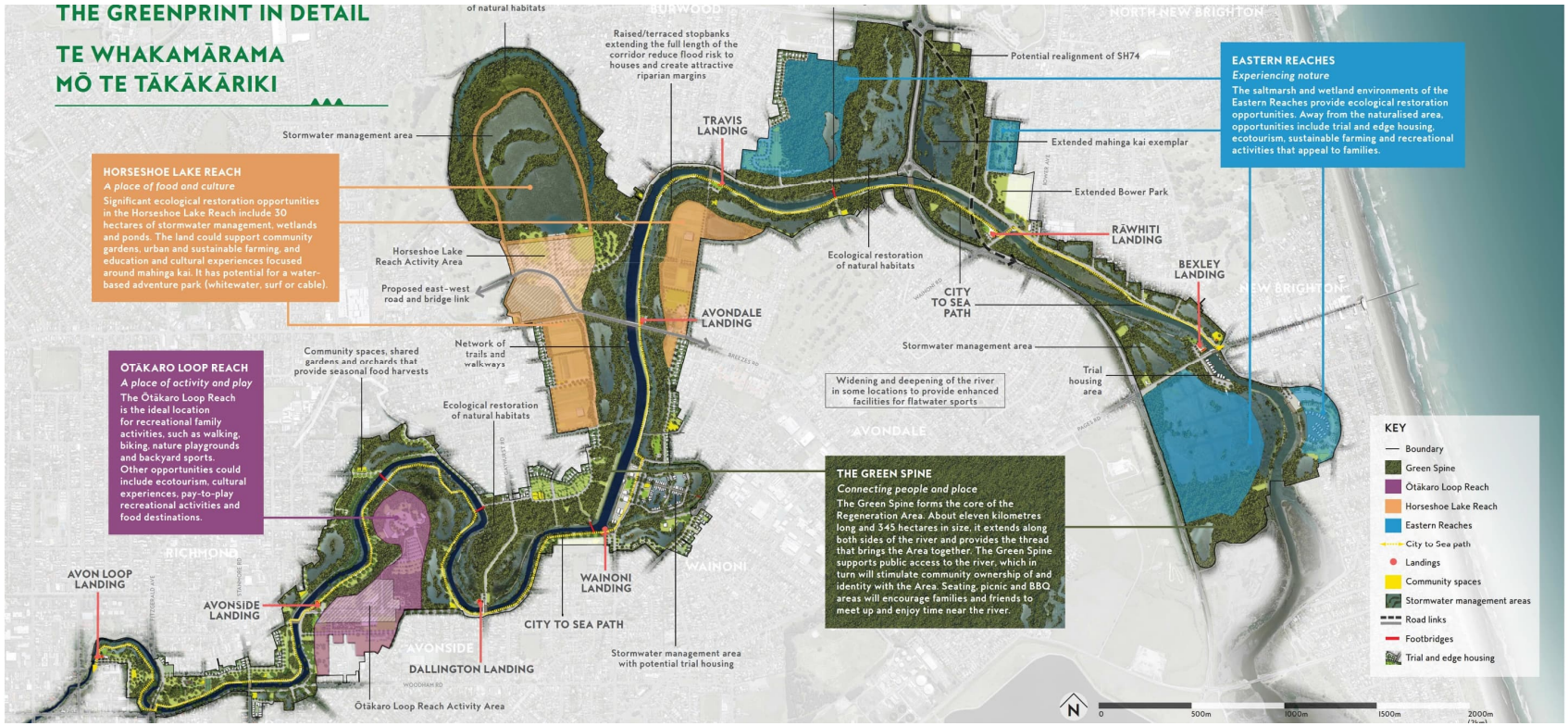
Christchurch City Council

Today's agenda

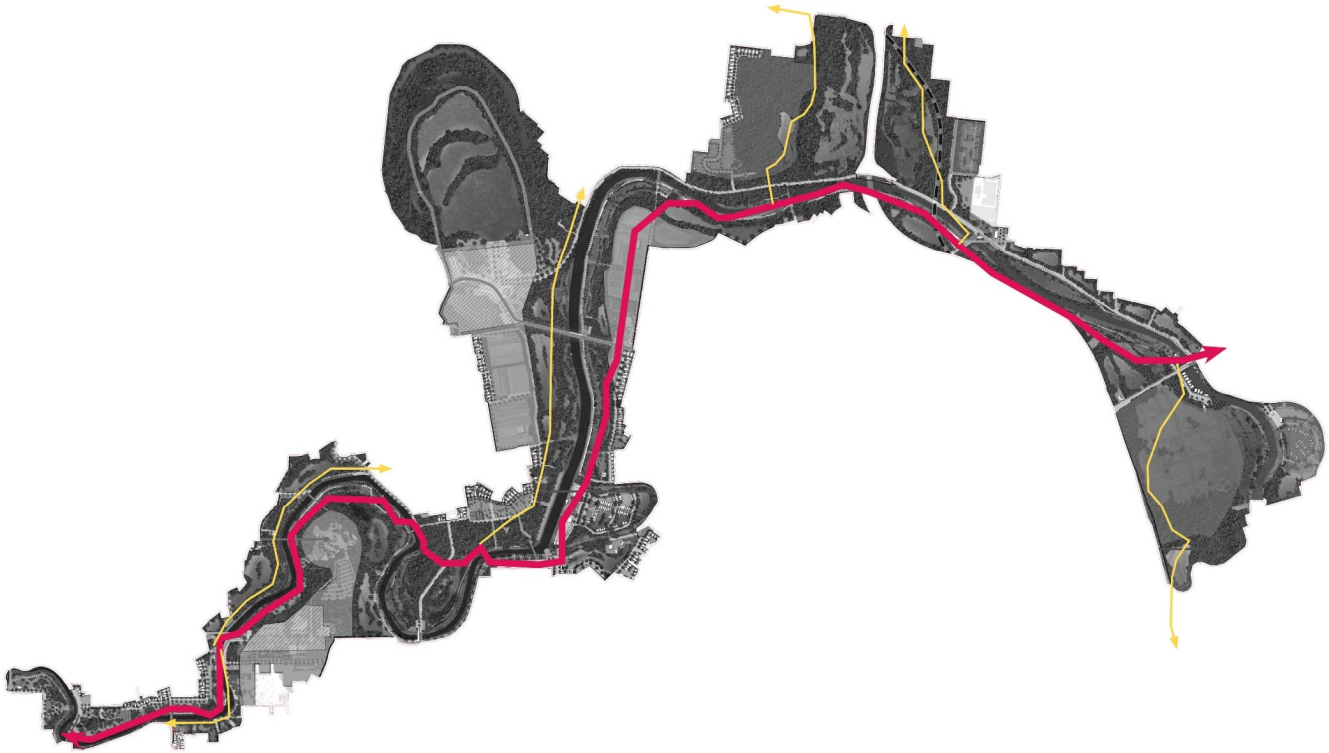
- Recap on Regeneration Plan (Dave)
- Upcoming projects overview (Dave)
- Typical parks design process (ŌARC, Dave)
- Landscape + Cultural Design Guidelines (Dave)
- 3W budget, issues and opportunities (Tom)
- 3W Project overview (Tom)
- Waitaki Street SMA project (Kamal)

- Questions

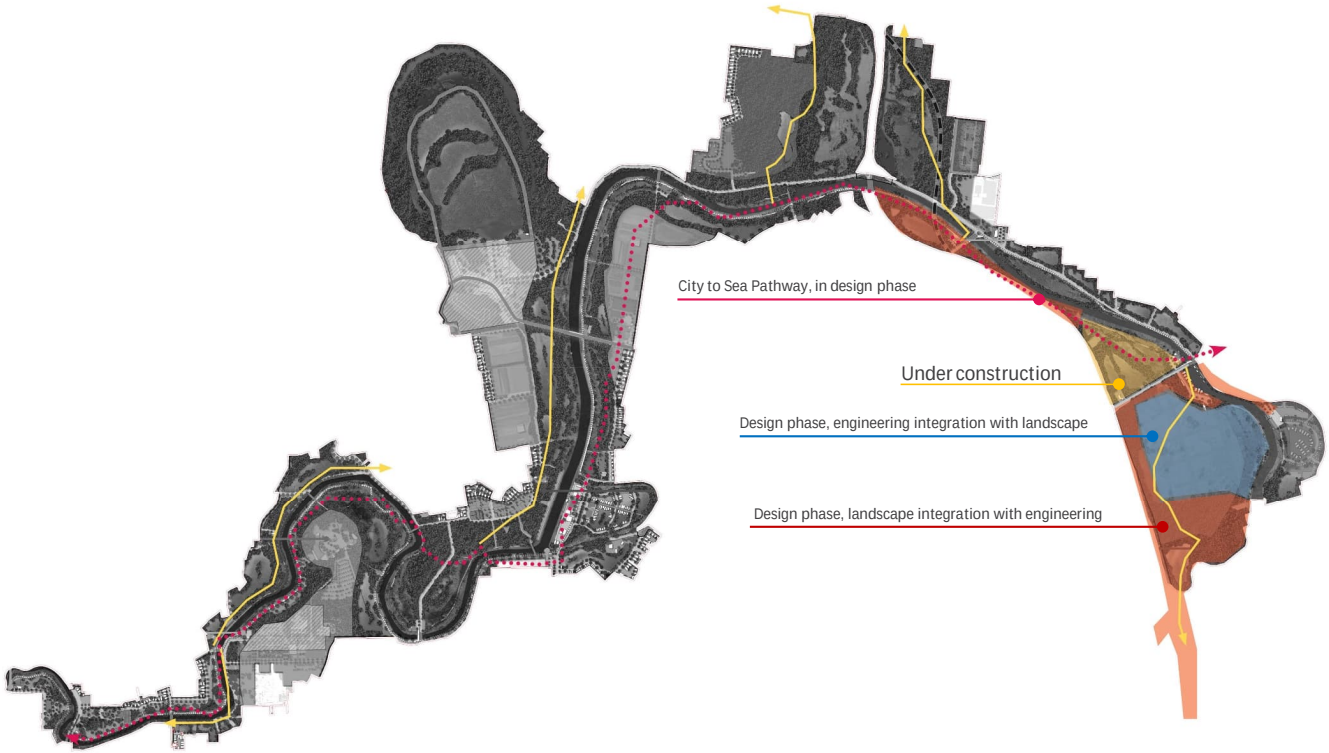
Regeneration Plan recap



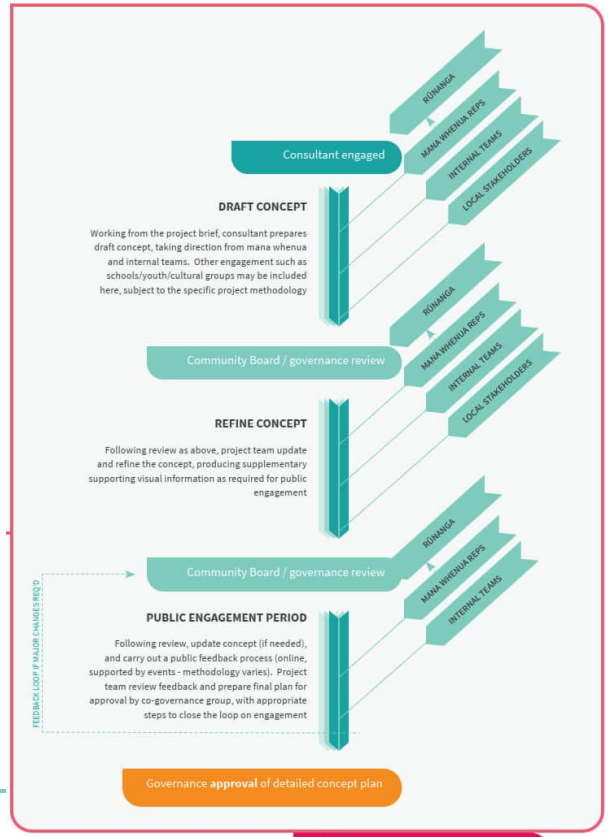
Upcoming projects overview



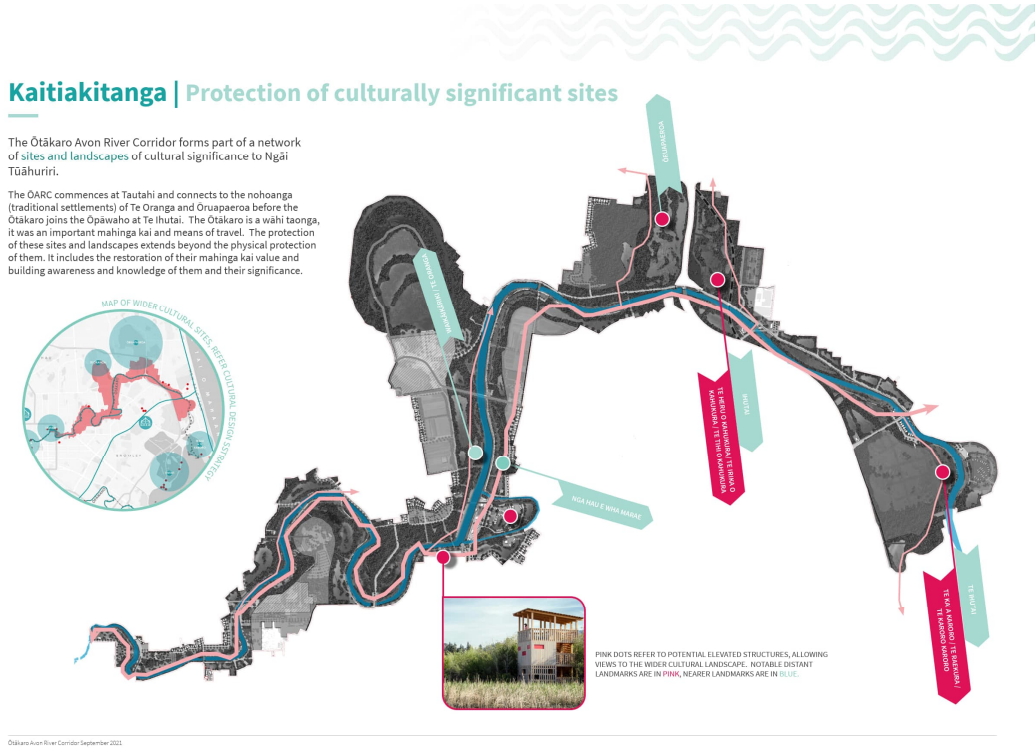
Upcoming projects overview



Typical parks design process in the OARC

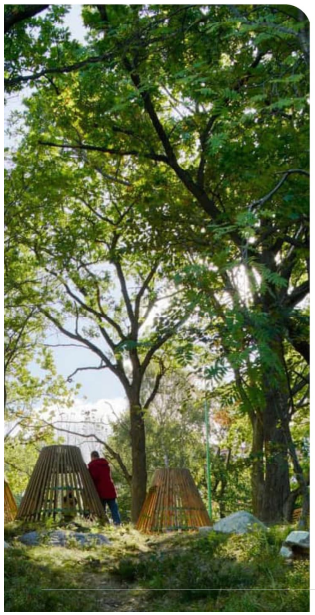


Landscape and cultural design guidance examples



Landscape and cultural design guidance examples

Materiality discussion | 'refined local materials'



One step more engineered than using found materials, is to use locally-occurring materials, but allowing processing methods to simplify construction and improve longevity of the product.

Typical examples of this approach are milling or carving on-site power poles or wharf poles, or breaking up existing concrete and grinding to create crazy paving. Use of locally available sustainably logged hardwoods (ie *E. Saligna*) also fits within this category. Macrocarpa may be considered but needs to be carefully detailed to avoid it rapidly rotting.

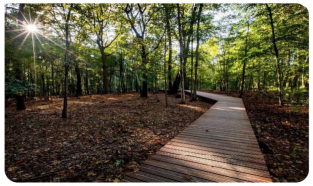
These may be used frequently, although will be somewhat subject to supply on any given project.

PROS

- Authentic materials, often with a sense of history
- Timber usage is a potential carbon sink
- Lower initial costs
- Natural, warm and recessive appearance.
- Presents a subtle contrast with natural forms

CONS

- Timber will need replacing over time, and can generate slip issues - not appropriate as a surfacing on slopes
- Natural materials are inherently weaker than engineered so can result in a 'heavy' appearance if used vertically (for handrails and the like)



More engineered → More natural

Increasing maintenance obligations and vandalism potential (operational cost), decreasing capital cost

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Landscape and cultural design guidance examples

Materiality discussion | 'recessive engineered materials'

This style uses engineered materials, designed to blend in sympathetically with the natural surroundings. As with the previous example, engineered materials would be used where they provide an advantage over natural materials.

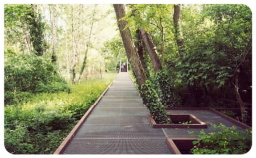
Under this approach, we would accept high quality engineered materials such as steel, recycled plastic and potentially concrete where they offer superior visual and durability characteristics to the natural alternatives, either for engineering or aesthetic reasons. As previously, they should be used in a way that plays to the visual strengths of the material. They should stay recessive and sit quietly in the surrounding environment, but in places, splashes of colour may be appropriate.

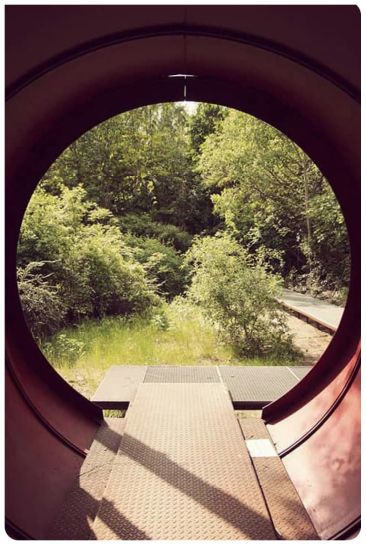
PROS

- Generally longer lifespan, likely to remain looking new for longer.
- Can be points of visual interest, with public art incorporated
- Engineered materials can span further than natural ones, meaning fewer footings.

CONS

- Higher carbon and capital cost initially, so use sparingly and check offsets. Investigate options to reduce this via innovative fabrication techniques or use of recycled materials/inputs





More engineered → More natural

Increasing maintenance obligations and vandalism potential (operational cost), decreasing capital cost

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Background Annual Plan ($000) (TP)

CPMS ID	Project Name	2021/22	2022/23	2023/24	2024/2025+	Total
66000	Stopbank - True Right Bank - Wainoni Bridge to Waitaki (OARC)		6,500	4,000		10,500
63038	Programme Flood and Stormwater Priority Works (OARC)	1,600	600	5,220	36,866	44,286
56166	SW Waikākāriki - Horseshoe Lake Stormwater Treatment Facility (OARC) (Stage 1)	5	848	1,867	10,137	12,857
57718	SW Waikākāriki - Horseshoe Lake Stormwater Treatment Facility (OARC) (Stage 2)		5	47	13,862	13,914
62925	SW Flood Management LDRP 521 Stage 1 Waitaki Street (OARC)	3,312	3,105	1,467	2,880	10,764

- https://ccc.govt.nz/assets/Documents/The-Council/Plans-Strategies-Policies-Bylaws/Plans/annual-plan/WEB-DAP-Full-Draft-Annual-Plan-2022-2023.pdf
- https://ccc.govt.nz/assets/Documents/The-Council/Plans-Strategies-Policies-Bylaws/Plans/Long-Term-Plan/LTP-2021-final/LTP2021-Vol1/1-7-Capital-Programme.pdf
- Flood and Stormwater Priority works programme will support physical works, design and programme activities

Challenges and Opportunities (TP)

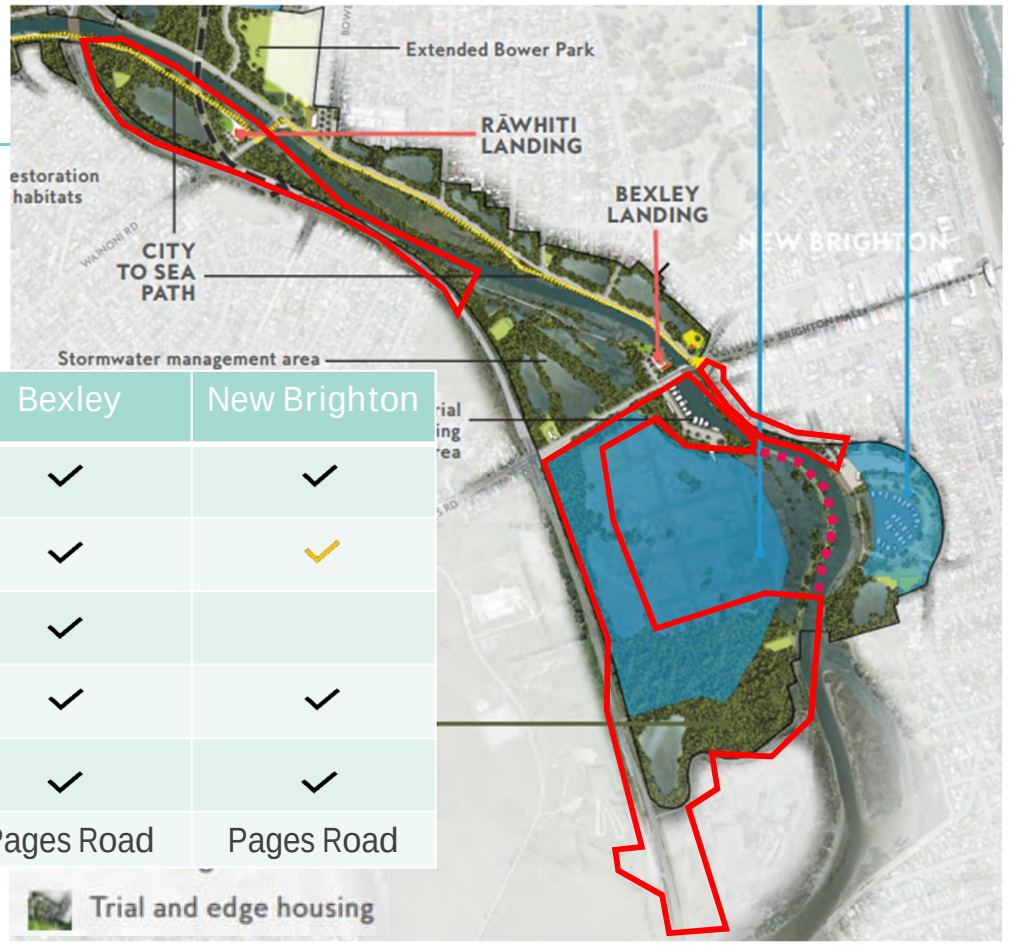
- Vary by area

- Project interactions e.g.
  - Pages Road
  - Bexley Wetland
  - Waka Kotahi / ANZAC Dr. realignment
  - City to Sea pathway
  - Current assets (public + private)
  - Community

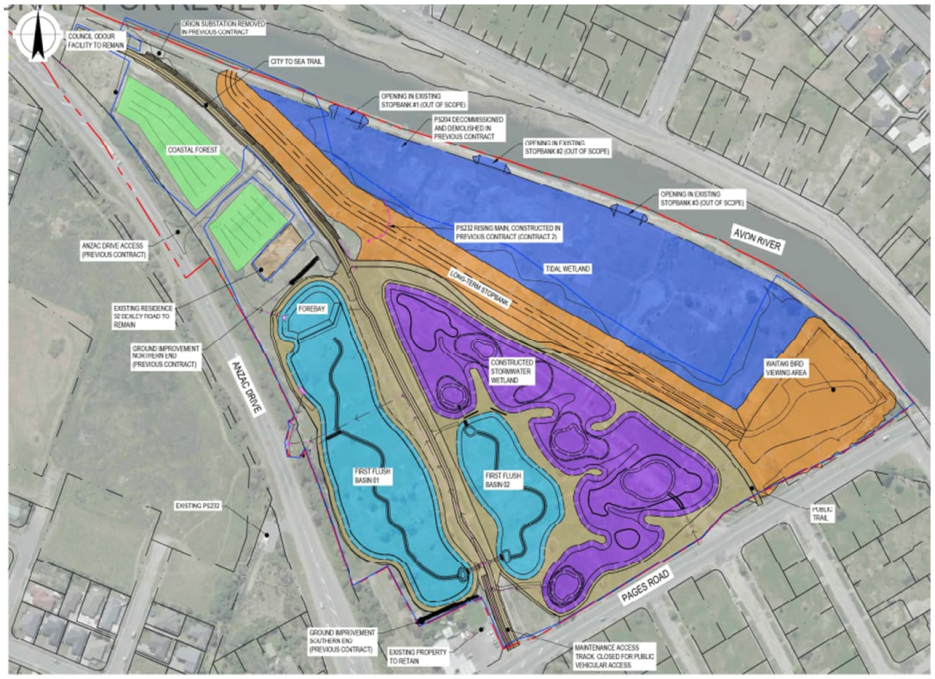
SW + FP works (TP)

Key Physical Components

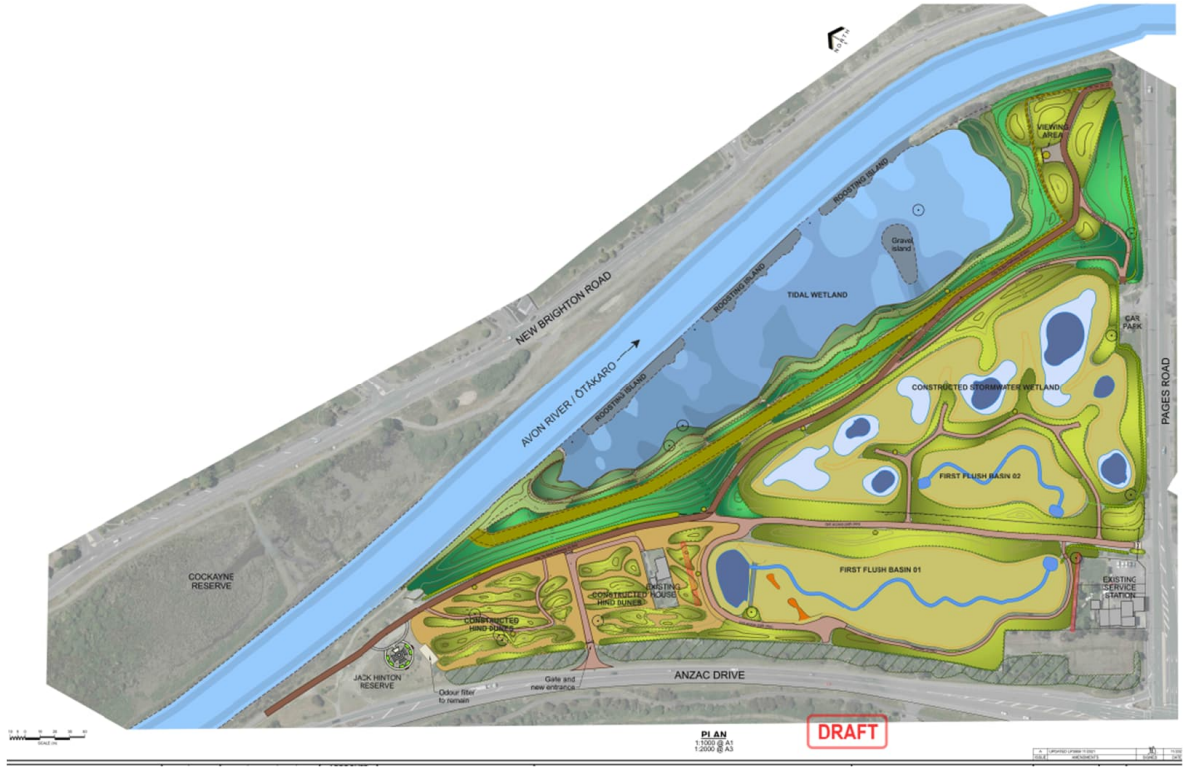
Component	Wainoni	Bexley	New Brighton
Stopbank	✓	✓	✓
Treatment facility	✓	✓	✓
SW PS(s)	✓	✓	
Services realignment	✓	✓	✓
River Bank / Green Spine	✓	✓	✓
Significant other project	ANZAC Drive	Pages Road	Pages Road



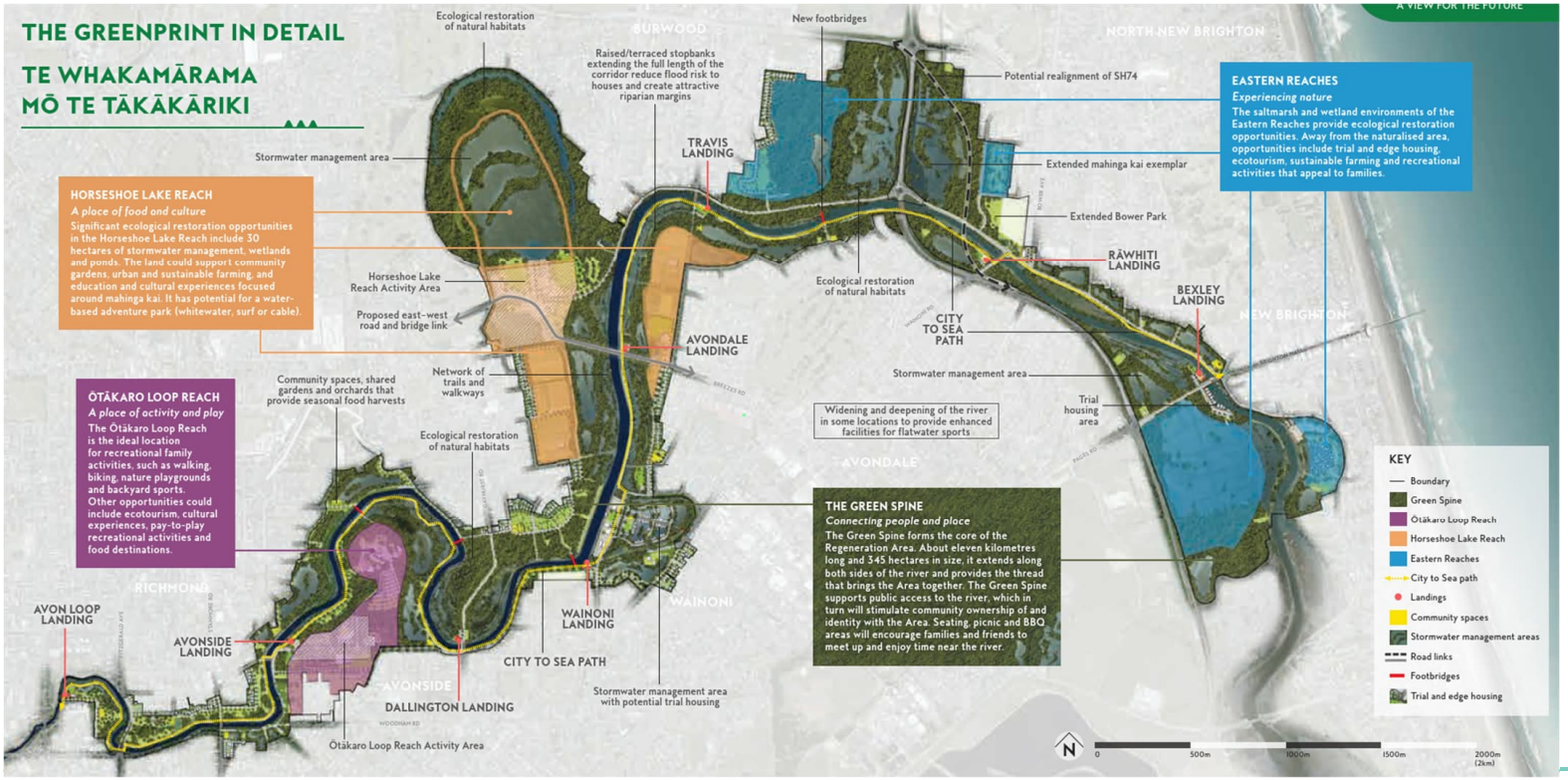
Waitaki (KN)


ORION SUBSTATION REMOVED IN PREVIOUS CONTRACT
COUNCIL ODOUR FACILITY TO REMAIN
CITY TO SEA TRAIL
OPENING IN EXISTING STOPBANK #1 (OUT OF SCOPE)
PS234 DECOMMISSIONED AND DEMOLISHED IN PREVIOUS CONTRACT
OPENING IN EXISTING STOPBANK #2 (OUT OF SCOPE)
OPENING IN EXISTING STOPBANK #3 (OUT OF SCOPE)
COASTAL FOREST
PS232 RISING MAIN, CONSTRUCTED IN PREVIOUS CONTRACT (CONTRACT 2)
AVON RIVER
TIDAL WETLAND
ANZAC DRIVE ACCESS (PREVIOUS CONTRACT)
LONG TERM STORMWATER
EXISTING RESIDENCE 32 DEWILY ROAD TO REMAIN
FOREBAY
GROUND IMPROVEMENT NON PAVED LND (PREVIOUS CONTRACT)
CONSTRUCTED STORMWATER WETLAND
WAITAKI BIRD VIEWING AREA
ANZAC DRIVE
FIRST FLUSH BASIN 01
FIRST FLUSH BASIN 02
EXISTING PS232
PUBLIC TRAIL
PAGES ROAD
GROUND IMPROVEMENT SOUTHERN END (PREVIOUS CONTRACT)
EXISTING PROPERTY TO RETAIN
MAINTENANCE ACCESS TRACK, CLOSED FOR PUBLIC VEHICULAR ACCESS

Waitaki (KN)


NEW BRIGHTON ROAD
AVON RIVER / ŌTĀKARO
ROOSTING ISLAND
ROOSTING ISLAND
ROOSTING ISLAND
TIDAL WETLAND
Gravel island
VIEWING AREA
CAR PARK
PAGES ROAD
CONSTRUCTED STORMWATER WETLAND
FIRST FLUSH BASIN 02
FIRST FLUSH BASIN 01
EXISTING SERVICE STATION
COCKAYNE RESERVE
CONSTRUCTED HINO DUNES
EXISTING HOUSE
CONSTRUCTED HINO DUNES
JACK HINTON RESERVE
Odour filter to remain
Gate and new entrance
ANZAC DRIVE
PLAN
DRAFT

Questions


THE GREENPRINT IN DETAIL
TE WHAKAMĀRAMA MŌ TE TĀKĀKĀRIKI
A VIEW FOR THE FUTURE
Ecological restoration of natural habitats
Raised/terraced stopbanks extending the full length of the corridor reduce flood risk to houses and create attractive riparian margins
New footbridges
Potential realignment of SH74
Stormwater management area
TRAVIS LANDING
Extended mahinga kai exemplar
Extended Bower Park
RĀWHITI LANDING
BEXLEY LANDING
HORSESHOE LAKE REACH
A place of food and culture
Significant ecological restoration opportunities in the Horseshoe Lake Reach include 30 hectares of stormwater management, wetlands and ponds. The land could support community gardens, urban and sustainable farming, and education and cultural experiences focused around mahinga kai. It has potential for a water-based adventure park (whitewater, surf or cable).
Horseshoe Lake Reach Activity Area
Proposed east-west road and bridge link
Ecological restoration of natural habitats
CITY TO SEA PATH
AVONDALE LANDING
EASTERN REACHES
Experiencing nature
The saltmarsh and wetland environments of the Eastern Reaches provide ecological restoration opportunities. Away from the naturalised area, opportunities include trial and edge housing, ecotourism, sustainable farming and recreational activities that appeal to families.
Stormwater management area
Trial housing area
Widening and deepening of the river in some locations to provide enhanced facilities for flatwater sports
ŌTĀKARO LOOP REACH
A place of activity and play
The Ōtākaro Loop Reach is the ideal location for recreational family activities, such as walking, biking, nature playgrounds and backyard sports. Other opportunities could include ecotourism, cultural experiences, pay-to-play recreational activities and food destinations.
Community spaces, shared gardens and orchards that provide seasonal food harvests
Network of trails and walkways
Ecological restoration of natural habitats
THE GREEN SPINE
Connecting people and place
The Green Spine forms the core of the Regeneration Area. About eleven kilometres long and 345 hectares in size, it extends along both sides of the river and provides the thread that brings the Area together. The Green Spine supports public access to the river, which in turn will stimulate community ownership of and identity with the Area. Seating, picnic and BBQ areas will encourage families and friends to meet up and enjoy time near the river.
AVON LOOP LANDING
AVONSIDE LANDING
WAINONI LANDING
CITY TO SEA PATH
DALLINGTON LANDING
Stormwater management area with potential trial housing
Ōtākaro Loop Reach Activity Area
KEY
Boundary
Green Spine
Ōtākaro Loop Reach
Horseshoe Lake Reach
Eastern Reaches
City to Sea path
Landings
Community spaces
Stormwater management areas
Road links
Footbridges
Trial and edge housing
0
500m
1000m
1500m
2000m (2km)