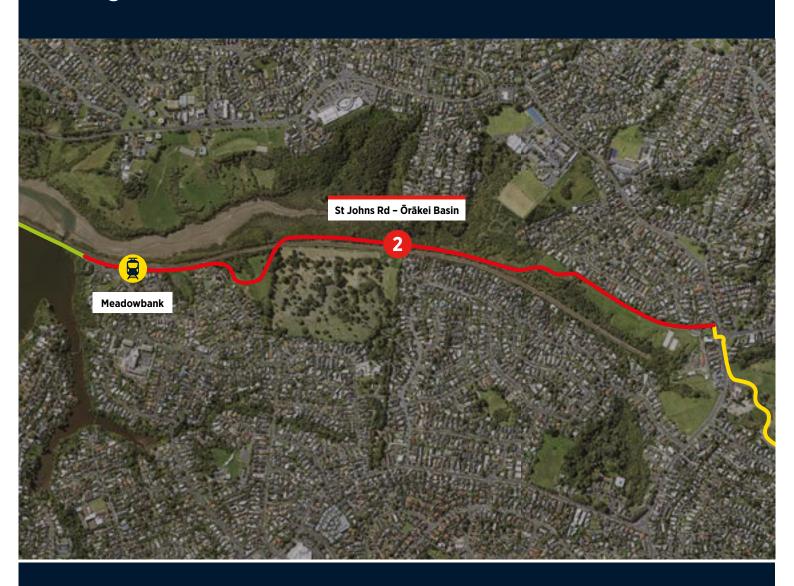
Glen Innes to Tāmaki Drive Shared Path Te Ara Ki Uta Ki Tai (the path of land and sea)

Design for Section 2 St Johns Road to Ōrākei Basin



Section 2 will be a mix of concrete path, boardwalks and bridges.





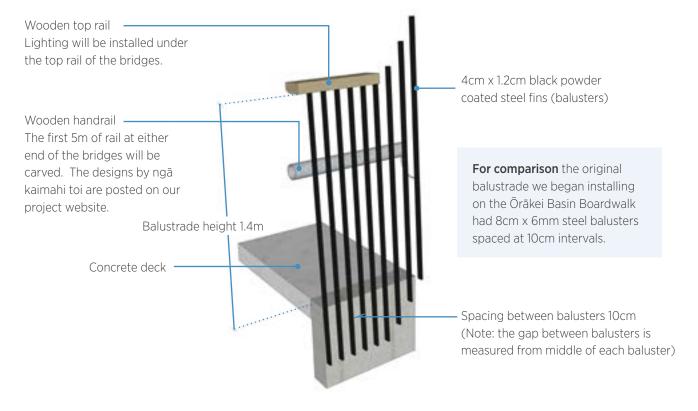
The Bridges

Two bridges will be built; one will cross a gully in the reserve behind John Rymer Place and another will span the eastern rail line from Pourewa Valley to Tahapa Reserve East (near the Purewa Cemetery).

The bridge decks will be concrete and approximately 5m wide, with black powder coated steel balusters and wooden handrails. Lighting will be installed under the top rail—you can see how this lighting arrangement works by visiting the Ōrākei Basin Boardwalk.

We know from feedback that people prefer lower balustrade heights such as a 1.2m, however because of the vaulting risk for people on bikes on bends and downhill sections, for safety, the balustrade height will be 1.4m on the bridges. There are also safety standards we must follow for crossing electrified rail lines.

Figure 1: Bridge balustrade

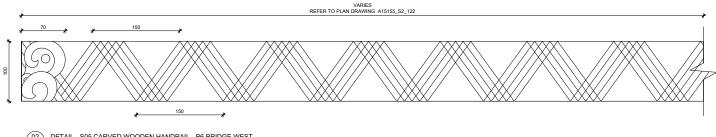




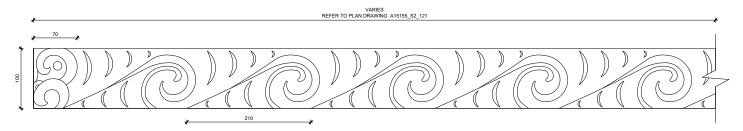
The Bridges

Fall protection screens, with motifs designed by ngā kaimahi toi, will be installed to prevent people from climbing the outside of the bridge over the rail line. The rail line bridge will also have electrocution protection screens fitted above the electrified lines.

The wooden handrails will be carved at each end of the bridge, relating to te maunga on the landward side and nga wai on the coastal side, picking up on the central theming of the path, Te Ara Ki Uta Ki Tai (from the land to the sea).



02 DETAIL - S05 CARVED WOODEN HANDRAIL - B6 BRIDGE WEST - Scale: 1:2 @ A1 1:4 @ A3



03 DETAIL - S05 CARVED WOODEN HANDRAIL - B6 BRIDGE EAST Scale: 1:2 @ A1 1:4 @ A3

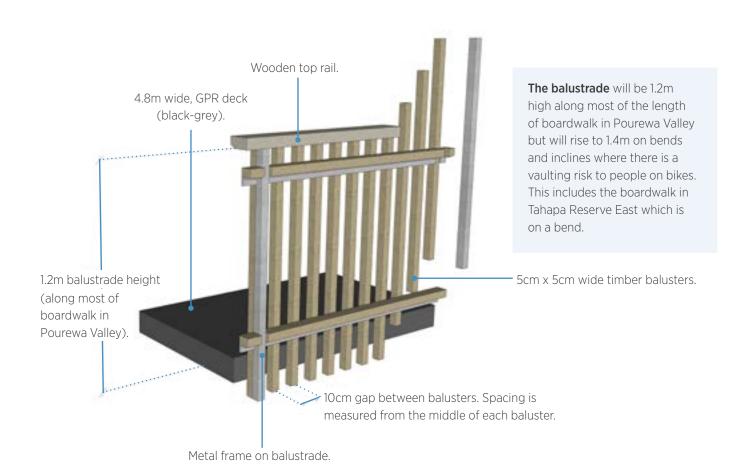
The Boardwalks

A 4.8m wide boardwalk will travel above ground through Pourewa Valley, ensuring the natural water flow is not interrupted and to minimise disturbance of the native forest. A boardwalk will also run around a steep section in Tahapa Reserve East. This is due to slope stability and will also minimise the extent of earthworks that would otherwise be needed here.

Reinforced plastic (GRP) panels will be used for the deck, similar to the decking on Section 3. This will provide slip resistance and durability, which are particularly important in a bush environment and given the high volume of people on bikes anticipated to use the path.

Lighting will be installed under the top rail. You can see how this lighting arrangement works by visiting the Ōrākei Basin Boardwalk.

Figure 3: Pourewa Valley boardwalk

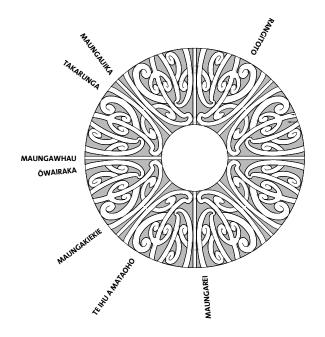


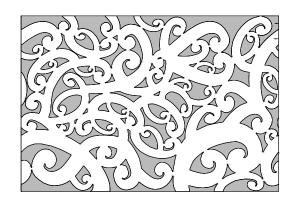
The Boardwalks Typical 1.8m high boundary fence Point 'A' Note: Height of point 'B' relative to point'A'varies. Point 'B' generally lower than point'A' Width of the planted Height above ground varies area varies from approx 2.5m to 5.5m 1.4m high balustrade. (2.5m shown) 4.8m wide boardwalk Lighting provided under top rail.

Figure 4: Cross section of boardwalk in Tahapa Reserve East.

Balustrade height on the boardwalk in Tahapa Reserve East will be 1.4m due to vaulting risk for cyclists on bends. The planting shown is indicative of the native planting that will be carried out along the length of the shared path. Please note that the type of native planting will vary depending on the location, reflecting the different natural environments.

Other design details





Ngā mahi toi (artworks)

Artists (ngā kaimahi toi) have been engaged to design cultural artworks for the project. This includes pou at both ends of Section 2 (by St Johns Road/ Kohimarama Road and Ōrākei Basin), sections of carved handrails on the bridges, motifs for the perforated metal fall protection screens and concrete stencils in the path at various locations. View the artwork on nzta.govt.nz/gi2t or at.govt.nz/easternpath.

The rail overbridge is introduced with artwork sand-blasted into the concrete footpath at each end, carved into the wooden handrails, and perforated fall protection screens.

Accessibility, ease of use & safety

The terrain is challenging in places, but we have designed the path to ensure it is as accessible as possible for everyone.

Where the path travels from Pourewa Valley up to the Pony Club the terrain is steep and through this section, flat sections (or landings) will be installed to provide a break in the uphill gradient. Some of the landings will be widened out to one side to provide rest areas out of the path of other users. On some landings, and other rest areas, we will provide seating.

We listened to feedback on Section 1 about the spacing between landings causing a bumpy ride. So, for Section 2 we will construct longer and more widely spaced landings to give a smoother ride for people on bikes, scooters and mobility aids. The approaches and exits to the landings will also be curved for smoother transitions and a different shade and surface finish of concrete will be used to mark the landings and signal a change in gradient.

Safety is a key consideration in our design. We will ensure that the path is obstruction free, including planting, and will only place bollards where required to prevent vehicles from entering the path. Lighting, CCTV and help stations will be installed along the path for personal safety.

Other design details Pony club Typical 1.8m high boundary fence 1.2m high post & wire fence 4.0m wide shared path (5.0m shown) 1.0m grass

Figure 5: Cross Section showing the path and representative planting along the section behind Whytehead Crescent near Meadowbank Pony club.

Width of the planted area varies from approx 5.0m to 7.0m

Planting and restoration

Planting and restoration are an important part of the project. Pest-plant and weed control will be carried out in and around the construction area to support the restoration efforts of community groups and the Ōrākei Local Board. Vegetation lost as a result of site works will be replaced with representative native species to enhance quality and diversity of habitat, and to support indigenous wildlife. Mana whenua and Auckland Council have both assisted with plant selection. The cross sections provided here show representative planting and you can view the planting plans on nzta.govt.nz/easternpath.

We received feedback about bark being washed onto the path on Section 1, so for this section we are looking at coir erosion control fabric for steeper areas, and elsewhere post peelings, which are long, fibrous and knit together.



Figure 6: The route for Section 2. To see the route in more detail please refer to the plans posted online here: <u>at.govt.nz/easternpath</u> or <u>nzta.govt.nz/gi2T.</u>

The route of the path

We have sought to create a path that follows the natural geographical contours of the area and provides ease-of-use, whilst also minimising earthworks and any environmental impact.

The detailed design plans are posted here <u>AT.govt.nz/easternpath</u> and on <u>nzta.govt.nz/gi2t</u> so you can see in detail the path route. If you have any trouble accessing these files or would like to know more about any specific location, please <u>contact the project team</u>—we are here to help.

Connections to the path

We often get feedback asking about local connections to the path, particularly if connections will be built from John Rymer Place and Gowing Drive. We understand that getting on and off the path, especially to access schools and transport hubs, is important to locals and will maximise the number of trips that the path can be used for.

Auckland Transport and Auckland Council are responsible for local links and are working with the Ōrākei Local Board on links in some areas. Available budget and prioritisation are issues for delivering links, and we are mindful of keeping the community up to date on these projects.

Auckland Council and Ōrākei Local Board recently delivered connections in Tahapa Reserve, Meadowbank. These connections, and accompanying upgrade work, run from Harapaki Road and Tahapa Crescent (from both the eastern and western ends) and will be connected to the Glen Innes to Tāmaki Drive Shared Path shared path following our construction work in the reserve.

Auckland Transport is investigating links from John Rymer Place and Gowing Drive as part of a business case process which has been part funded by the Ōrākei Local Board. However, at this stage there is no confirmed funding to construct these links.

It is anticipated that over time, more connections will continue to be built.

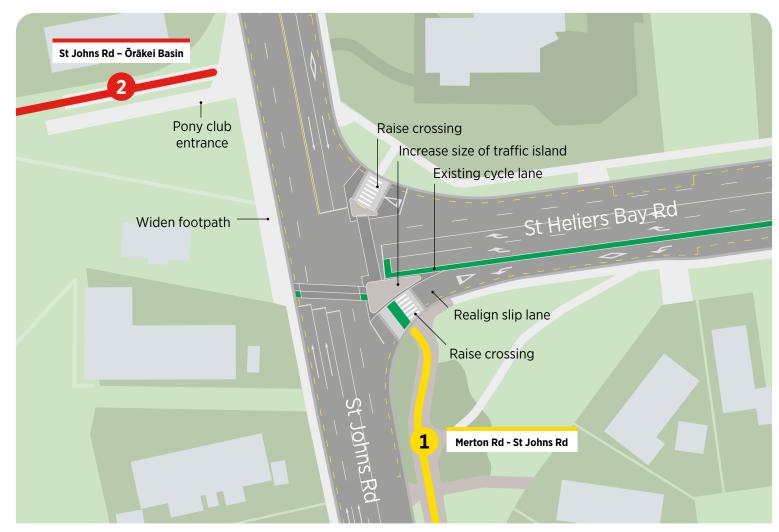


Figure 7: Connection between Section 1 and 2 across St Johns-St Heliers Bay Road intersection.

Connecting Section 2 to Section 1

Several improvements will make it safer and easier for people to connect between Sections 1 and 2 at the St Johns Road - St Heliers Bay Road intersection. We will:

- install a raised cyclist-pedestrian crossing across the slip lane on St Heliers Bay Road and a raised zebra crossing across the slip lane on the opposite side.
- Increase the size of the traffic island to give more room for people on foot and on bikes. (The slip lane will be realigned slightly to make room for a larger island).
- Widen the footpath at the intersection on the western side of St Johns Road.

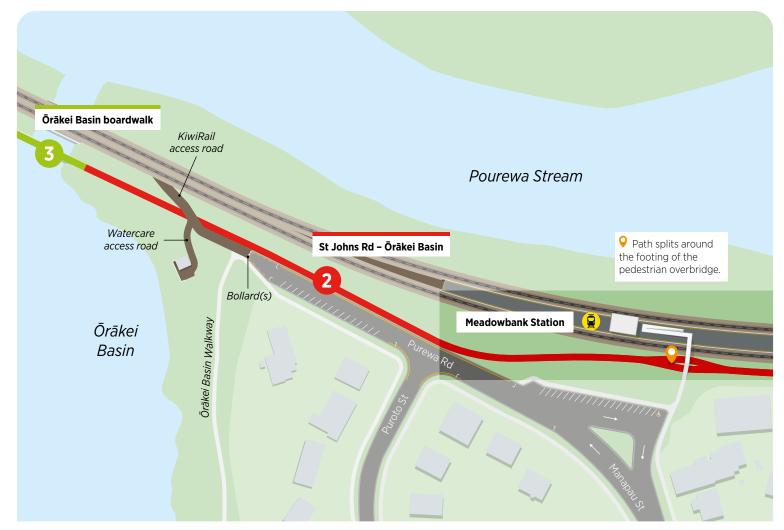


Figure 8: The shared path beside Purewa Road and Meadowbank Station

Connection to the Ōrākei Basin Boardwalk (Section 3)

A 4m wide concrete path will travel past Meadowbank Station and along the northern side of Purewa Road to Ōrākei Basin and connect to the boardwalk (Section 3).

We will need to remove around five car parking spaces at the basin end of Purewa Road, however, we are doing what we can to maximise parking within the remaining space, including changing the parking on the southern side of the road to angled parking.

The shared path will cross KiwiRail and Watercare access roads at the basin end of the path (see diagram above). This is unavoidable, as we are unable to re-route the shared path or move the access points, but we have designed for safety here. Bollards will be installed to prevent unauthorised vehicle access to the maintenance roads and markings/surface treatments, as well as electronic signage (warning lights when the access is in use) to alert path users of the crossing.



