

The Tōtara Highway



Design Vision

Our urban design vision creates a parkland, landscaped corridor, which incorporates multi-modal transport and is sensitive to the current and historic ecological receiving environment. The principal new entrance and arrival experience for the Ōtautahi Christchurch Central Business District (CBD) provides a prime opportunity to celebrate the proud legacy of Christchurch's ecological character and habitat, and cultural heritage values while enhancing the everyday lives and relationships of stakeholders for generations to come.

The Tōtara Highway urban design concept is a direct reference to native botanical plants that historically existed in lowland Canterbury and which are valued culturally – by Māori and European as taonga or treasures. As a legacy entrance

experience into Christchurch City, the Tōtara Highway also builds further on the already established botanical 'Garden City' character.

An attractive visual design approach uses abstracted botanical forms of Tōtara, Raupō and Kahikatea – representative 'signature' species within this pre-existing environment. This visual character is reflected on a range of urban design elements along the corridor. A design language of visually simple, striking, abstract forms - creating a proud legacy for Christchurch.

The following sections of this brochure present the key conceptual urban design components.



Urban Design Concept The Tōtara Highway

- 1 Steel Prefabricated Panels for 3 No Bridges
- 2 Feature Lighting to 3 No Bridges
- 3 Cycleway Shared Path
- 4 Landscape Feature Walls
- 5 Kaputone Creek Crossing
- 6 Styx River Footbridge
- 7 Shared Use Path Lighting
- 8 Signage
- 9 Planting
- 10 Winters Road Pedestrian Underpass - New Splayed Wall Profile
- 11 Belfast Road Pedestrian Underpass - New Splayed Wall Profile
- 12 Grimseys Road Subway - Entrance Upgrade
- 13 Hills Road Subway - Entrance Upgrade
- 14 Welcome to Christchurch Sign
- 15 North End Planting

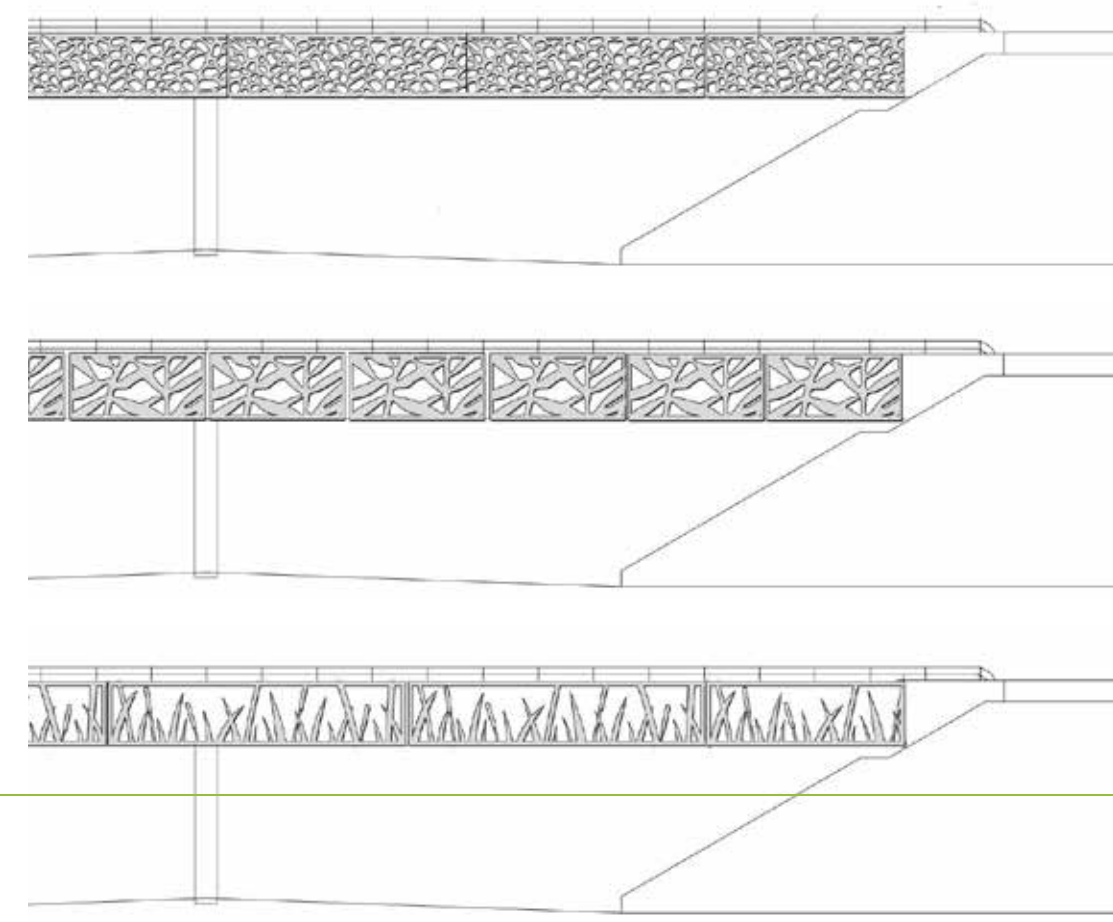




Description

The three local road bridges which pass over the alignment in the central section of the new corridor – Belfast, Radcliffe and Prestons Bridges - offer a portal experience for travellers to pass through as prominent visual markers to dramatically define the CNC corridor experience.

Decorative steel prefabricated panels with abstract botanical patterns are integrated onto both sides of the bridges. This feature will be a key component to identify the Tōtara Highway as the primary entrance route into Christchurch. This approach is a further adaptation of the panels and lighting used for NZ Transport Agency's recently constructed Caversham Bridge in Otago.





Description

LED technology integrated behind the decorative bridge panels for night time illumination and back-lit to avoid glare. Lighting colour, tone and intensity can be easily controlled to celebrate a range of local events or seasonal occasions.

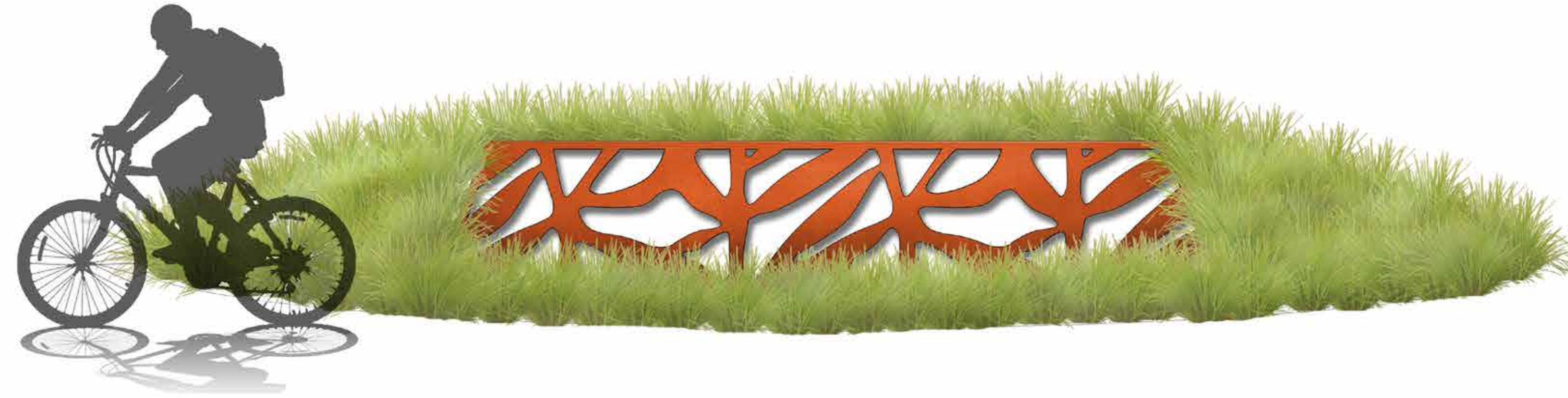


Description

A range of design treatment to ensure the shared path experience has amenity and visual interest while still retaining the required level of function and being CPTED friendly:

- Coordinated tree planting to provide shade and amenity while not obstructing user sightlines.
- A gently meandering shared path alignment to avoid monotony.
- Connections to key open space areas such as Owen Mitchell Park, Styx River walkway and Belfast Cemetery.



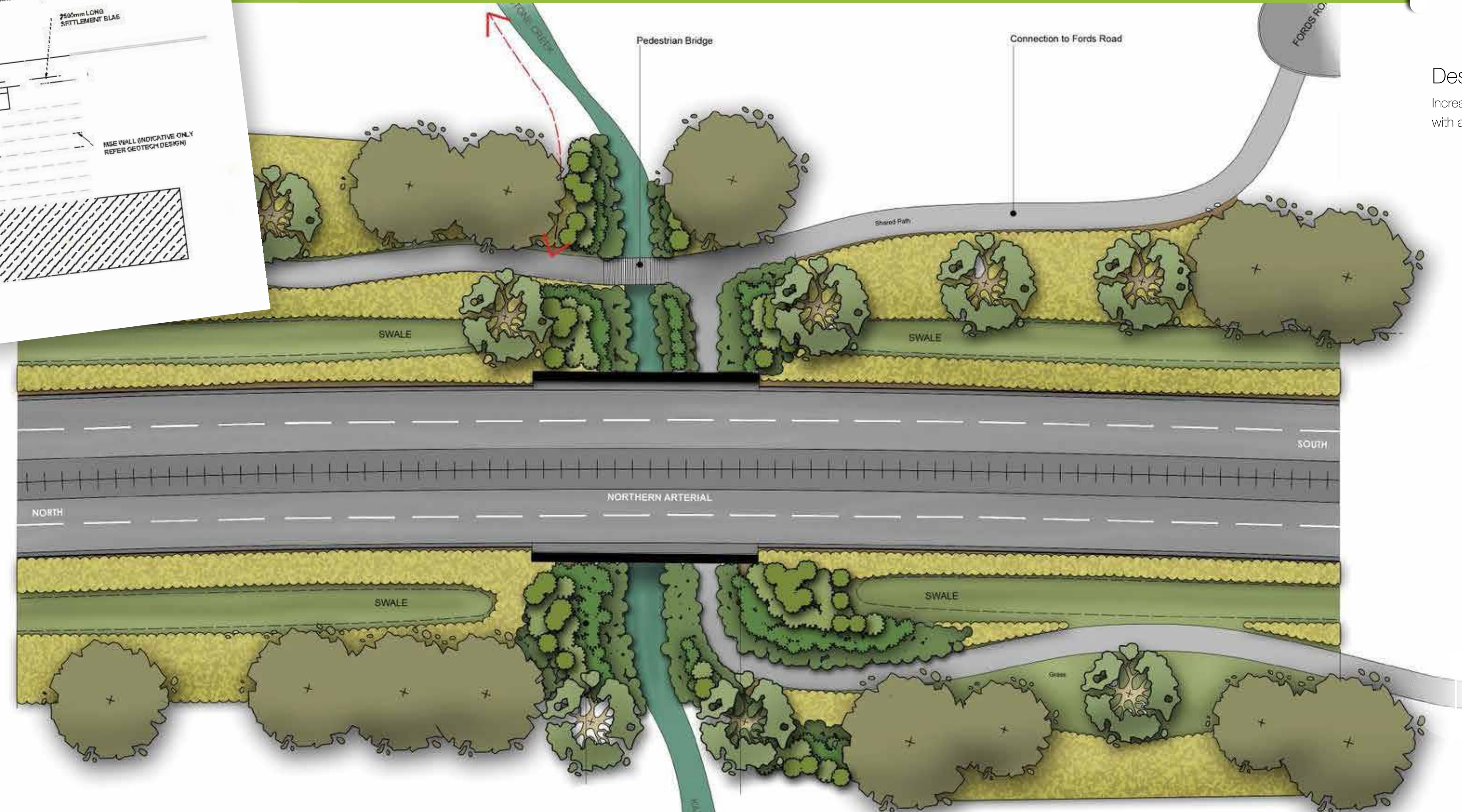
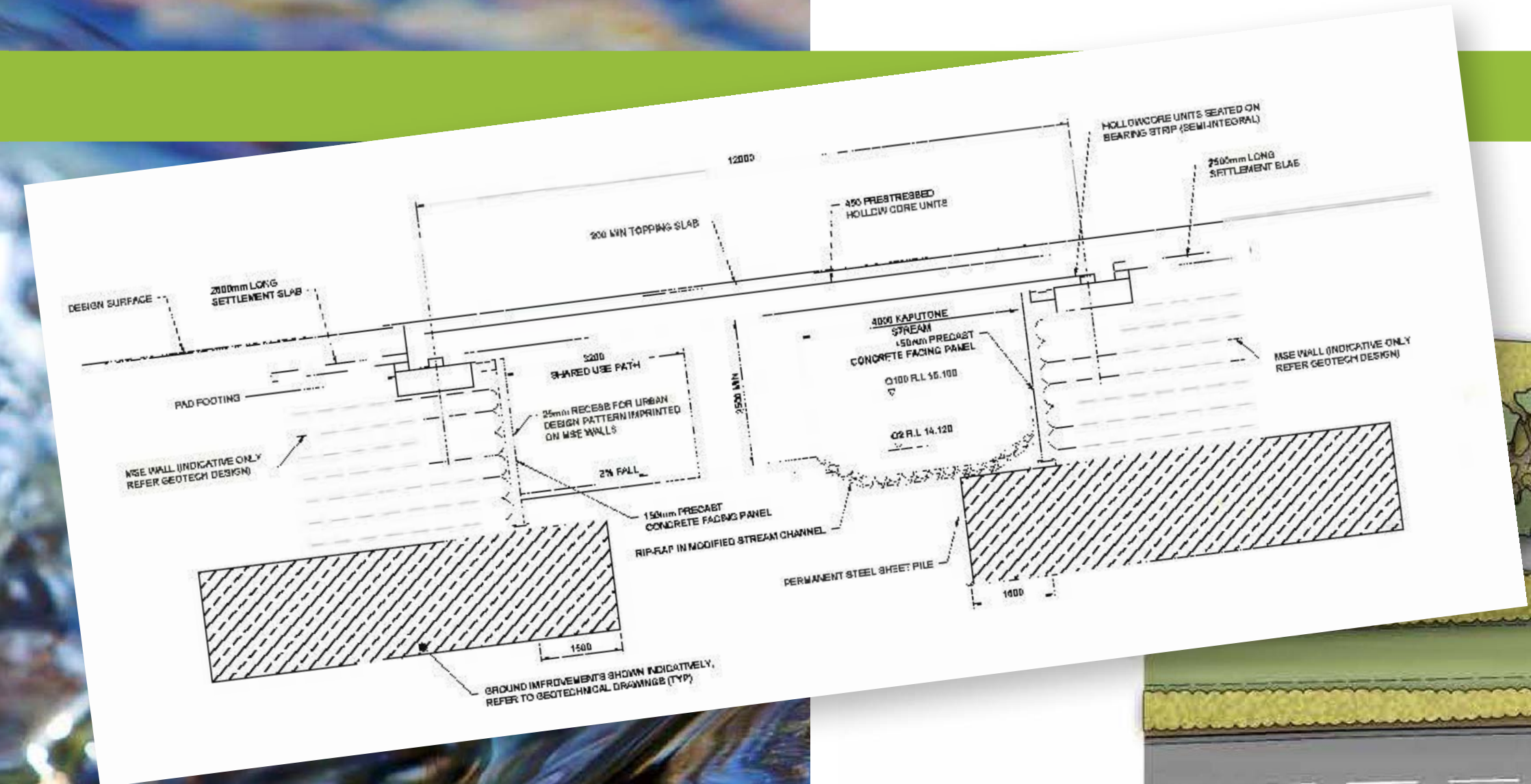
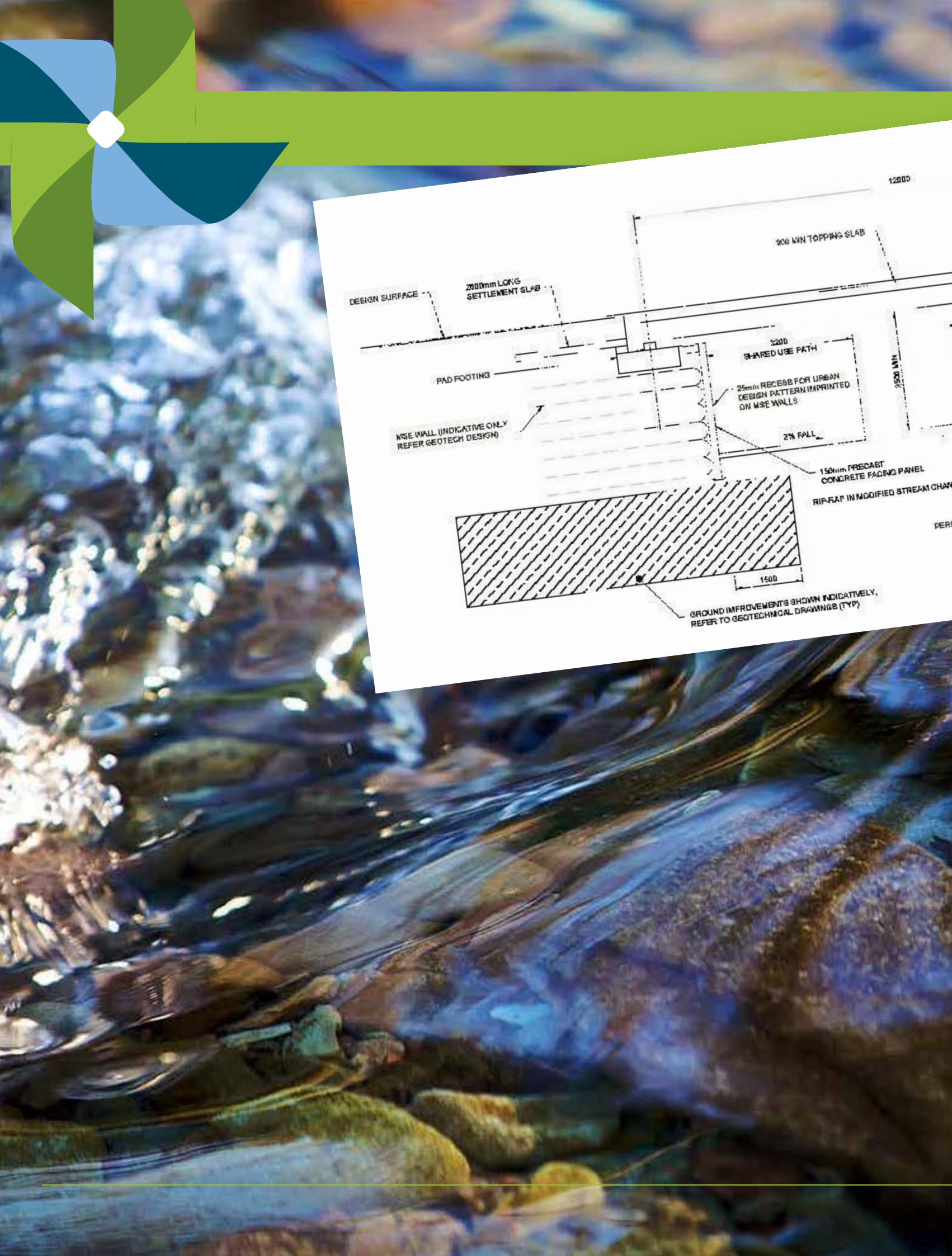


Description

8 nos. of landscape feature walls are proposed alongside the shared path alignment and integrated with site furniture items. These walls comprise of concrete and corten steel facades and background planting.

These low walls provide an identifiable visual element to mark the journey alongside the shared user path as it arrives at the urban area at the Southern Interchange and next to the Cranford Street roundabout.





Description
Increased space and amenity for pedestrians and cyclists with a pedestrian footbridge across Kaputone Creek.



Description

A pedestrian/cyclist bridge is separate from the motorway and incorporates character design elements from the existing 'Source to Sea' theme.



Description

Amenity and pole lighting along the shared path as follows:

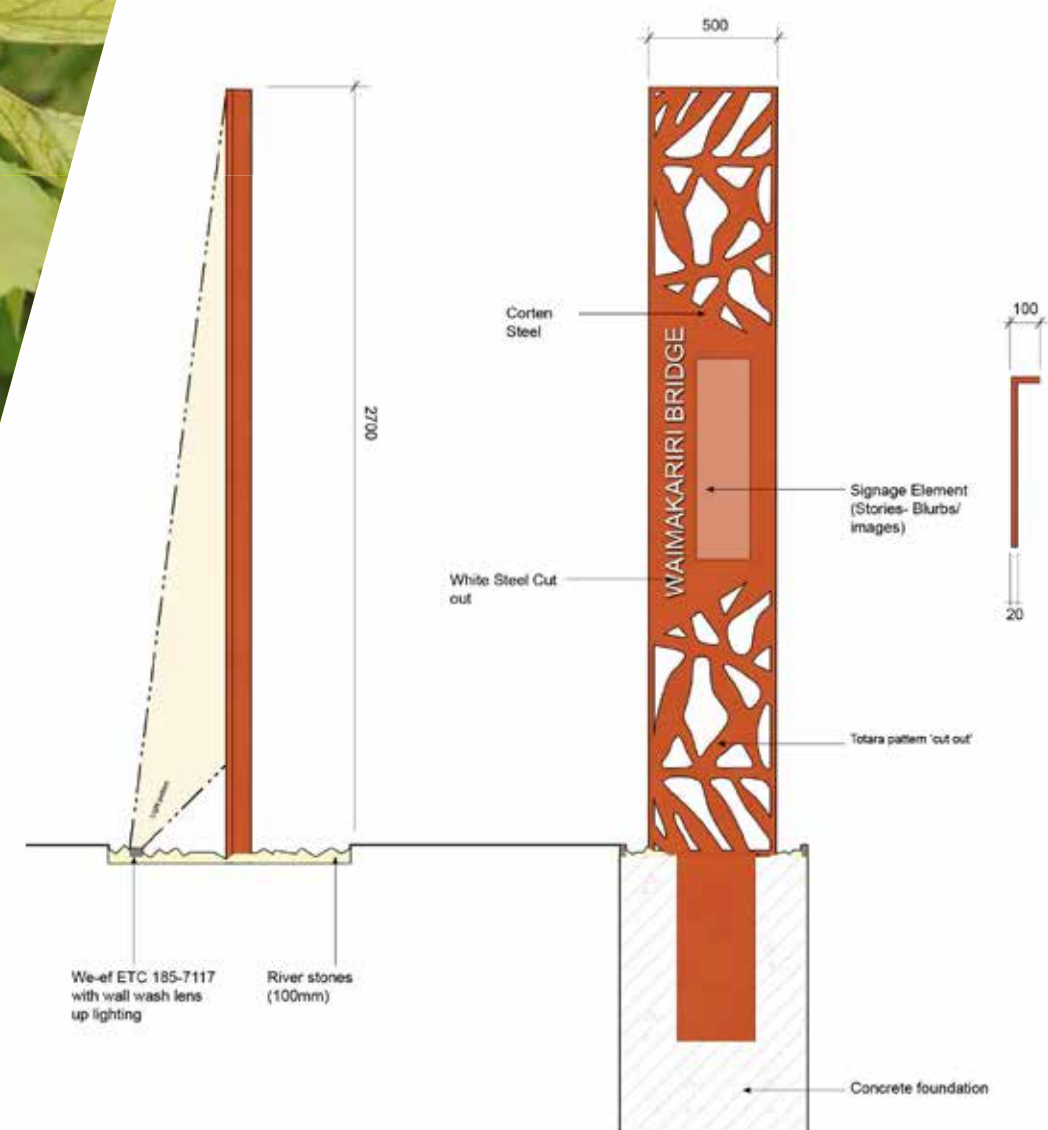
- Cycleway 6m high pole lights.
- Subway ceiling lights.
- Kaputone crossing ground lights.
- Subway accent lighting.
- In-ground lights for information signs.
- Tree uplighting.





Some of the stories told might include:

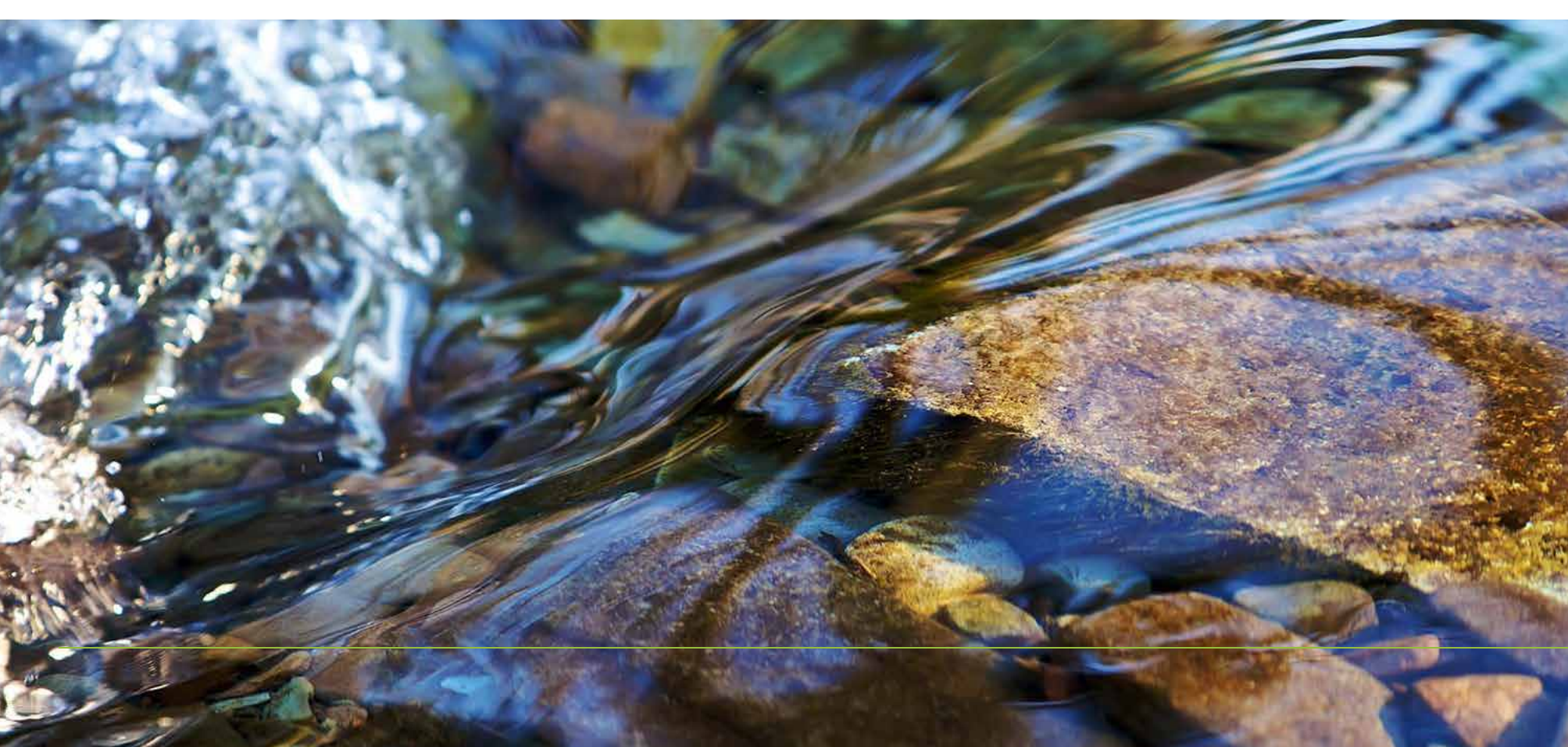
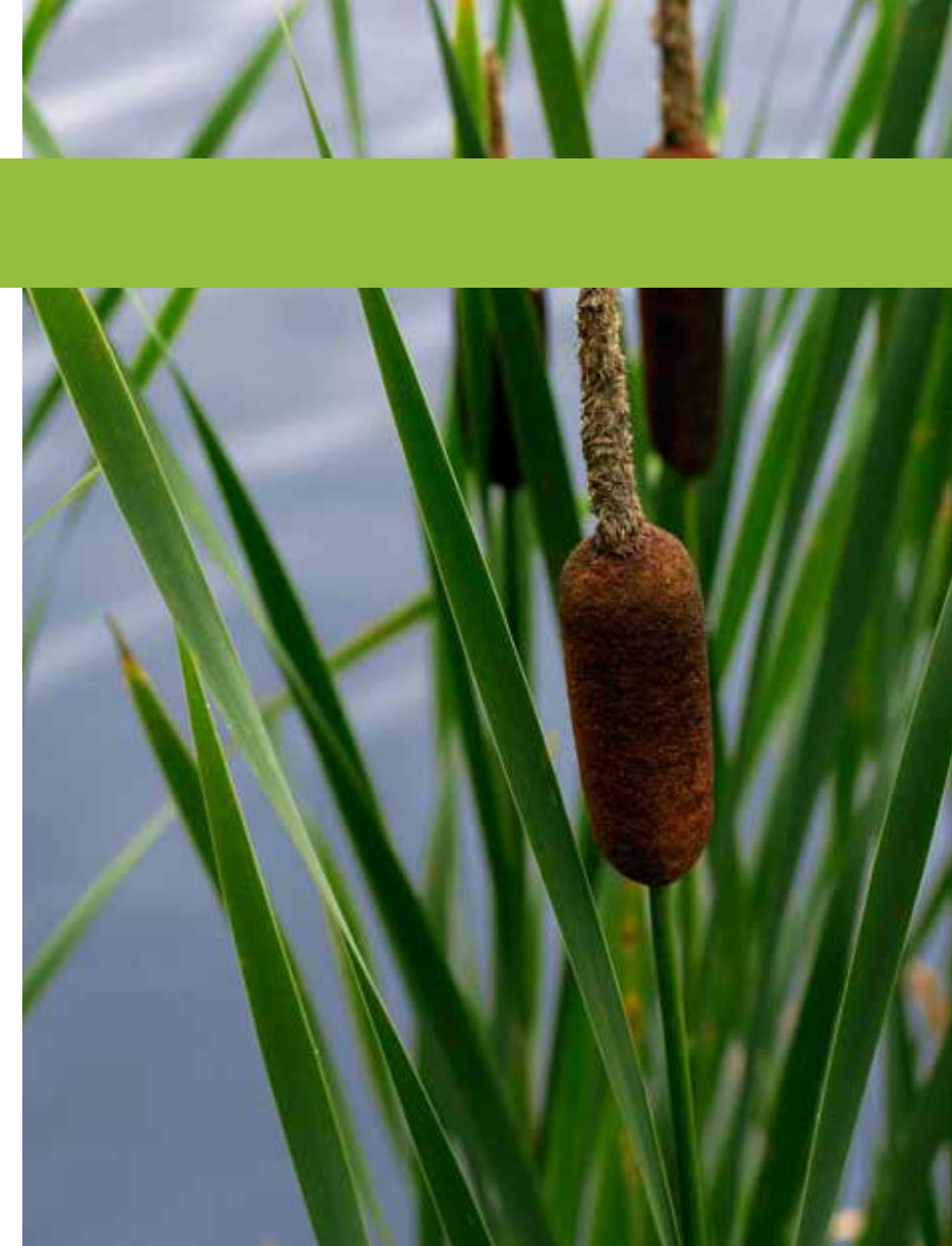
- The Story of the Waimakariri Bridge
- Tangata Whenua and the Otukaikino Area
- The History of the SIMT Rail Line
- Styx Living Trust – Source to Sea
- Industry in Belfast: e.g. The Kaputone Wool Works, Canterbury Frozen Meat Co Ltd, etc
- The Natural Environment and its Waterways
- The history of Market Gardening in the area



Description

This enhancement proposes 11 no. of Information signs along the shared path route to depict local narratives and adopting corten steel with botanical patterning and information plaques.

Our stakeholder strategy will engage the local community early in the design process to identify preferred narratives for these signage elements.



Description

Our planting strategy carefully responds to the landscape character zones along the motorway, including a specimen tree planting programme alongside the shared path alignment to enhance the amenity of the cycleway with shade trees and providing seasonal colour and visual interest.



New Splayed Wall Profile

Description

Guided by Sections 4.9 and 4.10 of the Agency's Urban Design Guidelines - Bridging the Gap, a key innovation of our urban design concept is the 'tilted walls' for new subways. This widened profile increases the sense of space and atmosphere for cyclists and pedestrians while adhering to low maintenance and easily constructive solutions. Key dimensions: tilted 30 degree wall profile. Internal subway height of 2.5m with a 5m wide floor.

Light colour and pattern treatments will be used for internal walls and ceilings of the subways to provide a sense of space and amenity.





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Entrance Upgrade

Description

This option allows for the renovation of existing pedestrian entrance areas of Grimseys Road Subway to improve the safety and CPTED related issues of these areas. This option retains in situ the existing subway 'box' sections which currently have water and CPTED related problems, but includes architectural treatments for surfaces and lighting etc.

This option proposes the following revitalisation measures to add a significant level of enhancement to the subway entries:

- removal of vegetation to allow unobstructed sightlines around subway entrance areas,
- low level vegetation around the subway entries and selective siting of canopy trees to maintain pedestrian sightlines,
- rationalisation of the slopes and upgrading of entry walls around the subway entries to improve pedestrian sightlines and to increase the levels of passive surveillance,
- cycleway fencing at the top of new walls for safety and to improve passive surveillance,
- internal subway wall and ceilings to be resurfaced with additional functional lighting to meet standard CPTED requirements
- pavement re-surfacing (asphalt),
- pedestrian lighting – e.g. pole lights and ground lights,
- CCC wayfinding signage to assist pedestrian navigation



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Description

With the introduction of the CNC corridor, the section of road immediately south of the Waimakariri River Bridge becomes a critical point in the entrance threshold zone for Christchurch.

Upgrading this area will help to visually 'announce' the arrival experience. Integrating a new CCC 'Welcome to Christchurch' sign in this area to better mark the threshold before traffic departs onto other arterials such as Western Belfast Bypass and Main North Road.



Description

In conjunction with the new 'Welcome to Christchurch' sign, we will replace the existing expansive area of roadside grass with amenity planting to improve visual amenity of this new threshold area while also reducing the existing whole of life costs of grass mowing.

