

The background of the image is a solid black field. Overlaid on this are numerous dark grey, hand-drawn style lines. These lines are wavy and irregular, flowing across the frame in various directions, creating a complex, layered texture. The lines vary in thickness and density, with some areas appearing more heavily scribbled than others.

NEIGHBOURHOOD RESERVE

# Neighbourhood Reserve

The neighbourhood reserve includes a number of organised and informal play elements that create an interesting and dynamic environment for locals. The sunken active space at the northern part of the reserve will serve a multi-functional purpose. The space is large enough that it could accommodate a series of play elements such as an accessible basket swing, a sculptural climbing element and a half-court. There is an opportunity for extensive seating in the area and a sloping lawn to create an amphitheatre that can be utilised for performances, competitive games and the like. On a relatively hilly site, this space creates a multi-functional open space that can accommodate a large number of people for special occasions, while also functioning as a relaxed play space during quieter periods.

The accessible lawn at the southern portion of the reserve provides an opportunity for an inclusive community space, where locals could grow, gather and prepare food. Long feasting benches could accommodate large gatherings, and the various seating options could provide for groups of various sizes. A series of potager gardens could accommodate community gardening initiatives, two barbecues to provide cooking options for up to two separate groups, and a hangi pit accommodates big and festive get-togethers.

Iwi have expressed their desire to have fruit trees as part of integrating mahinga kai opportunities into the Neighbourhood park. Several orchard trees would provide an opportunity for local foraging, and are a nod to the region’s fruit-growing heritage. Several weaving flax cultivars will feature in the reserve – where locals can tend to the plants and mindfully harvest what’s needed.

Koata House will be a significant nearby feature – and the design of the reserve will be subtly related to the Koata House site. As one of the earliest settlers of this land, the design plays on the idea of connecting with the land by using a series of continued lines weaving through the landform of the reserve, across the patterning in the street, and through to the lower slopes of the Koata House site. When looking out from this building, one will see an unmistakable link between the two sites from a unique and elevated vantage point.

The pump station fronting onto the main street will be enveloped within a visually interesting vertical timber palisade fence, which will turn this element into a sculptural form rather than a simple infrastructure element. These palisade forms will be repeated throughout the reserve to create an interesting dynamic of sculptural vertical elements.

The playground will likely consist of several levels and could include a concrete skate path, several sculptural climbing elements inspired by local taonga species (either flora or fauna).

The design drivers and goals provide a framework for the neighbourhood parks design. The final design of particular elements, layout, and details will evolve through developed and detailed design. Information provided at the Resource Consent phase is indicative only.

## Design Drivers

Manaakitanga - Manaakitanga is encompassing and inclusive of all. It is through love, korero , compassion, and understanding that we can navigate anything.

Kaitiakitanga - People pass on but the land remains. The continued exercise of kaitiakitanga and recognition of the enduring connection between people and whenua.

Whanaungatanga - Ngāti Koata connections with one another, whanaunga, relationships with Iwi and all the Te Taihū. Enduring connections with Ngāti Koata ki Kāwhia and those whānau overseas.

*The above is taken from the Draft Ngati Koata Trust Cultural Design Framework.*

## Landscape Goals

Equitable spaces - Provide accessible gathering spaces in a challenging topographic location. Passive and active spaces throughout the reserve.

Kai-centered spaces - Communal spaces to grow food, prepare and enjoy food.

A place to play - Play elements woven throughout the reserves at various elevations. Accessibility and variety of play elements.

Gather and celebrate - Celebration of active pursuits and performance arts. Enough space to accommodate basketball play-offs and cultural performances with an outdoor stage.

Connection to the land – Integrate with the surrounding topography, foster visual connections to key landmarks and travel routes.

Ecology – celebrate indigenous and taonga flora and fauna species. Support indigenous plant communities and natural processes. Foster habitat for native fauna. Foster education about local ecosystems.



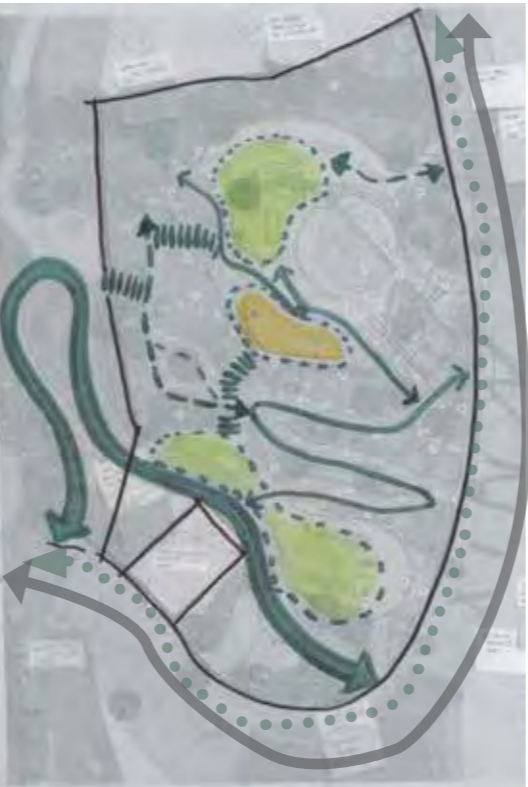
NCC APPENDIX 14 - RELEVANT CLAUSES	
AP14.2	information requirements
open space network	
AP14.2.2.ii - a. Location of features within open space	
AP14.3	Indicators of Quality Design
AP14.3.2 open space network - AP14.3.2.ii - 1,2,3,4	
AP14.3.3 landscape - AP14.3.3.i - 1, 2, 4	
AP14.3.4 streetscape and open space design - AP14.3.4.ii - 1, 2, 3, 5	



Scale 1:1500 @A3

# Design Description

# Design Layers



Connections

An accessible shared path is located at the heart of the Neighbourhood Reserve. This connects the neighbourhood reserve and its key community spaces with the wider accessible footpath network, as well as to the wider Maitahi Valley linear reserve. Two grassed areas are accessed directly off the main shared accessible path.

An accessible ramp with handrails snakes its way up the hillside, and connects the lawn areas to a multi-use play and performance area, as well as the upper picnic area. A viewing platform can also be accessed from this space via an accessible ramp. The rest of the reserve is accessed via 1.5m wide footpaths that allow visitors to come in from the adjoining roadside footpaths.



Activation

The northern lawn will be activated by the provision of a grassed picnic area with seating and accessible long feasting tables, food preparation areas and a hangi pit.

The upper portions of the reserve will be activated through the use of various play elements, including a basketball half-court, an accessible play area with a basket swing and several other play elements. The slopes will be integrated into the play spaces, with climbing nets, hopping posts and a slide at the lowest slope of the reserve near Kākā Stream.

The lower accessible spaces will be activated through the provision of a climbing structure and a Pa Harakeke, where a selection of harakeke cultivars bred for weaving can be planted in an easy-to-maintain location. These interventions will be supported by a seat along the accessible shared path.



Planting + Green Space

Most of the hillside portions of the reserve will be planted with a native amenity planting mix.

The south-eastern corner of the reserve will include a grove of Titoki, which will provide a visual and spatial barrier from the traffic and the roundabout. The trees will be limbed up to ensure safe sightlines.

The overland flow path at the upper portion of the reserve will include several riparian species that can withhold both wet and droughty conditions.

Several lawn areas will provide for informal recreation.

## NCC APPENDIX 14 - RELEVANT CLAUSES

### AP14.2 information requirements

open space network

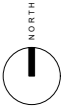
AP14.2.2.ii - a. Location of features within open space

### AP14.3 Indicators of Quality Design

AP14.3.2 open space network - AP14.3.2.ii - 1,2,3,4

AP14.3.3 landscape - AP14.3.3.i - 1, 2, 4

AP14.3.4 streetscape and open space design - AP14.3.4.ii - 1, 2, 3, 5



# Neighbourhood Reserve Resource Consent Plan

- ① Accessible lawn and picnic area
- ② Accessible ramp with handrails
- ③ Reserve entry
- ④ Timber crib retaining wall
- ⑤ Picnic and accessible gathering space
- ⑥ Possible orchard location
- ⑦ Natural embankment with planting, retaining walls, pathway, seating and play elements incorporated into the slope
- ⑧ Picnic and play space. Play equipment to be confirmed through further discussions with Nelson City Council
- ⑨ Cultural marker
- ⑩ Timber lookout platform
- ⑪ Pump station with sculptural palisade fence
- ⑫ Overland flow path
- ⑬ Public toilets

**NCC APPENDIX 14 - RELEVANT CLAUSES**

**AP14.2 information requirements**

open space network

AP14.2.2.ii - a. Location of features within open space

**AP14.3 Indicators of Quality Design**

AP14.3.2 open space network - AP14.3.2.ii - 1,2,3,4

AP14.3.3 landscape - AP14.3.3.i - 1, 2, 4

AP14.3.4 streetscape and open space design - AP14.3.4.ii - 1, 2, 3, 5



# Play Precedent Imagery

The play features and elements can be influenced by connection to the wider natural environment, the historical practices of mahinga kai, flax harvesting, native taonga species and the region's agricultural heritage.

The complex topography of the site will be embraced and enhanced with interactive and climbing elements such as thick rope nets, climbing logs, informal sleeper steps and stepping posts. The playground spaces will be layered over various levels of the reserve, providing a range of nature play experiences, climbing experiences, a slide, and several accessible play elements.

Key Playground Features could Include:

- Basketball Half-court
- Balancing/climbing logs
- Climbing net
- Stepping posts
- Informal sleeper steps
- Timber lookout near playground spaces
- Swings and a slide
- Accessible basket swing



# Furniture Precedent Imagery

A variety of site furniture will contribute to the accessibility, usability and enjoyment of the various open spaces throughout the reserves.

Timber seating mounted on gabions will provide informal seating opportunities, while long accessible picnic benches will provide opportunities for gathering and enjoying a meal together. Site furniture along paths and trails will allow visitors to be immersed in key locations and interaction points throughout the site.

Furniture elements used will utilise natural materials, and will reference natural forms and local history. Orientation and placement of these pieces will be strategic in the way they encompass key views and site features whilst allowing for practicality and enhanced user experience in public space.



# Level Changes Precedent Imagery

The design intends to provide opportunities for reserve users to both be able to observe and engage with the Kākā Stream at the center of the park and help raise awareness for the ecological value and ecosystem services provided by waterway restoration and protection.

Height differences throughout the surrounding development mean a variety of level changes will be managed to deliver functional, safe, accessible and attractive open spaces.

Several level change solutions such as crib wall retaining, gabion baskets and low concrete retaining can be utilized to provide visual interest, informal seating and retaining both in the neighbourhood park and throughout the reserves.



(RMM)



(RMM)



(Glück Landschaftsarchitektur, 2021)



(RMM)



(RMM)



(Isthmus, 2017)



(Isthmus, 2017)





# STREAMS AND OVERLAND FLOW PATHS

# Streambed Treatments

## Streambed Alignment

The overall approach to the alignment of the stream path and streambed treatments is to create a variety of habitats for native fauna such as fish and aquatic invertebrates. A variety of elements such as pools, riffles and shoals create variation in the water flows, which can create areas of stillness and refuge or turbulence and aeration.

The following is a brief description of each habitat type and benefits:

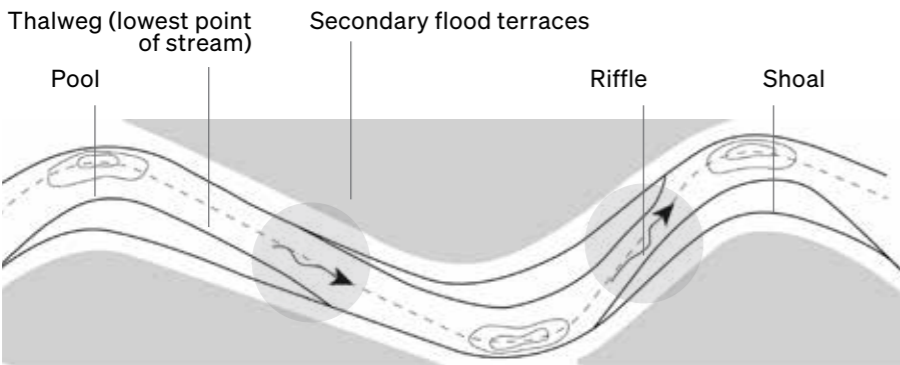
**Pool** - Deeper area of water naturally located at the outer edge of a stream meander, typically created by the water's scouring action.

**Shoal** - A shallower area typically made up of deposited streambed material at the inner portion of a stream meander, typically created by the deposited streambed debris scoured from the pool area.

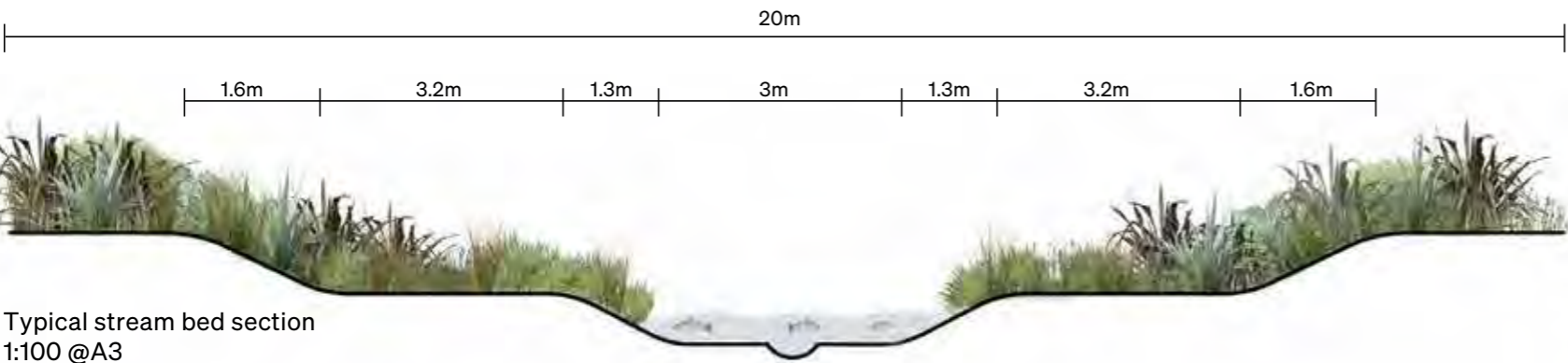
**Riffle** - An area of the streambed with larger rocks and boulders, increased turbulence and increased aeration.

**Run** - A relatively uniform area of stream with consistent flows, located between pools and riffles.

**Terrace** - A low-lying area adjacent to a stream that floods during high rainfall events, extending the area of the aquatic habitat for a time.



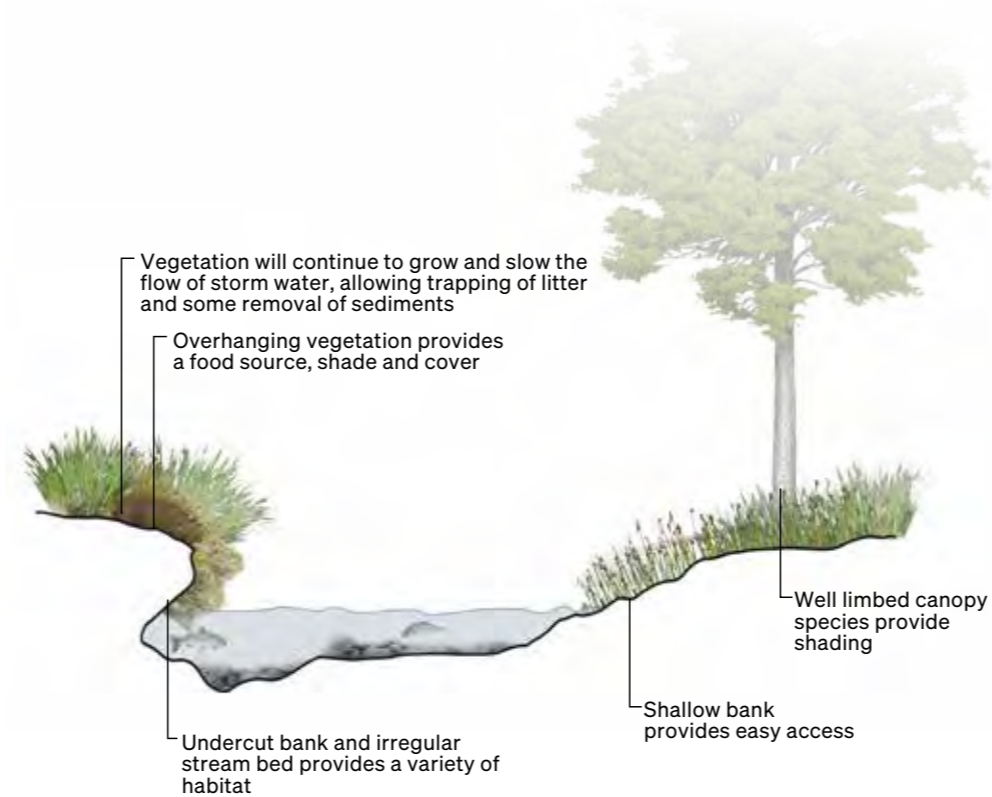
Waterway meander showing relative positioning of riffle and pool habitats



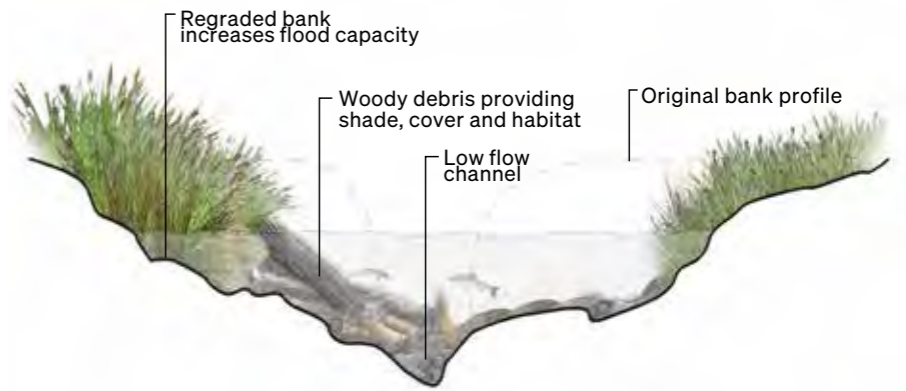
Typical stream bed section  
1:100 @A3

## Streambed Naturalisation

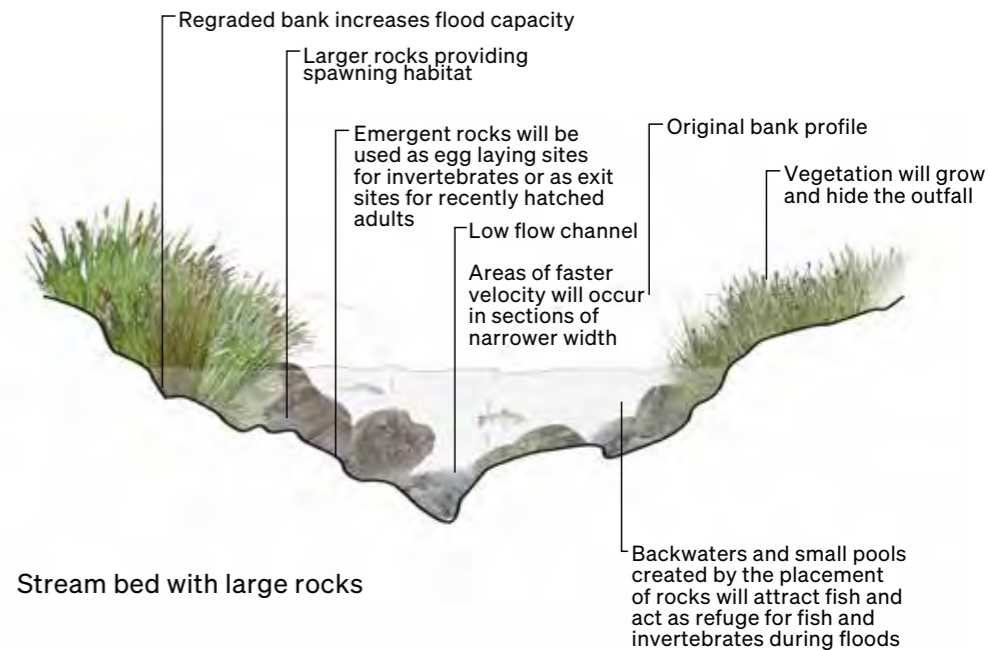
The streambed can include a variation of features that further enhance the ecological value of the waterway, and enhance the aquatic and riparian habitat. The use of rocks, wood debris and depth variation are important factors in creating an environment that supports diverse forms of aquatic life. Some examples are illustrated below.



Stream bed with overhanging vegetation



Stream bed with woody debris



Stream bed with large rocks

# Stormwater - Overland Flow Path Locations

OVERLAND FLOW PATHS

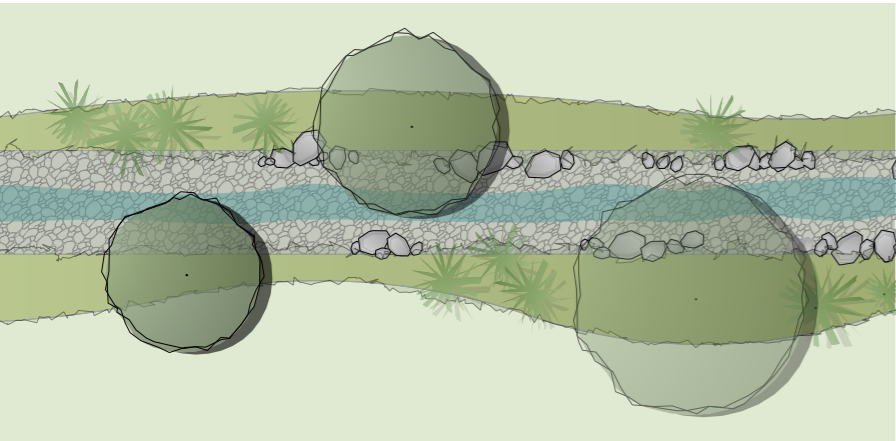
CULVERT



# Stormwater - Overland Flow Paths

A series of overland flow paths will be located within the development. Many of these flow paths will receive high velocity flows and will require scour protection at the base.

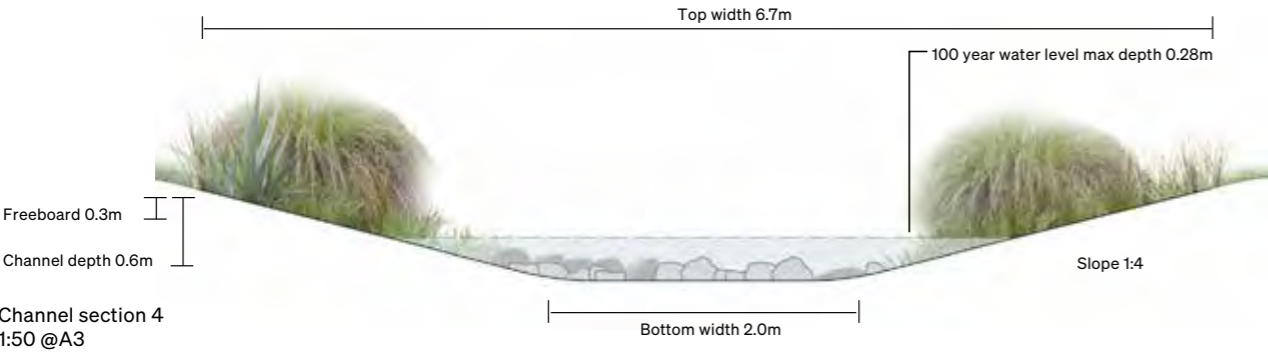
A carefully selected palette of edge planting will provide habitat and shade for when the paths have flowing water, and visually soften these features, seamlessly integrating them into the wider hydrology network of the site. A variety of rock sizes will be used to line the channels, providing a more natural appearance and better erosion protection.



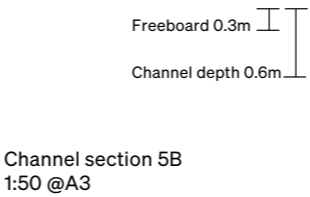
Overland Flow Path - Indicative Landscape Treatment Plan



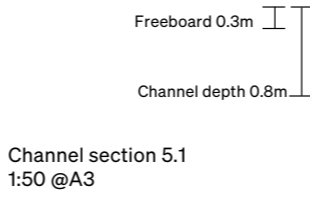
Overland Flow Path - Exemplar Planting



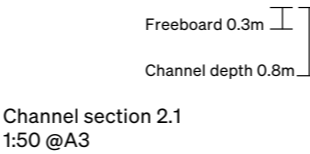
Channel section 4  
1:50 @A3



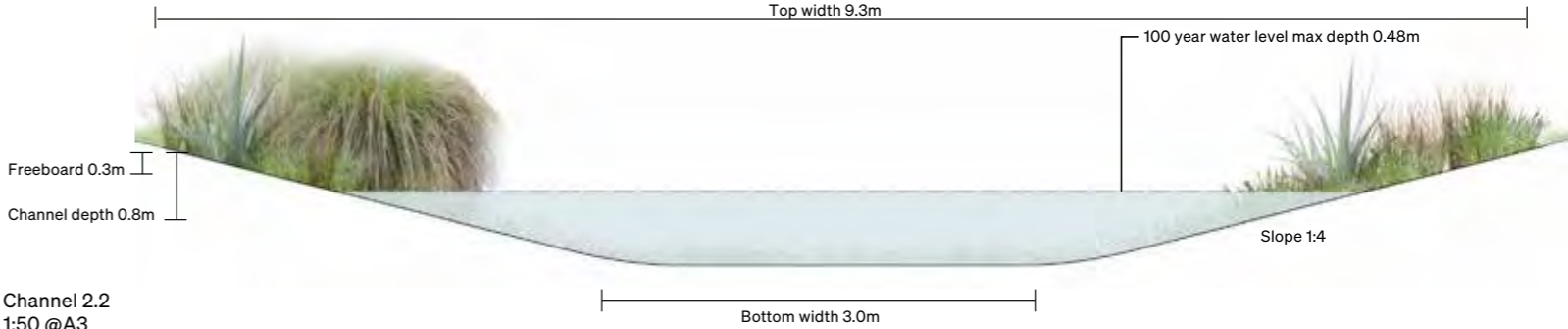
Channel section 5B  
1:50 @A3



Channel section 5.1  
1:50 @A3



Channel section 2.1  
1:50 @A3



Channel 2.2  
1:50 @A3

**NCC APPENDIX 14 - RELEVANT CLAUSES**

**AP14.2 information requirements**

AP14.2.2 Design Description: Subdivision and Development Plan  
stormwater management - AP14.2.2.v - b

**AP14.3 Indicators of Quality Design**

P14.3.5 stormwater management - AP14.3.5.ii - 2, 4

# Stormwater – Constructed Wetlands

## Overview

In collaboration with the wider project team, stormwater management has been considered early in the landscape design process to achieve a robust high amenity solution. A series of constructed wetlands and swales treat and convey stormwater runoff using native plant species. This is a naturalised system with carefully designed outfalls and hydraulic control weirs integrated with landscape features.

This design will meet the functional stormwater requirements of the development while also contributing to overall natural character of the stream corridor.

## Stormwater treatment wetlands

Stormwater runoff from the development is discharged via the pipe network to engineered treatment wetlands located within the Kaka Stream corridor. The treatment wetlands will include an impermeable liner to hold permanent water which supports the biological treatment process. Stormwater treatment wetlands will include:

- Forebay pool (with suitable maintenance access for clearing sediment).
- Bands of deep and shallow marsh habitat densely planted with native aquatic species.
- Riparian and littoral edge planting to integrate with wider landscape.

## Ephemeral Soakage Wetlands

Water from the stormwater treatment wetlands will discharge to adjacent ephemeral soakage wetlands which are unlined allowing runoff to soak into the ground during small rainfall events to mimic natural hydrology. In heavy rain the ephemeral soakage wetlands will become inundated and overtop via a designated flow path toward the stream. These wetlands are densely planted with native riparian/littoral edge species.

## Outfalls, Control Weirs, Engineered features.

The flow of water through the system is controlled by low profile engineered structures that will be integrated with their natural surroundings. Features include;

- Upstream bypass diversion to pass peak flood flows to Kākā Stream and protect wetlands vegetation from damage.
- Headwalls formed with natural rock and planted voids to integrate with landscape.
- Access to forebays to allow infrequent sediment clean out.
- Concrete spreader weirs ~50mm below the permanent water level at the downstream end of the forebay to ensure uniform flow.
- Perimeter safety benches to promote dense growth of edge vegetation.
- Rock cascade structures to facilitate flow over steep grade changes.
- Outlet controls to engage extended detention during frequent rainfall events and pass larger flows during less frequent storm events.
- Rock placement and planting at outfalls to complement the natural character of the stream corridor.
- Potential to include architectural features with corten steel cladding, artistic rendering or rockwork that provides additional amenity for high visibility features.

## NCC APPENDIX 14 - RELEVANT CLAUSES

### AP14.2 information requirements

AP14.2.2 Design Description: Subdivision and Development Plan  
stormwater management - AP14.2.2.v - b

### AP14.3 Indicators of Quality Design

P14.3.5 stormwater management - AP14.3.5.ii - 2, 4



Exemplar imagery of landscape treatments and structures in wetlands and waterways



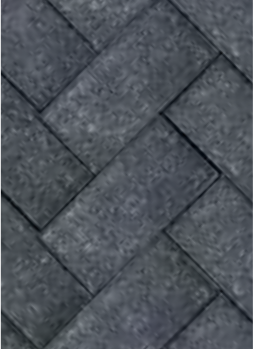
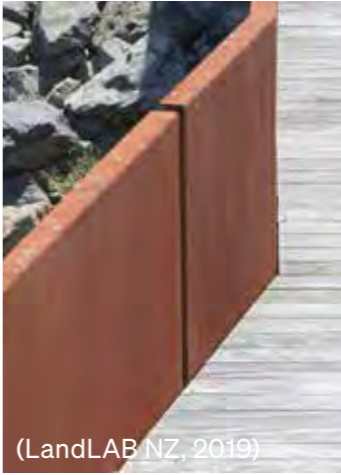
# MATERIALITY

# Materials Palette

Material use on site will be informed by historical mahinga kai (including harvesting of timber, harakeke, local Argillite and Dunite rock mining) and the past land use of the area - including agriculture will inform material use on site.

Asphalt, smooth concrete and various paving types will be used across streets to indicate intersections and areas of significance.

Footpaths and ramps will be finished in either asphalt or concrete.



# Pathways, Structures & Handrails

## Precedent Imagery

A variety of different interaction points, both physical and visual, are included within the reserves network. These features will allow park users to be immersed in the stream revegetation process, highlighting the physical and ecological changes, which will occur to the environment as water quality improves and the riparian margins establish.

The natural materials will complement the green backdrop, and elements such as handrails will be imbued with a sculptural quality to complement the reserve aesthetic.



# Site Wayfinding

## Precedent Imagery

Visual indicators will be used throughout the site for both wayfinding, and to indicate land use changes.

These indicators will also tell the history of the site and provide an understanding of the landscape significance to mana whenua and their tupuna. These elements will be designed and shaped with consultation and guidance from mana whenua, including the physical form these components will take and the messages they will convey.



(RMM)



(RMM)



(Isthmus, 2017)



(ACTA Javier Lopez & Ramon Pico, 2010)

