

## MEMO: URBAN DESIGN

---

**To:** Adriaan Vlok

**Company:** Hounsell Holdings Ltd

**From:** Garth Falconer

**Date:** 16 November 2022

**Project:** Rotokauri Greenway, Artificial Wetlands & Minor Arterial Road

**Subject:** Project Memo – Urban Design

---

Dear Adriaan,

Urban Design Memo

The following is an initial note on the urban design considerations and is not intended as a full Urban Design Report.

### 1. Project Summary

The proposed project for which a fast-track application under the **COVID-19 Recovery (Fast-track Consenting) Act 2020** is being applied for is the consenting and construction of:

- the Rotokauri Greenway;
- the Minor Arterial;
- the bulk watermain under the Minor Arterial and other roads;
- the wastewater rising main, and
- strategic wastewater pipeline and pump station.

The purpose of this project is to provide the necessary infrastructure pertaining to stormwater management and discharge along with critical roading connectivity to enable the residential development of the Rotokauri, a 'live' zoned residential growth cell in Hamilton north. The Rotokauri growth cell has a planned capacity of approximately 7,000 homes for approximately 20,000 people (noting this could increase with the recent proposed changed under HCC's Plan Change 12). Appropriate and necessary infrastructure is required to enable the balance of this growth cell. The key objective of this project is to design, consent and enable high-quality infrastructure that supports well-functioning urban development that can provide for the social, cultural and economic well-being of the community and wider Waikato region

As highlighted above, there are two key components to this proposal, the Greenway and the Minor Arterial, which integrate and need to be designed and consented in parallel. Both pieces of infrastructure are critical features of the existing Rotokauri Structure Plan contained in the Hamilton City District Plan and certified Rotokauri Integrated Catchment Management Plan (ICMP).



## MEMO: URBAN DESIGN

---

The Greenway is a multi-functioning ecological corridor that will provide for stormwater management, open space and an active transport network, traverses a range of adjacent land use and offering a range of opportunities including ecological restoration, water runoff treatment recreational activities and cultural re-instatement. The Greenway will include a fluvial system of swales, artificial wetlands and ponds, with extensive planting of indigenous species along the length of the corridor. The approximately 4.7km length corridor will run between Lake Waiwhakareke (high point) and Lake Rotokauri (low point) to effectively manage and attenuate stormwater within the area, treating stormwater prior to discharge to enhance the water quality and surrounding natural environments and ecosystems. The overarching purpose of the Greenway is to provide treatment, conveyance and storage of flows from Lake Waiwhakareke at the upper extent of the catchment) to Lake Rotokauri approximately 4km north. Construction of the Greenway includes major re-alignment and re-contouring of the existing Rotokauri Drain, as well as an upgrade to the culvert below Exelby Road and the construction of check dams in the lower reaches to assist in managing flows. The Greenway includes a 5 metre wide shared path on the southern side and a 3 metre wide secondary path on the north side.

The Minor Arterial is a key piece of enabling infrastructure that promotes a housing development within Rotokauri. The Minor Arterial extends 3.8km in length from Te Wetini Drive to the northern boundary of Hounsell Holdings land, including the collector road to the Chalmers Road underpass and the northern boundary of Hounsell Holdings land to the underpass that links to Te Kowhai East Road. Supporting three water infrastructure which is sized to cater for the wider catchment is also proposed which includes:

- the bulk watermain under the Minor Arterial;
- wastewater rising main;
- strategic wastewater pipeline, and
- pump station will also be included in the project.

The Minor Arterial will prioritise and enable active transportation with wide footpaths and separated cycleways, supported by planted medians to improve safety. There will be public transport connections provided, which will connect to the Rotokauri Transport Hub (1 kilometre east of Rotokauri), with bus stops along the length of the corridor.

### 2. Receiving Environment

- Impact on local context – fitting the proposal to the local landscape, to the greenfield site and enabling the optimum development of emerging communities, and suburban centre interfaces to ensure strong connections, coherent urban form, and pedestrian focused activities;
- Ensuring continuity and integration of multi-modal movement and areas for runoff, water, flora and fauna together with pedestrians, cyclists and vehicles throughout the extent of the Greenway and Minor Arterial Road;

## MEMO: URBAN DESIGN

---

- Development should create locally appropriate and inspiring spaces and features that encourage people to come together, to be more physically active, and connect with nature.
- Impact on developable land – the Greenway and new Minor Arterial Road will allow for land to become viable for development and increasing the housing supply for the area by up to 7,000 households and to provide additional employment through new commercial and industrial land.
- Cultural impact ensuring the weaving into the development of Mana Whenua input for protection/association/reaffirmation of Mana Whenua values, connection, and association to this landscape.
- Design to provide for creativity through innovative and place-based design solutions (including integration of art, new technology) reflecting local identity and culture.

### 3. Key Effects to Consider:

- Potential disconnect between the designs of the proposed Minor Arterial Road with the proposed Artificial Wetlands and Greenway Corridor that would result in poor connectivity and lack of continuity and focus areas for ecology, revegetation, stormwater, active travel, and legible activity areas.
- Future design phases need to ensure the process by which the design is developed and consider the experience of users, cultural & local heritage.
- Greenway 'Open Space' provision has not been allocated for adjacent 'interface areas' which are fundamental to good urban design outcomes (i.e., strong connection/public amenity or interface between greenway, and future road network and public reserves, accessibility by all ages and abilities,)
- Greenway interface with a potential range of adjacent land uses (industrial, residential, commercial) that may detract from its amenity, safety, and inactive edges.

### 4. Approach to Addressing Effects

Undertake a holistic urban design approach to the design of the greenway corridor/ artificial wetlands and the minor arterial road. This will encompass the Urban Design integration of the artificial wetlands with the Greenway Corridor and the Minor Arterial Road to optimise interfaces with adjacent land-uses ensuring, through design along the corridor, continuous active edges. The strategic location of activity areas and active travel connections, including crossings, will promote high levels of use and surveillance while creating an attractive and an accessible parkland corridor with well-defined entrances, comfortable grades, wayfinding signage, and well-lit circulation routes.

The area's cultural history and association is largely invisible. Through engagement with Mana Whenua there is great opportunity to reflect local landscape character and cultural heritage – including the provision of activities, facilities, forms, artwork, local flora, and materials significant to the reinstatement of their presence and aspirations.

Providing high levels of visual access, legibility, and wayfinding along the length of the Greenway Corridor are part of a comprehensive approach to avoid areas of entrapment and poor surveillance. The design will be

## MEMO: URBAN DESIGN

---

developed and documented through the use of a Crime Prevention Through Environmental Design (CPTED) Assessment report.

### 5. Anticipated Scope

The urban design scope for this project:

- Refined Greenway, Wetlands & Arterial Road Urban Design Masterplan– The approach, moving forward, will be to combine the Greenway, Artificial Wetlands and Minor Arterial Road into one holistic design strategy to ensure these key structures are well integrated with each other and the broader development.
- The current concept designs will be reviewed and tested against earlier assumptions, further site information and analysis, best practice urban design principles and Mana Whenua input.
- A refined Urban Design Masterplan will be developed to ensure a high quality and well-functioning urban environment and be approved prior to preparing the Resource Consent documentation.
- Updated Urban Design Report to include:
  - site, statutory, zoning, and development context
  - Mana Whenua input
  - Opportunities & Constraints
  - Urban Design Strategies (Principles)
  - Key Moves including overall layout, land-use, open space strategy, walking and cycling connections, streetscape, and landscape approach to the Greenway, Artificial Wetlands and Minor Arterial Road streetscape.
  - Crime Prevention Through Environmental Design (CPTED)
  - Assessment of Urban Design Performance

### 6. Conclusions

Overall, the proposed development supports Hamilton City Council’s vision to sustainably expand the city into Rotokauri, one of four key growth areas. The Greenway, and the proposed artificial wetlands, will provide positive ecological and recreational benefits to the environment and future community. The Minor Arterial Road will allow for a coherent and integrated mixed used development of the site. Based on Reset Urban Design’s experience and review of the information received and known to date, there are no urban design assessment reasons the Greenway, Artificial Wetlands and Minor Arterial Road could not proceed under a Fast Track application process.

### 7. Qualifications and experience

**Reset Urban Design (RUD)** is an international award winning specialist urban design and landscape architecture consultancy with established offices in Auckland and Wanaka serving a diverse range of projects across New Zealand, Asia, and the Pacific Islands. Our team of 10 professionals, qualified in the fields of landscape architecture and urban design, has been long involved with multi-disciplinary design teams and collaborations

## MEMO: URBAN DESIGN

---

on large scale comprehensive master-planning on greenfield and regenerative sites. Our project experience ranges from housing and retail developments, master planning and strategic planning, town centres, streetscapes, rural and urban parks, waterfronts, and expert assessments.

Our scope of work, related to Urban Design, we will undertake in this project include:

- Urban Design Masterplan: creating a refined holistic integrated design approach and high-quality urban outcome for the Rotokauri Greenway, adjacent wetlands and the Arterial Road that is resilient, engaging, and provides for a continuous naturalised open space to highly perform across multiple functions in strong collaboration with the project's engineers, ecologists, and planners;
- Urban Design Report: assessing the proposal against the relevant planning criteria and best urban design practise. This report will include the analyses of the surrounding context, urban form, movement networks, recreational facilities, and adjacent land uses.

### 8. Relevant Projects

**Waimanawa** – a proposed 1100 home residential development, of over 140 hectares, in Warkworth linked by a central reserve and river system which features shared paths, extensive plantings and playing fields.

**Bellfield and Opaheke Park** – a 600-lot residential development in Papakura delivered in stages which includes a river and the adjacent 6 hectare Opaheke Recreational Park which also functions as an artificial wetland and flood detention area.

**HuangJinWei Wetland Park, Guangzhou, China**- a 300 hectare wetland park including ecological restoration, active travel, boardwalks, event amphitheatre, market gardens, interpretative centre and playing fields. Adjacent to the Pearl River, the Wetland Park is designed to accommodate periodic flooding. It is also the key open space and amenity hub for a new urban precinct that will house over 3000 people.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Garth Falconer", with a stylized flourish at the end.

Garth Falconer  
Director  
**Reset Urban Design**