

An aerial photograph of Auckland, New Zealand, showing the city's dense urban landscape and the harbor. A large green rectangular overlay covers the top left portion of the image, containing the title text. The harbor area in the foreground shows various piers, a large ferry, and several boats. The city skyline is visible in the background, with the Sky Tower prominent on the right side. The overall scene is a mix of urban development and natural harbor features.

# QUAY STREET ENHANCEMENTS

STREET/PUBLIC SPACE DESIGN

**AUCKLAND  
DESIGN MANUAL**  
TE PUKA WHAKATAIRANGA | A TĀMAKĪ MAKĀURAU

**LAND  
LAB**

DESIGN THINKING // MĀORI DESIGN CASE STUDY

Downtown, Tāmaki Makaurau



# OVERVIEW

**A unique design collaboration with Mana Whenua brings fundamental change to one of Tāmaki Makaurau's oldest and most important streets.**

Located in the rapidly growing downtown area, the Quay Street Enhancement (QSE) project will transform Quay Street from a busy arterial road into a distinctive people-focused place at the edge of Te Waitematā (Waitematā harbour).

Hospitality, well-being and connection form the basis for a design that interweaves ecology, history and culture. Quay Street will become a place to move, rest and meet, with a strong focus on meeting the needs of pedestrians and cyclists.

Underpinning the QSE project is a collaborative design process between Mana Whenua, Auckland Council, Auckland Transport and a collection of local design firms.

This collaborative design process strengthened and elevated design outcomes to deliver a project that expresses local identity, culture and history that reflects Tāmaki Makaurau and the downtown area.



*Impression of the new Quay Street (LandLAB)*

# KEY PROJECT INFORMATION

## PROJECT TYPE

**STREET & PUBLIC SPACE DESIGN**

## ROHE / LOCATION

**QUAY STREET**

**DOWNTOWN WATERFRONT**

**TĀMAKI MAKĀURAU**

## MANA WHENUA

**NGĀTI WHĀTUA ŌRĀKEI**

**NGĀTI WHĀTUA KI KAIPARA**

**NGĀTI WHĀTUA RUNANGA**

**TE PATUKIRIKIRI**

**NGĀTI TE ATA WAIOHUA**

**TE AHIWARU**

**NGAATI WHANAUNGA**

**NGAI TAI KI TAMAKI**

**NGĀTI MARU**

**TE ĀKITAI WAIOHUA**

**NGĀTI TAMAOHO**

## KĀHUI KAIARATAKI - MANA WHENUA

**SPECIALISTS**

**MAAKA POTINI/TED NGATAKI**

(Ngāti Tamaoho)

**REUBEN KIRKWOOD**

(Ngai Tai Ki Tāmaki)

**RICHELLE KAHUI-MCCONNEL**

(Ngāti Maniapoto)

**TESSA HARRIS**

(Ngai Tai Ki Tāmaki)

## CLIENT

**AUCKLAND COUNCIL**

**AUCKLAND TRANSPORT**

## FUNDING

**AUCKLAND COUNCIL THROUGH LONG**

**TERM PLAN**

## YEAR COMPLETED

**2021**

## PROJECT DURATION

**10 YEARS** (Funding, Planning, Approvals, Resourcing)

**3 YEARS** (Design)

**1 YEAR** (Construction)

## LANDSCAPE ARCHITECTURE/

**URBAN DESIGN**

**LANDLAB**

# PROJECT SUMMARY

The Quay Street Enhancements project (QSE) is a major upgrade of a section of Quay Street between Commerce and Albert Streets.

Located at the meeting point of regional rail, bus & ferry services, the cruise ship terminal and a new commercial precinct, Quay Street and the surrounding area will have the highest density of transport, retail and employment activity in Aotearoa.

To support the changing area Quay Street will be transformed from a busy four lane arterial road into an active pedestrian focused promenade. The intention is to create a people focused space on the edge of Te Waitematā.

Mana Whenua have been comprehensively involved in the project through an active design collaboration. Mana Whenua endorsed design specialists worked closely with the wider design team developing and embedding Mana Whenua values and expressions of culture and history throughout the project.

By avoiding the 'usual' linear Mana Whenua consultation approach in favour of a collaborative engagement programme, the expression of Mana Whenua values through the design were elevated, deepening authenticity of the project.



*Impression of the new Quay Street (LandLAB)*

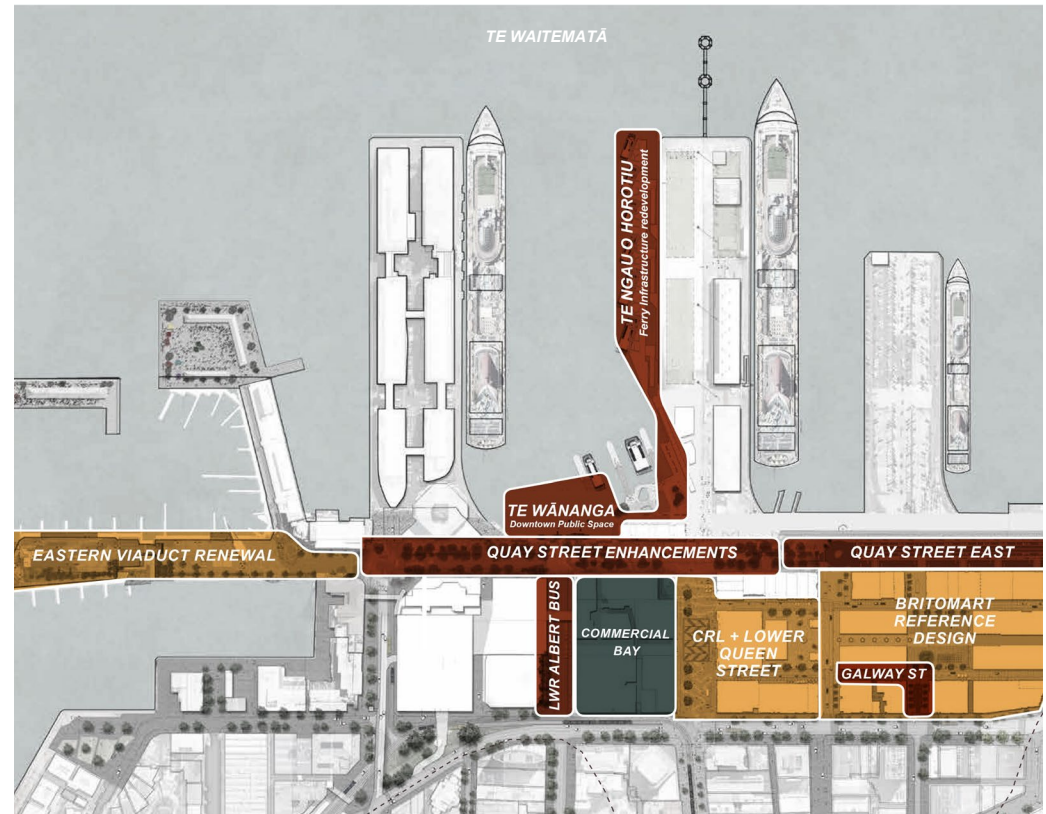
## BACKGROUND DOWNTOWN INFRASTRUCTURE DEVELOPMENT PROGRAMME

The QSE project is one of six projects that collectively form the Downtown Infrastructure Development Programme (DIDP).

The DIDP will transform the City Centre waterfront, delivering a series of people-focused spaces that strengthen the connection between Te Waitematā and the City Centre. The outcome will be a safe, attractive & pedestrian friendly waterfront that is uniquely Tāmaki Makaurau.

The six projects of the DIDP were initially drawn together as a programme to maximise efficiencies in both design and delivery.

Collaboratively working under a single programme has allowed each project's respective design team to pursue unique design narratives and outcomes, while still ensuring there is an overarching design coherence between the projects through the development of DIDP-wide design values and principles (see *page 6*).



QSE & the other DIDP projects (coloured in red)



# MANA WHENUA COLLABORATIVE DESIGN PROCESS

## A Collaborative Approach

The DIDP established a unique collaborative design approach between Mana Whenua, Auckland Council, Auckland Transport and a group of leading local design firms (the City Centre Design Collective).

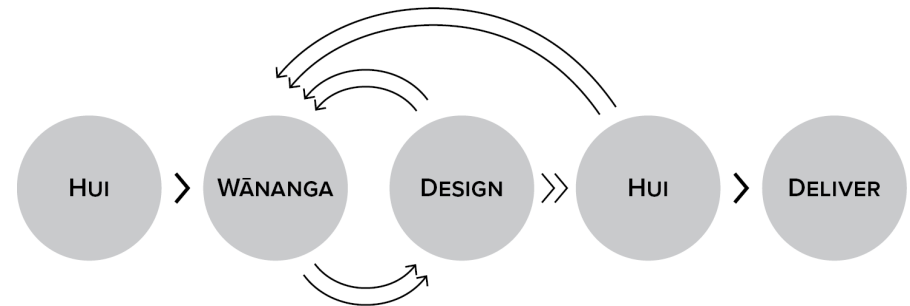
Conventional infrastructure programmes typically use a linear consultation process to engage with Mana Whenua. The DIDP rejected this limiting approach, instead Mana Whenua were integrated into the programme as co-design collaborators through design phases. This approach enabled a stronger recognition and integration of Mana Whenua values and design thinking throughout the programme.

## The Quay Street Enhancements design partnership

Mana Whenua mandated the Kāhui Kaiarataki, a collective of Māori ecology & design specialists, to collaboratively develop the QSE design with LandLAB (the design firm responsible for delivering the project).

The Kāhui Kaiarataki process included regular studio co-design wānanga with LandLAB. This co-design process was undertaken kanohi ki kanohi, pokohiwi ki pokohiwi (face to face and shoulder to shoulder) in numerous studio and workshop sessions. Key themes and values were discussed and then developed from concept through to detailed design. All design thinking was presented back to Mana Whenua for feedback in monthly hui.

The active and iterative design collaboration between the Kāhui Kaiarataki and LandLAB allowed Mana Whenua values and Māori design to be brought into the project in a more effective and meaningful manner than is typically achieved through a conventional linear design consultation approach with Mana Whenua.



# DESIGN PRINCIPLES

## DIDP Design Principles

A set of overarching programme design principles were initially developed for the DIDP. These principles were used to guide the design of the programme's six individual projects. The overarching DIDP design principles are:

- **Mīharo** - extraordinary
- **Manaakitanga** – hosting, generosity
- **Auckland to Tāmaki Makaurau**– an authentic Tāmaki Makaurau

Alongside these, Mana Whenua contributed three other design principles adopted by the DIDP:

- **Tāmaki Makaurau; Herenga Tāngata, Herenga Waka** – provide authentic stories of place
- **Taiao Whakaruruhau** – protection and enhancement of the environment
- **Mana Whenua Cultural Footprint** – celebrate Mana Whenua histories and futures of place

## Quay Street Design Principles

The following project specific design principles were developed by Mana Whenua and LandLAB for the QSE project:

- **Haumi / muka tāngata** – the relationship joining people from the sea to the land and from the land to the sea
- **Papatūānuku / Tāne / Tangaroa** - the connection between whenua (land), ngahere (forest) and moana (sea/harbour).



*Kāhui Kaiarataki member Tessa Harris working in studio on Nōhanga prototypes (LandLAB)*

# TOHU CULTURAL LANDSCAPE

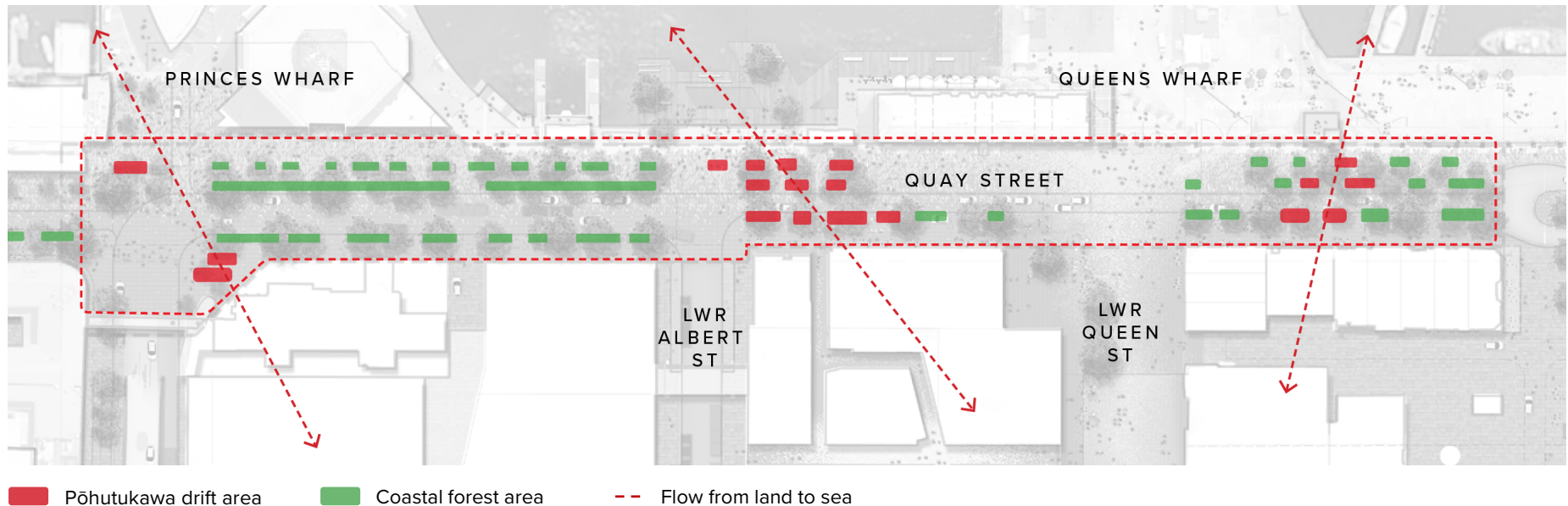
The wider DIDP planting strategy is informed by the original landforms and natural systems of the project site's broader setting.

Historic volcanic activity created drifts of lava that ran through established coastal forests. Over time, hardy pōhutukawa colonised these areas of bare rock to create new forests.

The QSE project draws from these histories to incorporate 'pōhutukawa drifts' into the street's design. These highly-designed spaces integrate seating and paving features amongst pōhutukawa and other hardy plants that typically emerged through natural processes.

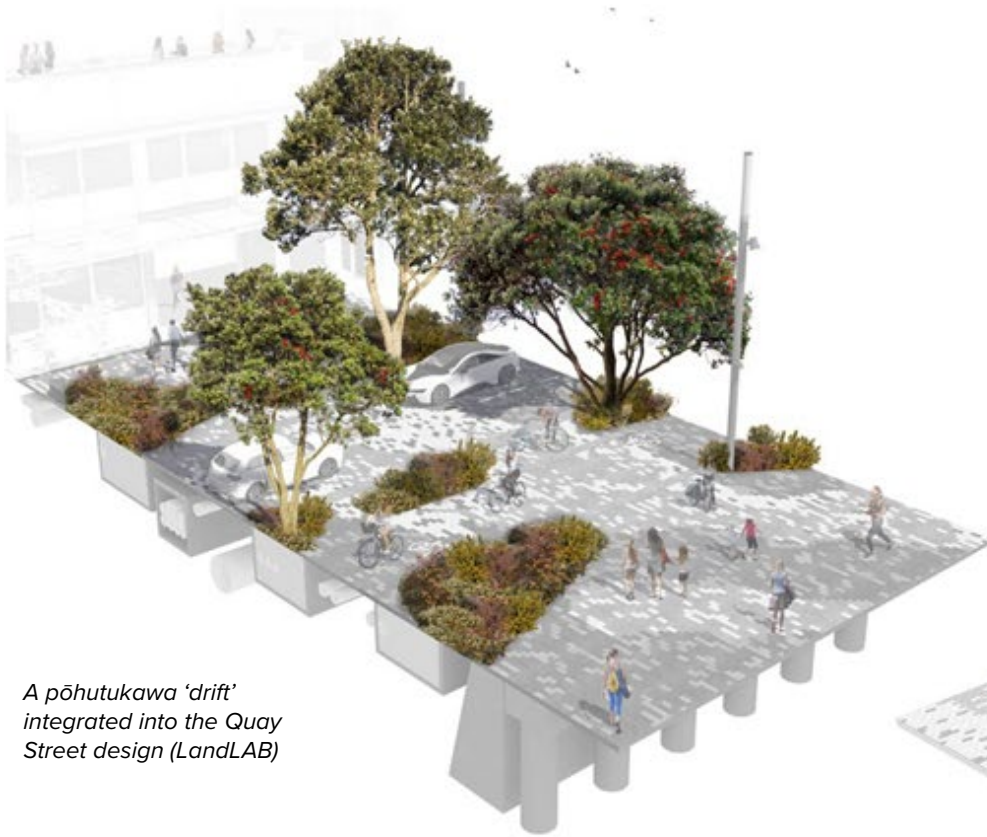
Historic kara (basalt) kerbstones have been re-purposed and integrated as special moments that speak to these 'drift' areas. This kara provides a presence of native stone amongst the imported basalt paving used within QSE.

Trees and planting areas have been carefully positioned within the design to ensure that impacts on views out of the project site to cultural landscape features such as Takarunga (Mount Victoria), Maungauika (North Head), Rangitoto and Te Waitematā are minimised.





# TOHU CULTURAL LANDSCAPE



*A pōhutukawa 'drift'  
integrated into the Quay  
Street design (LandLAB)*



*A rich and varied coastal  
forest planting palette  
integrated into the Quay  
Street design (LandLAB)*

# TAIAO/MAURI TŪ TERRESTRIAL HEALTH & WELLBEING

The project delivers a 100% native planting palette with a richer mixture of plants than is typical for most public realm projects.

Plant selection drew upon mātauranga (traditional knowledge) and the maramataka Māori (traditional lunar calendar) provided by Mana Whenua and Kāhui member Richelle Kahui-McConnell.

With Quay Street being located at the edge of Te Waitematā, mātauranga Māori was engaged to help select plant species that when in flower provide tohu (signs) which indicate the best times to harvest certain kaimoana (seafood), again recognising the interconnection of whenua, ngahere and moana.

Overall the project introduces a rich variety of plants belonging to this area, improving biodiversity, increasing habitat, and providing kai (food) for birds and insects that was not previously present. The planting supports delivery of the Te Kaunihera o Tāmaki Makaurau Urban Ngahere/ Urban Forest initiative.

*A rich and varied coastal forest planting palette is integrated into the Quay Street design, providing habitat and biodiversity (LandLAB)*



Kowharawhara | Astelia  
Astelia solandri



Akiraho | Ake Ake  
Olearia paniculata



Kawakawa | Pepper Tree  
Piper excelsum



Coastal Mahoe  
Melicytus novae-zelandiae



Kiokio | Palm-leaf fern  
Blechnum novae-zelandiae



Rengarenga | Renga lily  
Arthropodium cirratum



New Zealand Iris  
Libertia grandifolia



Wharariki | Coastal Flax  
Phormium cookianum



Carex | Sedge  
Carex dissita



Creeping Fuchsia  
Fuchsia procumbens



Carex | Sedge  
Carex maorica



Karaka | Kōpi  
Corynocarpus laevigatus



Pohuehue | Wire Vine  
Muehlenbeckia complexa



Tarakupenga | Sand Coprosma  
Coprosma acerosa



Autetaranga | Sand Daphne  
Pimelea villosa



Wharawhara | Coastal Astelia  
Astelia banksii



Tauhinu | Cottonwood  
Ozothamnus leptophylla



Tarairi  
Beilschmiedia tarairi



Horokaka | NZ Ice Plant  
Disphyma australe



Korokio | Wire-Netting Bush  
Corokia cotoneaster



Pohutukawa  
Metrosideros excelsa



Pohutukawa (transplants)  
Metrosideros excelsa



Nikau | NZ Palm  
Rhopalostylis sapida



Rata | Northern Rata  
Metrosideros robusta



Puriri  
Vitex lucen



Titoki | Nz Oak  
Alectryon excelsa



Kōwhai  
Sophora microphylla



Rewarewa | NZ Honeysuckle  
Knightia excelsa

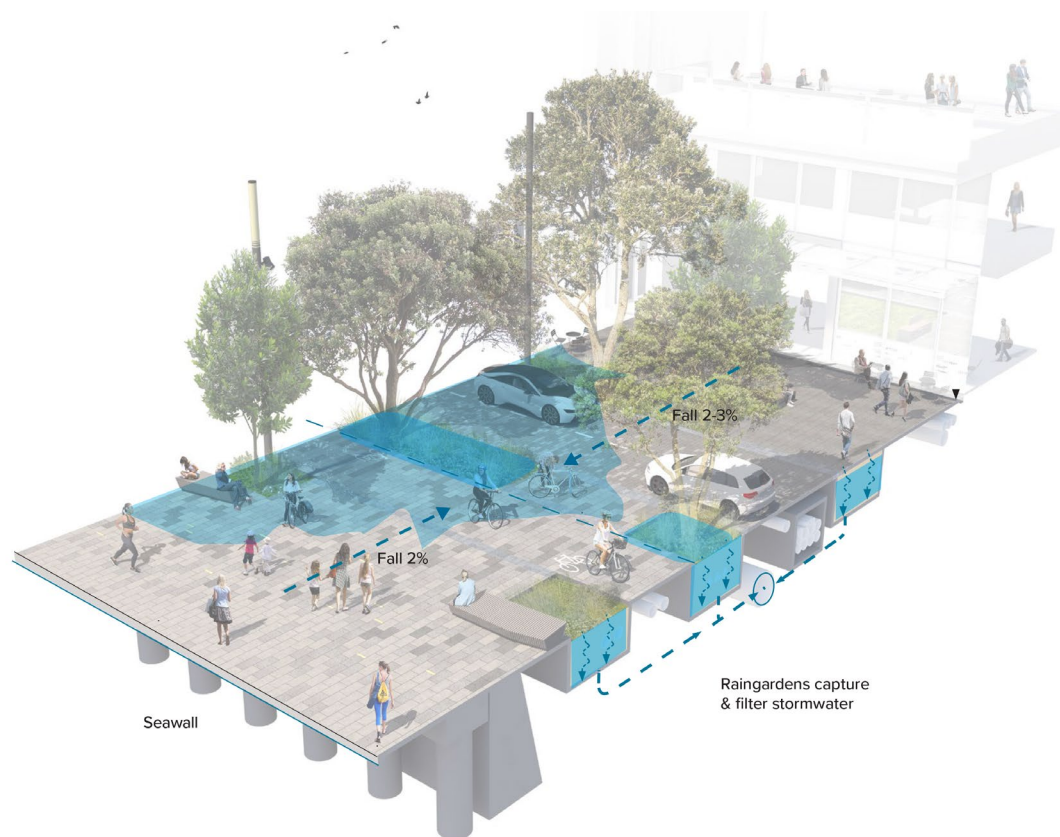
# TAIAO/MAURI TŪ STORMWATER DESIGN

The project is located in the hardest, most urbanised, and most impervious catchment in Tāmaki Makaurau, the Waihorotiu/Queen Street valley.

A key consideration of Mana Whenua was that all projects within the DIDP must recognise the mana (standing/respect) of Te Waitematā. For QSE this meant addressing Quay Street's frequent flooding and the direct discharge of contaminated stormwater during major rainfall events into Te Waitematā. A further project aspiration was having capacity to help address stormwater issues flowing down from higher in the catchment.

The project has been designed to provide treatment of 100% of stormwater within the project boundary for up to a 1-in-10 year rainfall event, and to pick up stormwater generated beyond the site boundaries below that peak event level. This is achieved through rain garden systems which manage and treat stormwater through a combination of strategically placed rain gardens, bio-retention tree pits and proprietary devices.

The project's stormwater performance is well above the expectations of the Auckland Unitary Plan. It provides an outstanding example of how well-designed public realm development can positively address significant urban issues, and simultaneously deliver outcomes focused on Mana Whenua values.



*Rain gardens in the centre of the street collect and filter stormwater before it is discharged into Te Waitematā (LandLAB)*

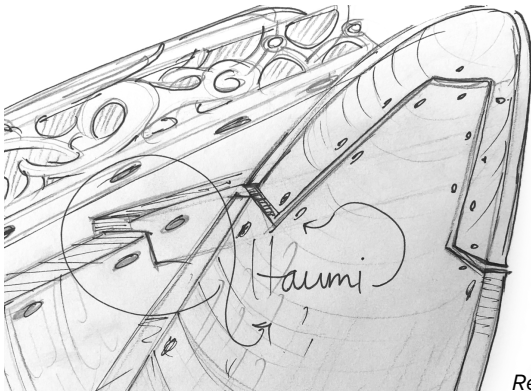


# MAHI TOI NŌHANGA

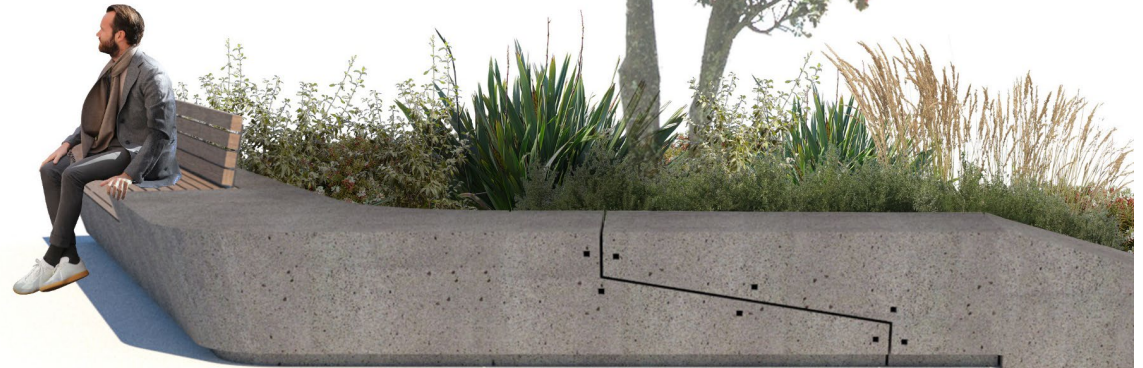
Haumi is a traditional fixing technique typically used to join/bind/extend the length of a waka (canoe), connecting the major structural components of the hull.

Haumi joints have been used in the context of this project to reference the joining/binding of tāngata (people), whenua and moana. The haumi concept appears as both a visible surface pattern and in the way that the components of basalt seating is shaped and constructed.

The haumi joint detail for basalt seating blocks was designed in collaboration with Kāhui member Reuben Kirkwood. The nōhanga (seats) are made up of 5 Tīmaru basalt modules that fit together to create an elongated piece of street furniture. The nōhanga are positioned within the 'pōhutukawa drift' areas at points where the planting and the paving pattern is richer and more detailed, providing an opportunity to pause in areas that provide an elevated sense of nature and place.



Reuben Kirkwood



*Nōhanga seating with  
haumi joint (LandLAB)*

# MAHI TOI POU RAMA

**Pou Rama** are the bespoke steel light posts installed along the length of both sides of Quay Street (within the project's boundaries). **Pou Rama** have been designed as major vertical markers at the connection between Te Waitematā and the City Centre, and speak to the many waka which historically plied these waters, connecting the many settlements of Tāmaki Makaurau and also linking Mana Whenua back to Polynesia.

## Taurapa

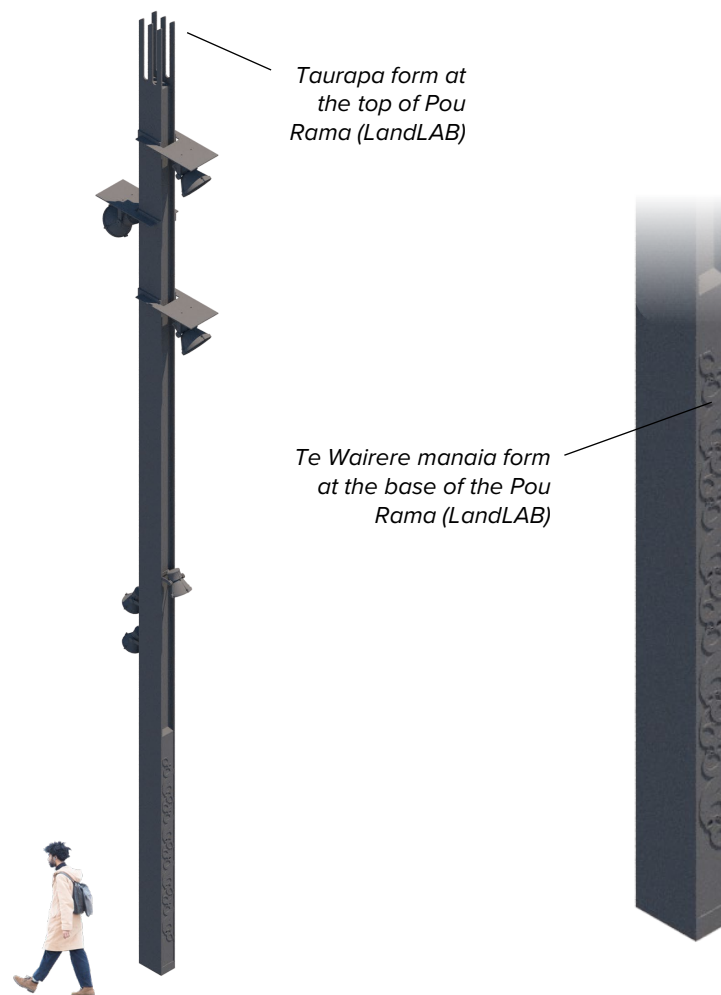
The top of the **Pou Rama** feature a stylised taurapa (sternpost) form. Designed with Kāhui members Reuben Kirkwood, the taurapa form is based on traditional forms including the sternpost of waka taua (traditional war canoes) and maihi (bargeboards) of wharenui (meeting houses).

## Te Wairere

**Te Wairere** is a contemporary expression of a manaia (traditional carving element/feature) designed for the DIDP by Kāhui Kaiarataki member Reuben Kirkwood.

For QSE, **Te Wairere** has been laser cut into steel plate panels, which are incorporated in the base of each of the **Pou Rama** to a height of 3 metres. The panels feature 3mm engraved line work that define and outline details and the design uses layering to throw shadow and create relief consistent with traditional whakairo (carving) techniques.

**Te Wairere** also features in two other DIDP projects, providing a cohesive design link between QSE and these other projects.



*Taurapa form at the top of Pou Rama (LandLAB)*

*Te Wairere manaia form at the base of the Pou Rama (LandLAB)*

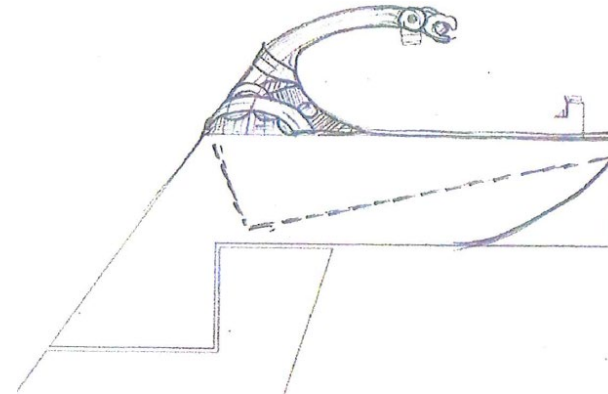
# MAHI TOI PUNAWAI

Kāhui member Reuben Kirkwood and LandLAB collaborated to design four bespoke basalt **Punawai** (drinking fountains) for QSE.

A key design value for the project is to provide manaakitanga (care/hospitality) for users of the space. The **Punawai** offer manaaki for users of the space by providing drinking water, and have been designed to be accessible for wheelchair users.

**Punawai** incorporate a cast bronze water basin designed in a traditional tīheru (waka bailer) form. The kakau (handle) of the tīheru forms the spout through which the water flows, and incorporates the **Te Wairere** manaia design element in another form and material.

A haumi joint feature has been incorporated into the basalt base of each **Punawai**. Different textures have been applied to the Timaru basalt body to highlight this feature.



*Sketch of the Te Wairere form integrated into the spout (top – Reuben Kirkwood).*

*Different surface textures highlight the Punawai haumi joint feature (bottom - LandLAB)*

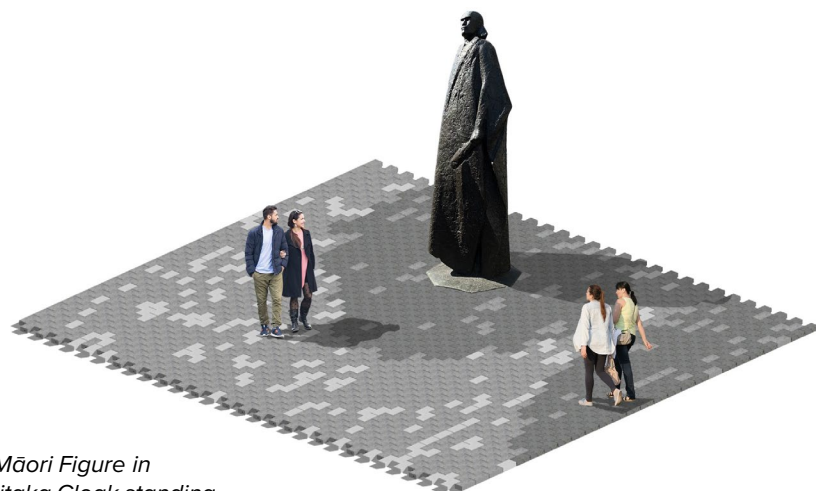




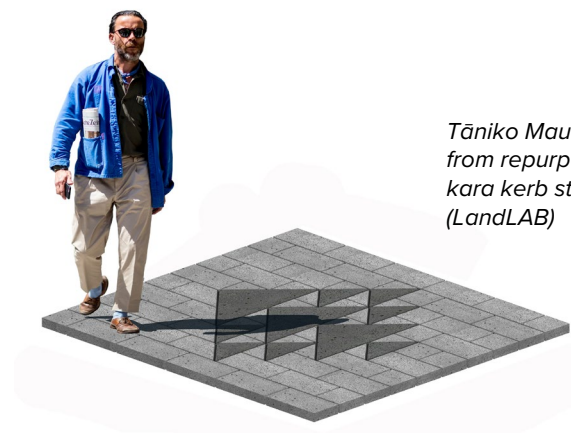
# MAHI TOI PAVING

Waste minimalisation was part of broader discussions with Mana Whenua and Kāhui members, looking to identify ways projects could re-purpose material originally drawn from the Tāmaki Makaurau landscape and the local landscape. A particular focus was on how ‘waste’ materials could be re-imagined and celebrated within the DIDP.

The **Tāniko Maunga** pattern represents the many iwi (tribes) of Tāmaki Makaurau, and has been designed by Kāhui Kaiarataki members Ted Ngataki and Maaka Potini. The pattern is constructed from pavers machined from the historic kara kerb stones of Quay Street.



*A Māori Figure in Kaitaka Cloak standing over the new kara whāriki (LandLAB)*



*Tāniko Maunga pattern from repurposed historic kara kerb stones (LandLAB)*

Re-purposed kara has also been used to create a whāriki (woven mat) beneath the re-located Molly MacAllister bronze statue *A Māori Figure in Kaitaka Cloak*. This statue has a close connection and meaning for Mana Whenua. The sculpture was installed in 1967 and has occupied various locations in the immediate area. The use of local stone as a base marks the respect associated with the sculpture.

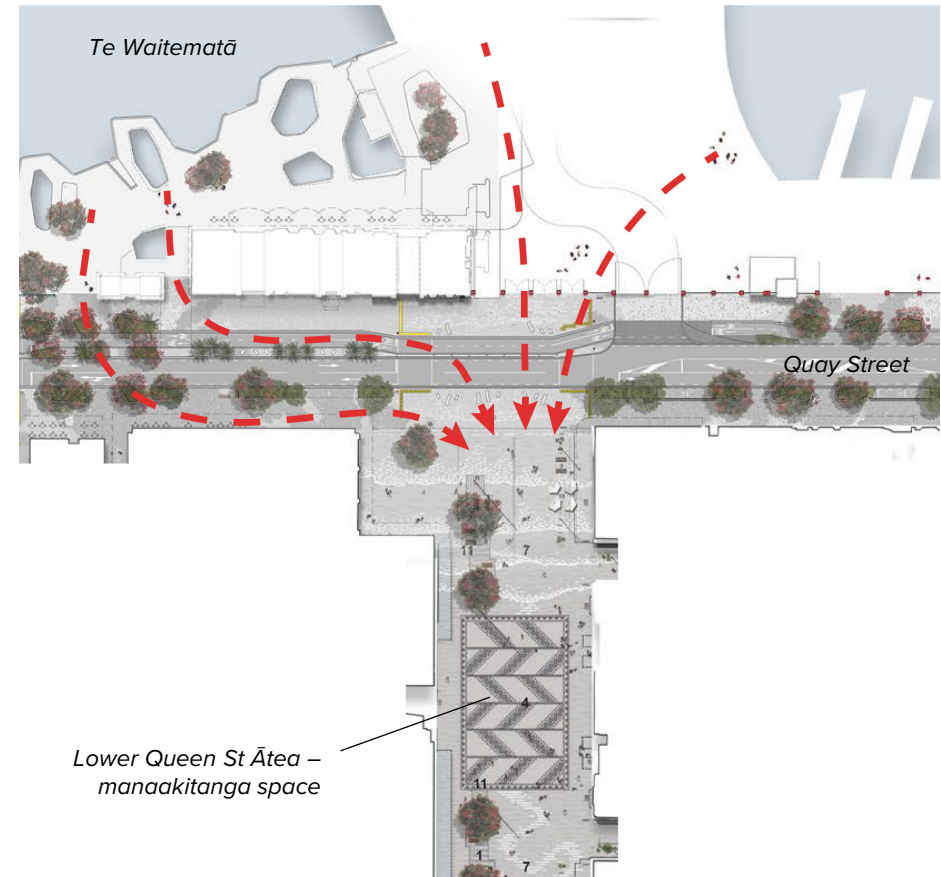
Adjacent to the project is the City Rail Link (CRL) Waitematā (Britomart) Station redevelopment. A key design element of the CRL works in the Lower Queen Street area is a bespoke Mana Whenua paving design which references the original meeting point of the waters of Te Waihorotiu (the river which flows through the Queen Street valley) and Te Waitematā. This CRL design has been respectfully integrated with the QSE project paving.

## AHI KĀ/WHAKAPAPA LIVING PRESENCE & NAMING

Mana Whenua worked with the DIDP to ensure that all design work considered the presence of cultural infrastructure in the immediate surrounds, such as the large **Ātea – manaakitanga** public space (see adjacent diagram) and revised Waitemātā station being delivered as a part of CRL. It was deemed important that all elements of this Downtown area function cohesively according to cultural protocols when required.

With this direction the project and the adjacent Te Wānanga project have been designed to anticipate movement from Te Waitemātā over Quay Street to the **Ātea – manaakitanga** space in Lower Queen Street. This movement will be part of pōhiri/whakatau (traditional welcoming ceremonies) associated with Mana Whenua extending their maanaki to visitors/groups arriving from Te Waitemātā.

A Mana Whenua landscape company and nursery has been engaged to install and manage planting within the project, providing a rich and highly visible expression of kaitiakitanga (Mana Whenua stewardship) and ahi-kā-tanga (Mana Whenua occupation/presence).



# LESSONS LEARNED

The LandLAB design team offers the following reflections:

- Begin Mana Whenua engagement as early as possible
- Listening is key to the process
- The process of working with Mana Whenua and alongside the Kāhui group has enabled a deeper understanding and articulation of the cultural values
- Co-design delivers more meaningful design
- Hosting and co-designing with Mana Whenua in LandLAB's whare / studio environment has helped relationship building, creativity and the sharing of knowledge



*Impression of the new Quay Street (LandLAB)*



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