PROPOSED PLAN CHANGE 36
TO THE TAUPO DISTRICT COUNCIL

APPENDICES TO THE STATEMENT OF REBUTTAL EVIDENCE OF MARY MONZINGO

Mary Monzingo Ltd
Landscape Architect

APPENDIX 1

Revised Definition of Effects Ratings

DEFINITIONS OF EFFECTS RATINGS

28 May 2020

Negligible effects

The proposal would have a so small or so unimportant, as to not be worth considering, effect on the:

- character or key attributes of the receiving landscape; and/or
- the visual context within which it is viewed and/or
- the perceived amenity derived from it.

Very low effects

The proposal would have a very small or very unimportant effect on the:

- character or key attributes of the receiving landscape; and/or
- the visual context within which it is viewed and/or
- the perceived amenity derived from it.

Low effects

The proposal would have a small or unimportant effect on the :

- character or key attributes of the receiving landscape; and/or
- the visual context within which it is viewed and/or
- the perceived amenity derived from it.

Moderate effects

The proposal would have a moderate effect on the :

- character or key attributes of the receiving landscape; and/or
- the visual context within which it is viewed and/or
- the perceived amenity derived from it.

High effects

The proposal would have a significant effect on the :

- character or key attributes of the receiving landscape; and/or
- the visual context within which it is viewed and/or
- the perceived amenity derived from it.

Very high effects

The proposal would have a significantly change the :

- character or key attributes of the receiving landscape; and/or
- the visual context within which it is viewed and/or
- the perceived amenity derived from it.

Extreme effects

The proposal would result in the total loss of the characteristics and key attributes of the surrounding landscape and/or visual context amounting to a complete change in the landscape character.

APPENDIX 2
Locations of OLA 60

GREAT LAKE TAUPŌ
Taupō District Council

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LOCATIONS OF OLA 60

Sheet 1

3352.800 Meters

Scale = 1: 64,000 (A3)

Date Created: 27 May 2020 3:31 p.m.

Map Produced From Mapi

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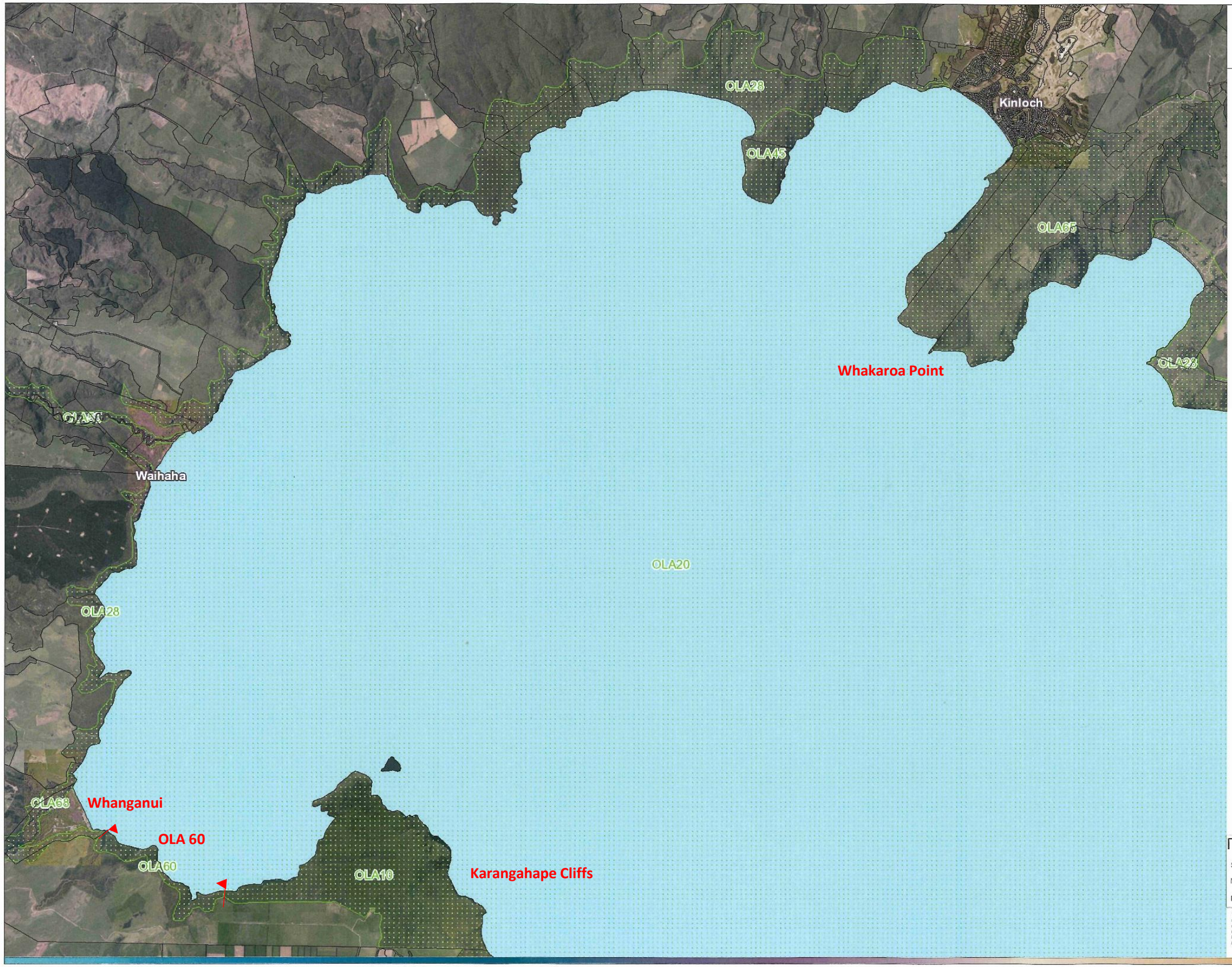
GREAT LAKE TAUPŌ
Taupō District Council

LOCATIONS OF OLA 60

Sheet 2



3300.118 Meters

Scale = 1: 64,000 (A3)

Map Produced from Mapi

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APPENDIX 3

Descriptions of OLA 13, 40 and 10

DESCRIPTIONS OF OLA 13, 40 AND 10

OLA 13	Kākaramea-Tihia Massif	Highly prominent land form with two main peaks; Kākaramea at 1301m above sea level and Tihia at 1165m above sea level. Geothermal vents on the north side. Particularly high value for its regenerating native bush, and large podocarp trees. High level of vividness and memorability, contributing to one of the most scenic sections of SH41. Provides a natural backdrop to Turangi, Tokaanu, and Waihī communities. Electricity transmission infrastructure traverses this landscape area, below the 600m contour on the north east face. Highly valued for its sense of place and identity particularly or Tokaanu and Waihī.
OLA 40	Rangitukua	Very high physical prominence, highest rhyolite dome on the lake margin at 726m above sea level (346m above lake level). Native regenerating bush cover on the upper slopes provides a very high degree of naturalness and uniqueness. Forms the back drop of Kuratau and Omori settlements, very high importance to local communities. Forms part of a sequence of prominent bluffs on the lake edge.
OLA 10	Karangahape Cliffs	Highly prominent feature, tall vertical cliffs rising some 340m above the Lake Taupō water level, cliffs void of vegetation with regenerating bush on less sheer areas. High importance to the district, forming the most prominent headland within the lake. Very high level of amenity value and scenic qualities. Referred to in many promotional brochures and accommodation facilities with views to the cliffs. Iconic feature of Lake Taupō with very high historical and cultural values.

APPENDIX 4

Revised Appendix 8:

Whareroa North Outline Development Plan

Appendix 8: Whareroa North Outline Development Plan

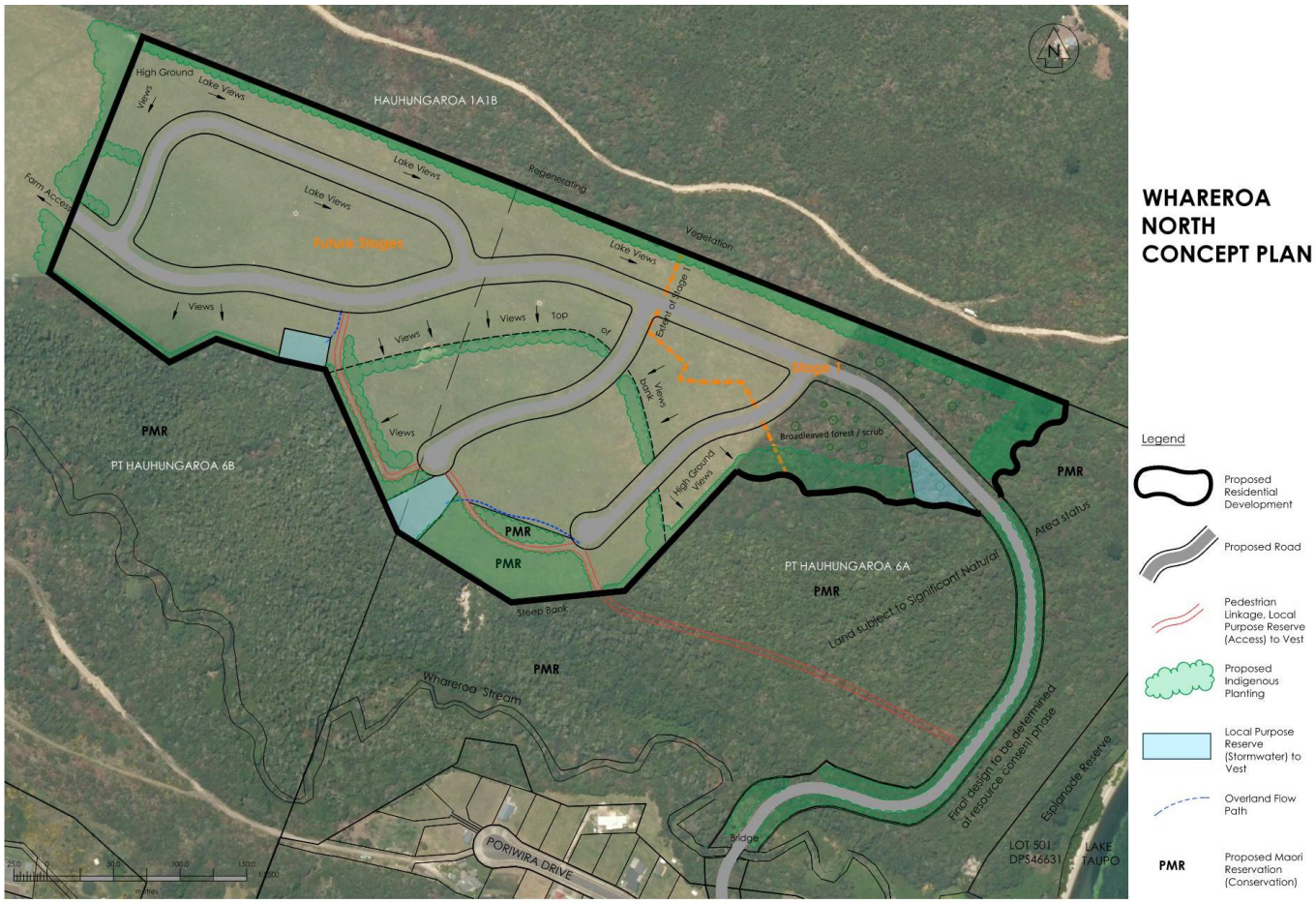
1 Context

This Outline Development Plan enables extension of Whareroa North as planned by the maori landowners since the 1970's and provided for in numerous local authority planning documents since that time, including the Southern Settlements Structure Plan and Section 3e of the operative Taupo District Plan.

The site is above the Whareroa Stream and vegetated escarpment immediately north of Whareroa Village and separated from Lake Taupo (to the east) by an Esplanade Reserve. Maori land blocks and Poukura Marae are to the immediate north, and a manuka plantation on Whareroa Station is on maori land to the west. Part of Whareroa Station is included in the Whareroa North proposal.

2 Subdivision Design

The area zoned "*Residential Environment*" at Whareroa North is an elevated 14.6505ha parcel of land proposed to be developed in accordance with the "Whareroa North Concept Plan" below.



Key outcomes of the subdivision design are:

a) Provide direct connection (pedestrian and roading) with the existing village of Whareroa to the immediate south;

b) Low impact stormwater management approach consistent with the conceptual design stormwater plan in Section 4, including preventing adverse impact (in terms of stormwater quality and quantity and erosion risk) on the adjoining vegetated escarpment and Whareroa Stream below. Note: Area required for stormwater ponds (and associated Local Purpose Reserves) is subject to geotechnical investigations and final stormwater design and pond sizing to be undertaken at detailed design stage;
c) Efficient extension of existing water supply and wastewater reticulation currently terminating at the intersection of Whareroa Road and Poriwira Drive (where capacity has already been provided), and connection of every residential lot to community water and wastewater systems, as well as electricity and telecommunication networks;
d) Arrest existing erosion at low point along escarpment edge;
e) Planting of new and supplementary indigenous vegetation in accordance with Schedule 1 Attached – "Whareroa North Indigenous Planting Proposal";
f) Avoid residential lots within areas of landscape and/or natural value identified in the Taupo District Plan;
g) Minimise indigenous vegetation removal, earthworks, and the footprint of any structures (including bridge, retaining structures) and roading within SNA062 and/or OLA60. Note: The subdivision application for Stage 1 shall include a report prepared by a suitably qualified engineer, landscape architect and ecologist outlining how the proposed road design minimises physical intrusion into SNA062 and OLA60 while providing a safe and suitable road connection;
h) In the area shown as "Broadleaved forest / scrub", provision for house sites near the road and protected indigenous vegetation behind (to minimise fragmentation and achieve a protected buffer to SNA062);
i) Manage the adverse effects of loss of indigenous vegetation, fauna and their habitats through best practice management and restoration methods. This includes:
    - careful timing of any indigenous vegetation removal from SNA062, wildlife relocations, habitat replacement and enhancement;
    - pest predator control;
    - dense buffer planting (including with future canopy species) along new edges created by road through SNA062;
    - minimum 2m wide dense buffer planting of predominantly flax (to minimise foot traffic and rubbish / garden waste dumping) where residential lots adjoin SNA062;
    - other restoration activities that follow the 'hierarchy of mitigation' to avoid, remedy and mitigate;
    - offsetting or compensation of any significant residual adverse effects in accordance with best ecological practice to achieve a Net Environmental Gain. Note: any offset planting required will be undertaken within, or contiguous with SNA062;
    - an Ecological Management Plan (EMP) prepared by a suitably qualified and experienced ecologist and incorporating the matters above shall be provided for approval by TDC in the Stage 1 subdivision application. The EMP shall detail methods to minimise and mitigate potential adverse effects on ecological values,

and to offset any significant residual adverse effects in accordance with best ecological practice for biodiversity offsetting in New Zealand. The EMP shall acknowledge and address edge effects and fragmentation associated with the road access and particular values within the Whareroa Stream riparian habitat which supports older, larger trees within an area of higher moisture content;

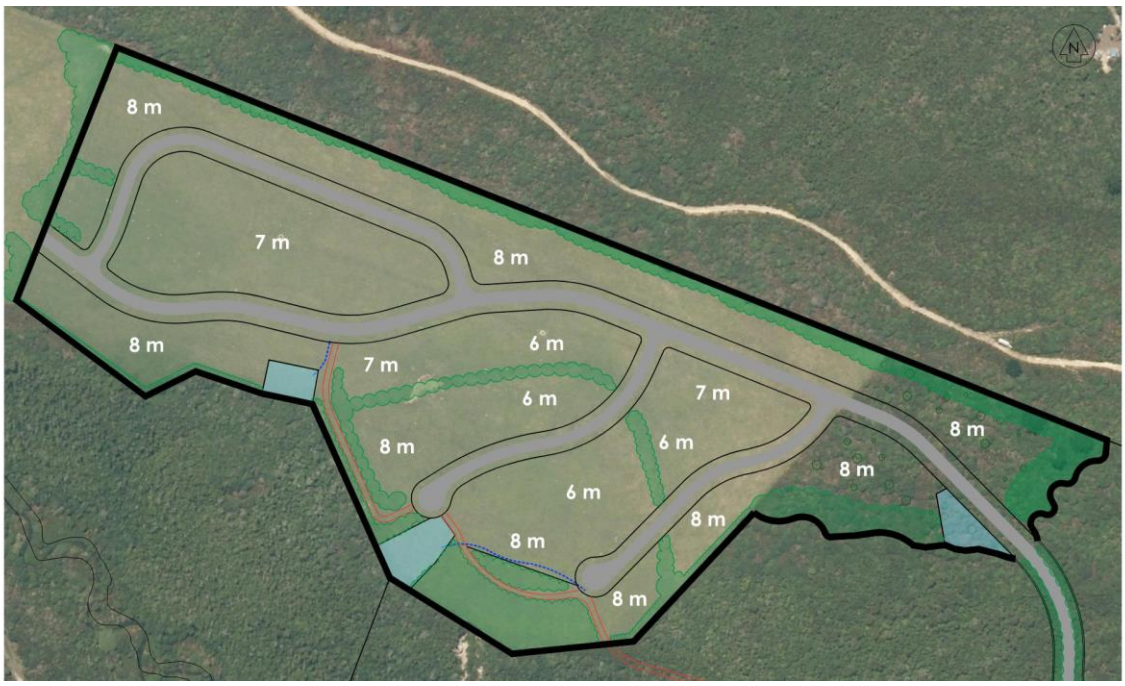
j) Legal protection in perpetuity of the following areas of indigenous vegetation:
   - SNA062 vegetation and areas of any ecological mitigation or offset planting;
   - Areas shown as "Proposed indigenous planting" on the Whareroa North concept plan (and any other indigenous vegetation planting undertaken as part of the subdivision construction), including the areas identified in the part of the site identified as "Broadleaved forest / scrub". Note: In the "Broadleaved forest / scrub" area the "Proposed indigenous planting" will supplement existing indigenous vegetation to remain;

   Note: where the indigenous vegetation described above is within a residential allotment, protection (including the obligation to maintain the vegetation and replace dead or dying plants) will be secured by Consent Notice or other suitable legal mechanism.

k) Reflect the exercise of kaitiakitanga and on-going cultural connection by the landowners through approach to stormwater management, land tenure options, proximity to Poukura Marae, and the protection of indigenous values associated with the site and surrounding area;

l) A subdivision with:
   - A maximum of 160 residential lots;
   - Residential lot sizes between 500 sq m and 1,100 sq m;
   - Indigenous vegetation provided as part of the subdivision (as shown on the Whareroa North Concept Plan and any additional planting proposed at the subdivision consent stage) to integrate it with the surrounding landscape and reduce the visual and amenity effects when viewed from Lake Taupo and the existing Whareroa Village. The planting shall be in accordance with Schedule 1 - "Whareroa North Indigenous Planting Proposal";
   - A single span bridge across the Whareroa Stream with:
     - abutments clear of the waterway;
     - associated indigenous planting to reduce visual effects;
     - bridge surfaces finished in colours from the A and B Groups of the British Standard BS 5252 colour chart with reflectivity levels of less than 35%;
   - Limits on levels of street lighting through the use of appropriate streetlights to reduce light spill and adverse effects of light when viewed from the existing Whareroa Village and Lake Taupo;
   - A safer community through incorporating "Crime Prevention Through Environmental Design" (CPTED) principles. Note: A CPTED assessment is to be undertaken as part of the subdivision design process and included with any application for subdivision consent;

- Control of the following matters by Consent Notice or other suitable legal mechanism on the titles of future residential allotments:
  - One (only) dwelling per lot and no further subdivision permitted;
  - Exterior building colours limited to those from the A and B Groups of the British Standard BS 5252 colour chart with reflectivity levels of less than 35%;
  - Exterior lighting limited to reduce effects of night-lighting as much as practicable (ie without compromising safety);
  - Window reflectivity by use of over-hanging eaves or low-reflectivity glass;
  - Maintaining vegetation planted on residential allotments as part of subdivision construction in a healthy state in perpetuity (with any dead/ dying plants being replaced with the same species within the following planting season);
  - Maximum building height as shown in the plan below:



3 Staging

The subdivision will be developed in the following stages (in accordance with the Whareroa North Concept Plan) and no development can be undertaken unless the necessary resource consents are granted:

- Preliminary Stage: Further site investigations and assessments (including geotechnical, archaeological, ecological, engineering and landscape);
- Stage One: Bridging the Whareroa Stream, construction of the access road to the elevated residential land above, development of stormwater management systems, provision of approximately 30 residential lots, indigenous vegetation planting, and associated biodiversity mitigation/offset measures etc;
- Stage 2 and subsequent stages to completion.

Preliminary Stage

To inform the detailed subdivision design process a range of site investigation, existing infrastructure network assessments, and pre-design work will be undertaken. This includes geotechnical, ecological (including fauna surveys, and surveys to inform development of the proposed mitigation/offset package), landscape, engineering and archaeological site investigations and assessments.

Geotechnical site investigation work, involving on-site geotechnical drilling, testing and investigation, includes within the vegetated escarpment (necessitating vegetation removal and tracking within SNA062 for access to and clearance of the investigation sites). Resource Consent/s will be sought to authorise these geotechnical investigations, including biodiversity offsetting for the associated loss of indigenous vegetation from SNA062.

The preliminary stage archaeological field inspection will be undertaken in accordance with the report of Sian Keith Archaeologist Limited (Recommendations 2 and 3, Section 14, "Archaeological Assessment Whareroa North Private Plan Change", April 2020). Advice Note: Any required Archaeological Authority pursuant to s44a Pouhere Taonga Act 2014 shall be obtained prior to commencement of any earthworks being undertaken in affected areas.

Stage 1

Stage 1 (shown on the concept plan) which will yield approximately 30 sections, consists of bridging the Whareroa Stream, construction of the access road to the elevated residential land, and development of the stormwater management areas that will serve subsequent stages. The Stage 1 western boundary reflects the stormwater management proposal referred to in Section 4 below, and the stormwater works associated with Stage 1 will allow the stormwater management areas to stabilise before being brought into service for later stages.

All of the "Proposed indigenous planting" shown on the Whareroa North concept plan (and any other planting required by the Stage 1 subdivision consent) will be undertaken as part of Stage 1 subdivision construction (and in accordance with Schedule 1 - "Whareroa North Indigenous Planting Proposal") so that the plants have achieved a height that will ensure the development is integrated into the surrounding landscape when each subsequent subdivision stage is implemented.

Stage 1 includes land zoned "Residential Environment" (where residential lots are proposed) and "Rural Environment" (where provision of access, bridging of the Whareroa Stream, and associated earthworks and removal of indigenous vegetation is proposed). Stage 1 will be the subject of a resource consent application to TDC and WRC.

Stage 2 Onwards

The balance of the subdivision will be developed progressively in stages, the number and location of which is not constrained (as Stage 1 is) but will be determined by detailed design and demand.

4 Engineering and Servicing

Water, Wastewater, Power, Telecommunications

Each residential lot will be served with connections to community water and wastewater systems, as well as electricity and telecommunication networks.

With respect to water supply and wastewater services, the infrastructure within the existing settlement has been designed and installed over the decades to recognise the future demand from this development on the northern side of the Whareroa Stream, connections have been sized appropriately and located at the stream crossing point so that the reticulation can be extended easily across the proposed bridge and up the new access road to the development.

Electricity and telecommunication service providers have indicated that their respective systems have capacity to cater for Whareroa North.

Access

Stage 1 of the development includes bridging the Whareroa Stream (a single span structure with abutments clear of the waterway) and an access road to the elevated development area. As noted on the Concept Plan, the final design (including alignment, grade and cross section) of the bridge and access road will be agreed during the detailed design and resource consenting process referred to above and is to incorporate provision for safe, separated pedestrian movement. It is intended to minimise the "footprint" of the access road where it traverses SNA062 and OLA60. This recognises not only the limitations imposed by the topography, but also the sensitive nature of the vegetation in those areas.

An off-road pedestrian link is provided (as Local Purpose Reserve) connecting the access road, through indigenous vegetation, to the southern part of the subdivision roading network. Detailed design (which responds to the location and purpose of the various sections of the accessway) will be agreed with relevant TDC staff as part of subdivision design process. Design and physical works are subject to TDC approval prior to vesting. Note: It may be appropriate to also cater for recreational cyclists on the proposed pedestrian links between roads in the elevated development area and for these sections to be designed accordingly. This can be determined in consultation with TDC staff at subdivision stage.

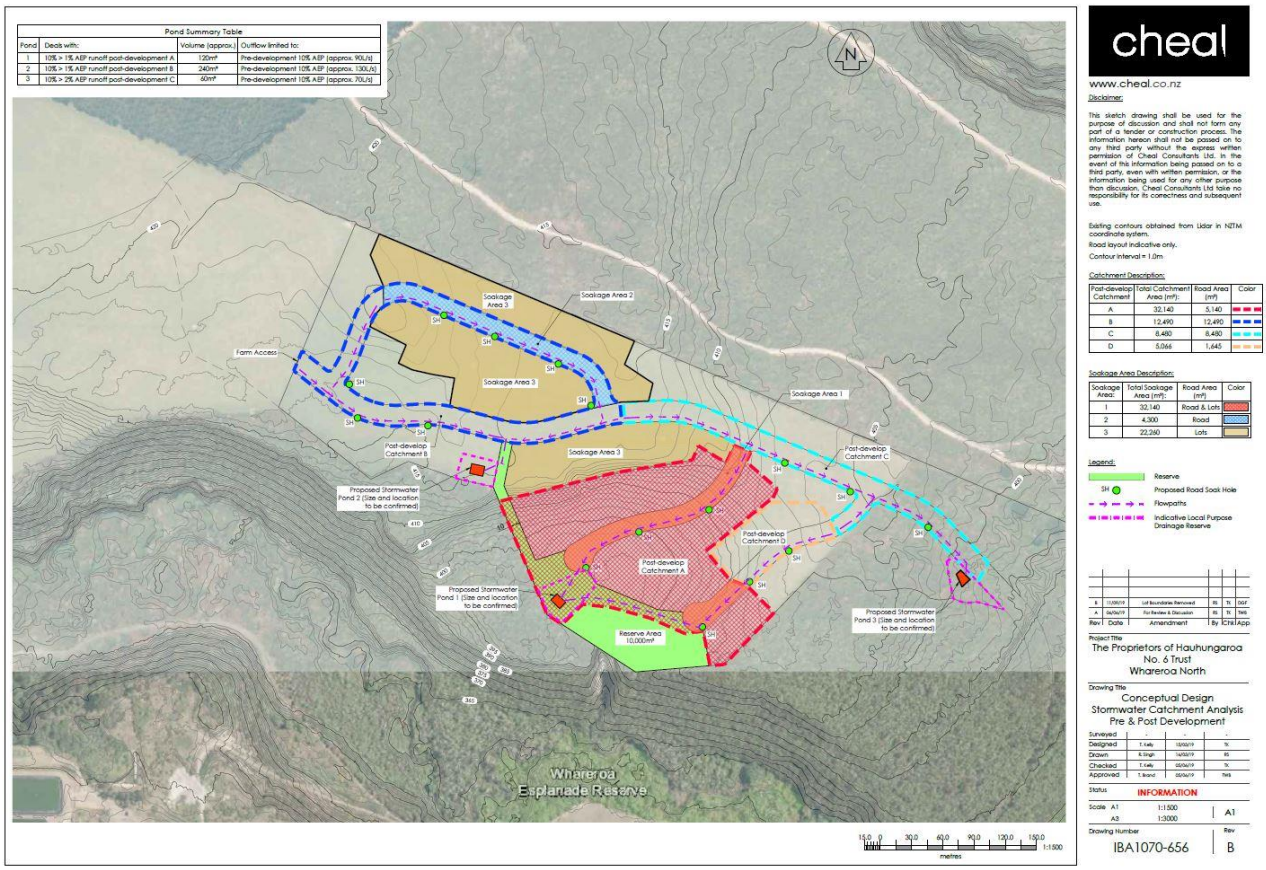
Internal roading for Stage 1 and future stages will also be designed to minimise the impact from earthworks and from stormwater runoff.

Stormwater

A preliminary conceptual design has been prepared to confirm that not only can stormwater generated from the development be managed in accordance with best industry practice, but also that erosion occurring currently at the low point of the existing pasture can be halted. Innovative solutions are proposed to minimise the quantity of stormwater generated from the development and to address the treatment and disposal of stormwater in a sustainable way. Subject to detail

design informed by the preliminary geotechnical site investigation work, stormwater management for the development will be implemented in accordance with the report titled "*The Proprietors of Hauhungaroa No. 6 Trust, Whareroa North Preliminary Stormwater Assessment*" (Cheal Consultants ref IBA 1070 Rev.4 dated 26 September 2019).

The conceptual design included as Appendix 1 in that report (and showing stormwater management elements) is below.



5 Required Environmental Outcomes

Section 2 above includes a summary of the key outcomes of the subdivision design. The subdivision design, and subsequent applications for resource consents must also achieve the following environmental outcomes.

Required Environmental Outcomes	
• **Village Character and Amenity:**	
a)	Quality urban design and residential amenity outcomes within the development, including incorporation of CPTED principles in subdivision design.
b)	Residential development of a character and scale compatible with the existing Whareroa Village (being a primarily holiday settlement in a relatively remote lakeside location).
c)	Provision for a variety of built form and architectural style consistent with the existing Whareroa village character.
d)	Controls on building height, exterior colours, lighting, etc to ensure visual integration with the surrounding environment.

e)	Existing and proposed planting that will visually integrate the development into the landscape and provides key buffers.
f)	Beneficial connections within and between the southern and northern sides of Whareroa Village.
g)	Connection to urban infrastructure (roading, water supply, wastewater and utility services).
•	**Natural and Physical Environment:**
a)	Development footprint (bridge, access road) is minimised in areas of natural and landscape values identified in the District Plan as far as practicable.
b)	Bridge crossing and access is designed clear of the Whareroa Stream bed and to minimise adverse effects on the natural character of the riparian area.
c)	Indigenous vegetation (and associated habitats) which are lost from SNA062, OLA60, and the area of "Broadleaved forest / scrub", is remedied, mitigated or offset by ecologically appropriate methods, such as planting within or contiguous to SNA062.
d)	Long term sustainability of SNA062 is enhanced by legal and physical protection.
e)	Visual and landscape effects associated with road access are mitigated.
f)	Existing erosion feature is arrested.
g)	Environmental values of the Whareroa Stream and escarpment are protected through low-impact stormwater design.
h)	Potential archaeological values are managed through field inspection and subsequent measures and actions as appropriate.

Additional Matters of Control

As provided for beneath Taupo District Plan Rule 4a.3.2, clause (h), the following additional matters of control apply to subdivision at Whareroa North:

- Measures to avoid, remedy, mitigate, or offset potential effects on indigenous biodiversity;
- effects on landscape character and visual amenity;
- effects on natural character;
- protection of the quality of the waters of Lake Taupo and its tributaries including through stormwater and earthworks management;
- provision and design of reserve areas including for pedestrian and cycling access to and within the residential subdivision;
- application of Crime Prevention Through Environmental Design principles.

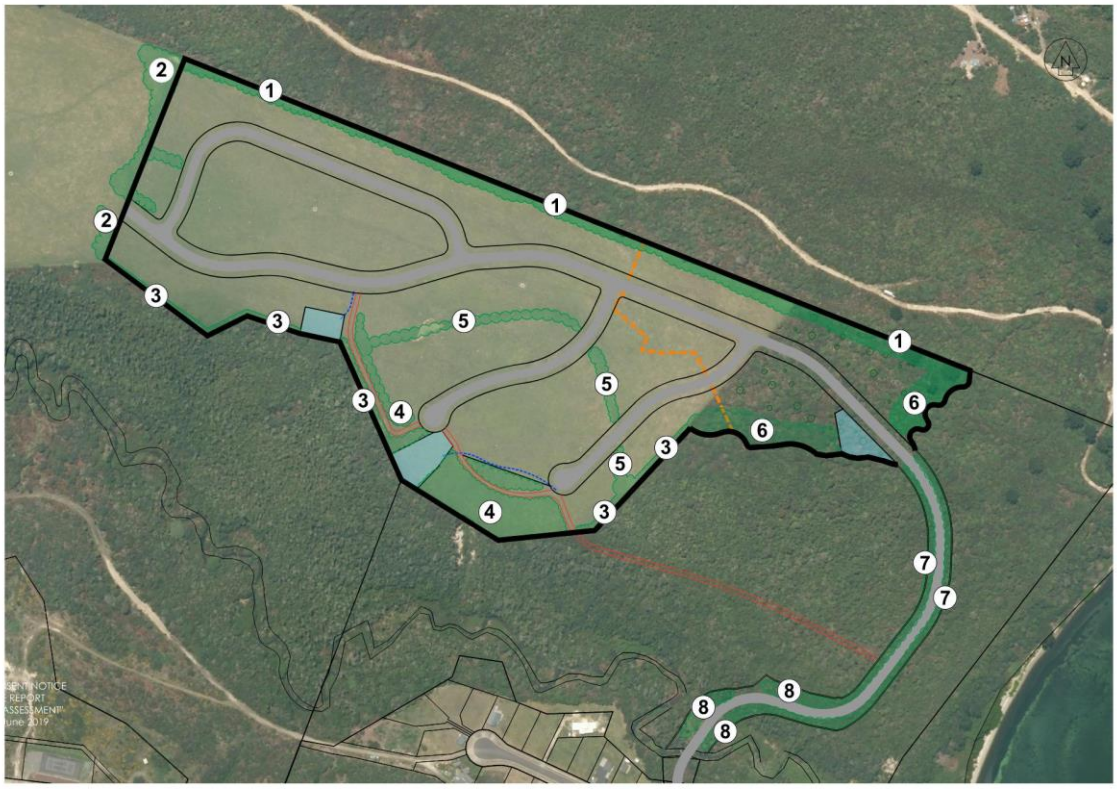
SCHEDULE 1

WHAREROA NORTH INDIGENOUS PLANTING PROPOSAL

General

1. All of the planting shown on the Whareroa North Concept Plan (and any other planting required by the Stage 1 subdivision consent) will be undertaken as part of Stage 1 subdivision construction.
2. All indigenous planting will utilise eco-sourced indigenous plant species naturally occurring in the Taupo Ecological District.
3. All planting on land to be vested in the TDC will be agreed with relevant TDC staff as part of the subdivision design process.

The planting shown on the on the plan below is identified by numbers to facilitate the descriptions following.



Planting Areas 1, 2, and 4

Planting along and near the northern and western boundary of the Land and the planting identified with the number 4 will be made up of:

- 30% of the plant species capable of achieving a minimum height of 4 metres;
- 60% of the plant species capable of achieving a minimum height of 6 metres; and
- 10 % of the plant species capable of achieving a minimum height of 8 metres.

Planting Areas 3

A minimum 2m wide dense buffer planting of predominantly flax (to minimise foot traffic and rubbish / garden waste dumping) where residential lots adjoin SNA062.

Planting Areas 5

Planting near the top of the bowl will be made up of:

- 70% of the plant species capable of achieving a minimum height of 2 metres;
- 20% of the plant species capable of achieving a minimum height of 4 metres; and
- 10% of the plant species capable of achieving a minimum height of 6 metres.

Planting Areas 6

Planting within the area of Broadleaved forest / scrub to supplement existing indigenous vegetation to remain. This planting will be detailed during the subdivision design stage of Stage 1.

Planting Area 7

Planting, including future canopy species, along new edges created by road through SNA062 to be addressed as part of the ecological offset model detailed during the subdivision design stage of Stage 1.

Planting Area 8

Revegetation planting of earthworks associated with the construction of the bridge and road will be made up of species capable of attaining a height to visually screen the earthworks within 10 years. Further details of this planting will be detailed during the subdivision design stage of Stage 1.

APPENDIX 5
Table 12-3

Table 12-2: Typical factors to consider when assessing landscapes

Attributes	Typical factors
Physical Attributes	Natural - the characteristics of intactness, health and significance of natural landscape features including: • Geology, geomorphology, and resultant topography • Hydrology (hydrological features and processes) • Soil and natural vegetation • Ecology (the health and significance of ecological attributes) Human ('Cultural') - the characteristics of human features, any inherent cultural significance, and the manner in which they relate to the underlying natural setting including: • Land use • Human vegetation patterns • Buildings, structures and settlements • Road networks Human or cultural factors are relevant to landscape assessment in general. However, for assessment of outstanding natural features and landscapes the focus will be on natural areas where such human factors are recessive or absent.
Aesthetic Attributes (perceptual, sensory, experiential)	Visual and aesthetic characteristics including: • Expressiveness – the manner in which biophysical features (including landforms, water-bodies and natural vegetation) express natural processes and patterns • Legibility (in the sense of way-finding and orientation) – the role of landscapes and features as landmarks, boundaries, areas with a distinctive character (taking the 3D sequential experience into account) • Picturesqueness / Composition (including such attributes as the presence of water, contrast of shadow and light, perspective depth, focal-points, the mix of openness and enclosure, and the overall composition of landscape elements) • Coherence (the manner in which different elements relate to each other including the intactness of natural landscapes and the extent to which human elements and patterns reflect the natural structure of the landscape) Account should be taken of attributes that may be only occasionally or seasonally present (such as wildlife or snow), and the effects of movement (wind, waves) i.e. the 'transient factors'
Associative Attributes	Values or meanings associated with a landscape including such matters as: • Naturalness associations (such as 'wilderness' values) • 'Sense of place' the manner in which landscapes convey a distinctive local character (cultural or natural) • Historical associations (where relevant to appreciation of the landscape) • Tāngata whenua associations (where relevant to appreciation of the landscape) • Recreational uses based fundamentally on landscape qualities • Emblematic attributes (for instance where a feature has been adopted as an icon for a community)