
**BEFORE THE WAIKATO DISTRICT COUNCIL
Independent Hearing Commissioner(s)**

IN THE MATTER

of the Resource Management
Act 1991

AND

IN THE MATTER

A Submission by Hounsell
Holdings Limited on the
Waikato Proposed District Plan

**Statement of Rebuttal Evidence of
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Introduction

1. My full name is Judith Victoria Makinson. I am the Transportation Engineering Manager for CKL.
2. I hold a Bachelor's degree in civil engineering and a Master's degree in transport engineering and planning from the University of Salford (UK). I am a Chartered Professional Engineer and am a Chartered Member of Engineering New Zealand. I am also a Chartered Engineer in the United Kingdom and a Member of the Institution of Civil Engineers. I have over 20 years' experience working as a transport engineer in both New Zealand and the United Kingdom with Arup, WSP Group, Gifford, TDG, Stantec and CKL. I am also qualified as an Independent Hearing Commissioner and recently sat on the panel considering the Te Ahu a Turanga State Highway 3 Manawatu Gorge Road replacement project.
3. I confirm that I have read and am familiar with the Code of Conduct for Expert Witnesses in the current (2014) Environment Court Practice Note. I agree to comply with this Code of Conduct in giving evidence to this hearing and have done so in preparing this written brief. The evidence I am giving is within my area of expertise, except where I state I am relying on the opinion or evidence of other witnesses. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed. I understand it is my duty to assist the hearing committee impartially on relevant matters within my area of expertise and that I am not an advocate for the party which has engaged me.
4. I prepared a desk top review considering the traffic and transportation implications of the proposed rezoning of 140ha of land at 268 Te Kowhai Road / 30 Mathers Road, Te Kowhai to either live or deferred residential zoning, and identified a range of anticipated infrastructure upgrades required, subject to more detailed assessment being undertaken.
5. I have read the 'Section 42 Report Hearing 25: Zone extents Te Kowhai' ("S42A report") prepared by Mr Jonathan Clease, 16 April 2021, paying particular regard to Section 6. I have also read the 'Section 42A Report Hearing 25: Zone Extents Te

Kowhai Addendum' ("S42A report Addendum") prepared by Mr Cleese, 21 April 2021.

6. My rebuttal evidence that follows consider the matters raised in the S42A report, namely:
 - (i) Connectivity of the site with adjacent growth cell and urban areas
 - (ii) the appropriateness of delaying detailed analysis of traffic effects until live zoning is imminent.
7. Whether a Hamilton Urban Expansion Overlay ("UEA") or Future Urban Zone ("FUZ") is most applicable, and the scope of the submission to consider additional land for rezoning will be addressed in rebuttal planning evidence of Mr. Batchelar and legal submissions.

Connectivity

8. In paragraphs 167 and 169 of the S42A Report, the submissions against the proposed rezoning by Waikato Regional Council, Waka Kotahi New Zealand Transport Agency ("Waka Kotahi") and Hamilton City Council ("HCC") are summarised as being based on the lack of infrastructure provision and connectivity to support development within the subject site.
9. The subject site is stated as being *"located near a large interchange with the expressway and us northwest of the large Te Rapa industrial hub located on the eastern side of the expressway."*¹
10. I have reviewed the connectivity of the proposed area of rezoning in the context of the:
 - (i) Rotokauri North Structure Plan as per Plan Change 7 of the HCC Operative District Plan;
 - (ii) the wider Rotokauri Structure Plan as per Appendix 2 Structure Plans of the HCC Operative District Plan; and
 - (iii) the wider settlement patterns in and around the urban core area.

¹ Section 42 Report Hearing 25: Zone Extents Te Kowhai, paragraph 168

11. A Masterplan has also been prepared by Boffa Miskell to give scale and context to potential future development within this area. This is shown as Figure 1, Annexure A.
12. Figure 1 shows the intention to have an arterial road forming a loop through the site, allowing connection at both Onion Road and State Highway 39 (“SH39”). The function of the arterial road network is to provide for multimodal access into the cell and to allow for public transport provision in future. This would be supported by a network of local roads and on and off road walking and cycling pathways within the new development area itself and connecting to external areas as appropriate. There is no reason why such roads cannot meet the requirements of the relevant District Plan. The masterplan also allows for significant open space, neighbourhood centre, public transport hub, new primary school and walking and cycling networks.
13. Figure 2, Annexure A shows the proposed area of rezoning in the context of the surrounding urban pattern and anticipated growth cells.
14. Figure 2 shows that there are significant connectivity opportunities to a range of day to day requirements as set out in the following sections.
15. The site is adjacent to the Rotokauri Growth cell and the Te Rapa employment areas and provides opportunities as follows:
 - (i) connection to significant employment areas in the Rotokauri growth cell and wider Te Rapa area supported by the Employment and Industrial zoning and existing development;
 - (ii) connection to an extended employment area north of Te Kowhai Road and bounded by SH39 and SH1;
 - (iii) access to retail and leisure services within The Base shopping centre and Rotokauri commercial centre as identified in the Rotokauri Structure Plan;
 - (iv) access to primary schooling within the rezoned area of land;
 - (v) access to neighbourhood goods and services within a neighbourhood centre in the rezoned land;
 - (vi) secondary schooling at the Rotouna High school via Wairere Drive at present and the Northern Crossing in Figure 2. The HCC Long Term Plan includes the Northern

Crossing as a future project. The designation of the corridor in the base in 2026/27 and 2027/28. The construction is currently identified as an opportunity from 2028/29 with \$4.548m assigned. This could potentially also address the Onion Road / Ruffell Road intersection and existing concerns over the North Island Main Trunk rail level crossing adjacent to it.

16. The site provides the opportunity to extend and connect to existing walking and cycling networks as follows:
 - (i) linkage to the existing WEX shared off road path running south to Avalon Drive via the existing crossing points on the SH39 roundabout and via Te Kowhai Road. Development within the rezoned area would be anticipated to provide these linkages;
 - (ii) linkage to Horotiu and the north for cyclists via the existing on road route using Onion Road and Holmes Road, connecting the Waikato Expressway off-road path to the Horotiu Interchange. Upgrading of Onion Road (Mathers Road to Holmes Road) within the existing road corridor to create on-road cycling or shared off-road shared paths;
 - (iii) direct access to the Koura Road on-road cycle lane, with the potential for off-road facilities to be provided on the north side of SH39 along the site frontage; and
 - (iv) connection to the Rotokauri growth cell walking and cycling network as that is delivered by others.

17. The site provides the opportunity to provide for and connect to public transport networks as follows:
 - (i) creation of a road network suitable to accommodate bus routes that can provide connectivity with the new Rotokauri Transport Hub. Services will need to be developed in conjunction with Waikato Regional Council as per other identified growth cells in the city;
 - (ii) creation of a road network that allows for through routing and connection with the Rotokauri growth cell; and

- (iii) allowing for potential public transport hub within the rezoned land subject to input from Waikato Regional Council.
18. The site provides the opportunity for the development of suitable roading networks as follows:
- (i) creation of a suitable collector road and arterial road network allowing connection through the site as an extension of the Rotokauri minor arterial road identified in the Rotokauri Structure Plan;
 - (ii) potential alignment of the SH39 end of any on site arterial / collector spine road with the eastern roundabout identified in the Rotokauri North Structure Plan to create a seamless link with the wider development area; and
 - (iii) urbanisation of north side of SH39 to reflect the urbanisation expected on the southern side as part of the Rotokauri North Structure Plan
19. When considering the context of the proposed rezoning area, it is clear that whilst it does sit to the west of the Waikato Expressway, the majority of Rotokauri is in a similar location and overcomes the apparent barriers to connectivity. The site has the potential to be fully integrated with current and future transportation networks, without impinging on the ability of Waka Kotahi, HCC and Waikato District Council to deliver their identified network upgrades. It is also integrated with known expected settlement patterns and can provide a high level of multimodal connectivity with the same, without being depending on their delivery.

Waikato Regional Transportation Model

20. The Waikato Regional Transportation Model (“WRTM”) is the strategic level traffic modelling tool used by District Councils, Waikato Regional Council and Waka Kotahi to assist in the land use planning and transportation infrastructure investment decisions. It is jointly funded by the Waikato Local Authority Shares Services (“WLASS”) and is currently managed and operated by Stantec on their behalf. Broadly speaking, the WRTM is updated periodically in order to:
- (i) align with revised growth strategies and land use patterns;

- (ii) reflect the most up to date Census data which is one of the key inputs to the model;
and
 - (iii) ensure the modelled transportation network reflects the existing and committed network.
- 21. The current version of WRTM was updated to allow for the 2013 census. It also significantly increased the number of model zones, making a more fine-grained assessment of implications of large scale development activity and network changes possible.
- 22. I am aware from consultation with Shaun Lion-Cachet, the WRTM Project Manager on behalf of WLASS that:
 - (i) WRTM is currently being updated to reflect the 2018 Census
 - (ii) in relation to jobs and households, WRTM is also being aligned with the Waikato Integrated Scenario Explorer (WISE) model, which is an economic, environmental, demographic and land use forecasting model
 - (iii) the future model years are likely to be updated to match the census years of 2028, 2038 etc. but this is not yet confirmed;
- 23. The updated WRTM and associated peer reviews are expected to be completed by 1 July 2021. Until such time, the older version of WRTM remains the most applicable tool to assess the effects of large scale development.
- 24. In my initial desk top assessment of traffic and transportation effects of the proposed rezoning, concluded that significant further assessment would be required to understand the detailed effects of the proposal. This has been quoted by Mr Clease in paragraphs 10 and 11 of his S42A Addendum. It is not my intention to disagree with this assessment, but to put them into context.
- 25. The submission made by Hounsell Holdings Ltd was for residential zoning. Mr. Batchelar's evidence and Section 32AA report assessed as the more appropriate alternative at this time for a deferred zoning, through the application of a UEA overlay.
- 26. I agree with the evidence statements of Mr Wood and Mr Clease that the level of assessment undertaken to date has not identified the level of infrastructure needed to support development of this scale for residential zoning. However, as set out in Section 5

of Mr Batchelar's evidence, protection of this land for future residential use is appropriate and should be factored in to strategic infrastructure decision making.

27. In either instance, WRTM would be the appropriate assessment tool. However, the use of the existing WRTM model at this time would most likely lead to the need to repeat the analysis once WRTM is updated to the 2018 Census data. It is my opinion that a high level consideration of transportation linkages, opportunities and constraints is sufficient to support a future urban form of zoning, subject to suitable rules being applied that make the undertaking of a suitably scaled and detailed Integrated Transportation Assessment a prerequisite of development of the land.
28. In my opinion, this approach would address the timing disjoint between the Waikato District Plan Review and WRTM update and ensures that the most up to date version of WRTM is used to assess the traffic and transportation effects of future residential development in this area. It also supports the confirmation of appropriate infrastructure requirements in the context of the prevailing and planned environment at the time of the zoning.

Conclusions

29. In my opinion, the site has a high level of connectivity to Te Rapa and Rotokauri where there are existing significant employment, retail and service provision opportunities, as well as zoning supporting increased future employment growth. The site has excellent opportunities to connect to both existing and planned walking, cycling and public transport networks as well as supporting the provision of an appropriate internal transport network hierarchy.
30. The proposed area of rezoning can align with and connect to the adjacent Rotokauri North Structure Plan and wider Rotokauri growth cell, without being dependent on these areas.
31. Suitable consideration has been given to the likely level of transportation infrastructure requirements to support rezoning on a deferred future urban basis. At the time that operative zoning becomes appropriate, a suitably detailed and scaled Integrated Transportation Assessment can be undertaken, using the most updated version of WRTM as set out above. This will ensure that the effects of development

and the necessary supporting transport infrastructure can be assessed in prevailing context.

A handwritten signature in black ink, appearing to read 'JM', with a stylized flourish at the end.

Judith Makinson






















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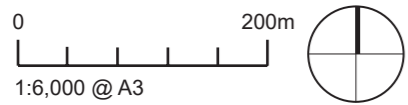
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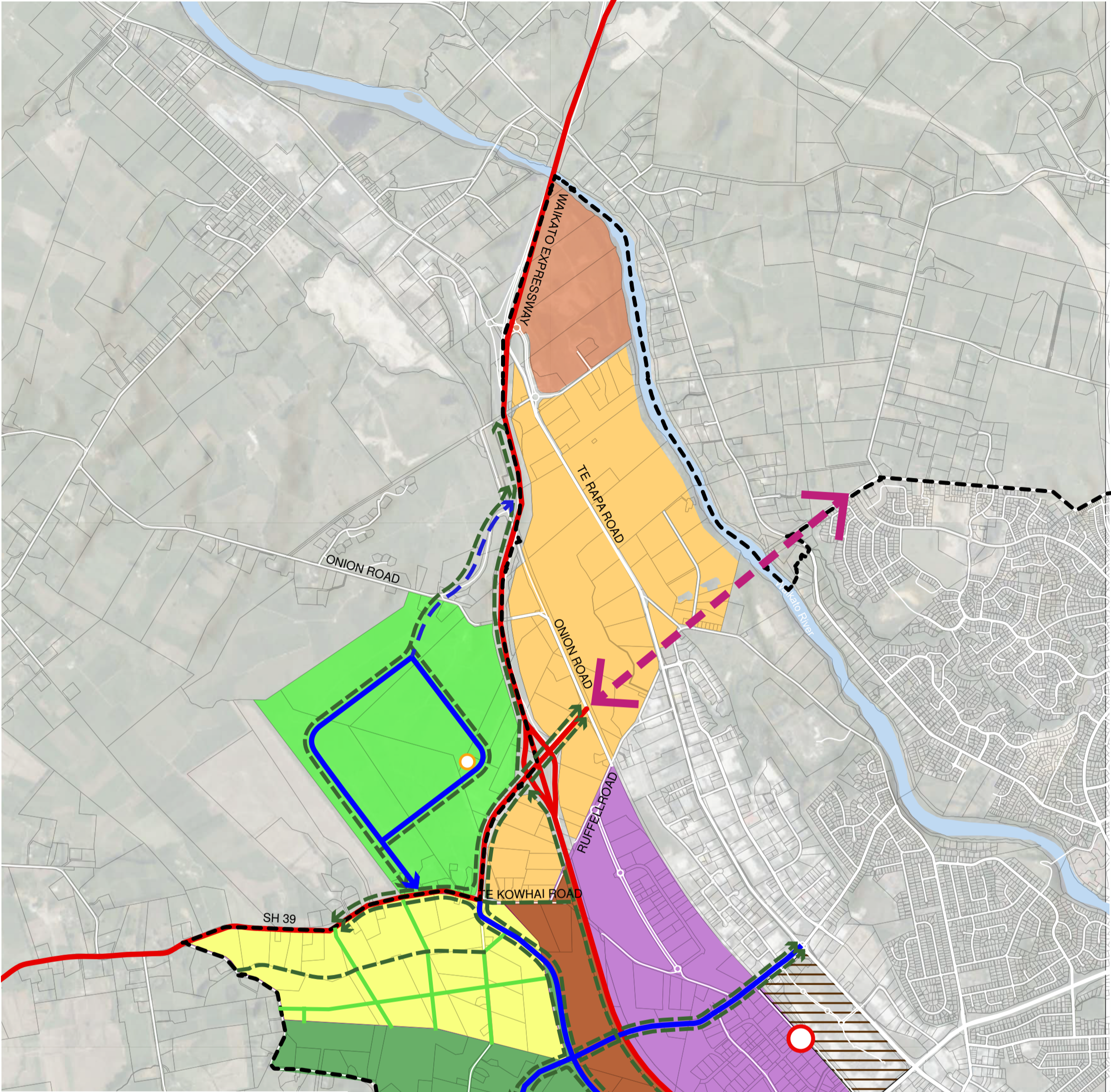
Annexure 1 – Figures

TE KOWHAI EAST DEVELOPMENT - FRAMEWORK PLAN

LEGEND

-  DEVELOPMENT BOUNDARY - CURRENT
-  DEVELOPMENT BOUNDARY - EXPANDED
-  EXISTING ROAD (EXTERNAL)
-  TRANSPORT CORRIDOR (MULTI-MODAL)
-  TRANSPORT LINK (INTERNAL)
-  PT HUB
-  KEY INTERSECTION
-  EXITING NETWORK CONNECTION
-  BRIDGE
-  PT ROUTE
-  WALKWAY / CYCLEWAY CONNECTIONS
-  STREAM / CONVEYANCE SWALE
-  STORMWATER POND
-  RESIDENTIAL
-  AFFORDABLE HOUSING (VILLAGE)
-  MEDIUM / HIGH DENSITY
-  NEIGHBOURHOOD CENTRE
-  PRIMARY SCHOOL
-  OPEN SPACE RESERVE
-  STORMWATER RESERVE (INCL. WALKWAY / CYCLEWAY)
-  STATE HIGHWAY BUFFER RESERVE





- Legend**
- Te Awa Lakes Structure Plan Area
 - Te Kowhai East Development Area
 - Rotokauri North Structure Plan Area
 - Rotokauri Structure Plan Area
 - Rotokauri Employment Zone
 - Te Rapa North Industrial Zone Plan Change
 - Te Rapa Gateway Industrial Zone
 - The Base
 - Hamilton City Boundary
 - State Highway
 - Arterial Roads
 - Walking and Cycling Connection
 - Collector Road - Rotokauri North
 - Proposed Northern Crossing
 - Public Transport Hub
 - Public Transport Hub (Proposed)

