



**Mahaanui  
Kurataiao Ltd**  
Manawhenua Environmental Services

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To: Murray Boyes, Kirwee Central Properties Ltd  
C/O Sally Elford, Baseline Group

## **Kirwee Private Plan Change**

### **Manawhenua Statement**

Ngāi Tahu are tangata whenua of the Canterbury region, and hold ancestral and contemporary relationships with Canterbury. The contemporary structure of Ngāi Tahu is set down through the Te Rūnanga o Ngāi Tahu Act 1996 (TRoNT Act) and, through this structure and this Act, sets the requirements for recognition of tangata whenua in Canterbury.

The following Rūnanga hold manawhenua over the project's location, as it is within their takiwā:

- Te Ngāi Tūāhuriri and Te Taumutu Rūnanga.

The natural resources – water (waterways, waipuna (springs), groundwater, wetlands); mahinga kai; indigenous flora and fauna; cultural landscapes and land - are taonga to manawhenua and they have concerns for activities potentially adversely affecting these taonga. These taonga are integral to the cultural identity of ngā rūnanga manawhenua and they have a kaitiaki responsibility to protect them. The policies for protection of taonga that are of high cultural significance to ngā rūnanga manawhenua are articulated in the Mahaanui Iwi Management Plan (IMP).

### **Assessment of Proposal**

- The client has proposed to rezone 17.8608 in Kirwee from Living Zone 2A to Living Zone 1 to facilitate the development of residential sections.
- The average minimum allotment size would be 800 m<sup>2</sup> and It is estimated the proposed plan change area could yield 164 residential allotments if fully developed to the potential of the proposed Living 1 Zone.
- The applicant suggests this is a logical area of expansion for the existing Living 1 Zone in the Kirwee Township (which the application site immediately adjoins) and would provide for a more efficient use of land that is already identified for residential development.
- The minimum average size of the allotments would be reduced from 1 ha to 800 m<sup>2</sup> creating more mixed of allotment sizes within the Kirwee township. More households would be

accommodated close to the centre of the township and larger allotments on the periphery, adjacent to the rural zone.

- This application does not seek to introduce any new objectives, policies or rules to the District Plan, rather inclusion of an Outline Development Plan (ODP) into the Plan and use of the existing Living 1 Zone.
- The site is generally flat and does not currently contain any buildings, with the majority of land utilised for agricultural purposes.
- There are no NZAA Māori sites or sites of cultural significance identified in the planning maps for this area.
- The site is also bounded by an approved subdivision (currently under construction) to the north. The “Kirwee Plains” development contains 45 lots and includes new roads, a utility allotment, a council reserve, and a balance allotment.
- It does not appear that there are any surface water bodies in close proximity to the site.
- The site is assessed as being geotechnically suitable for development and is not recognised as being at risk of flooding or liquefaction.
- There is no evidence of contamination at the site and it is not on Environment Canterbury’s Listed Land Use Register.
- There is no reticulated wastewater system for Kirwee and Selwyn District Council have indicated that they would not be willing to establish a wastewater system for the area.
- Wastewater is therefore proposed to be managed through individual on-site wastewater treatment systems.
- An additional bore would be established to increase the capacity of the existing reticulated drinking water network.

The matters that are relevant to this particular proposal have been identified as:

### **Papatuanuku: Subdivision and development**

P4.1 To work with local authorities to ensure a consistent approach to the identification and consideration of Ngāi Tahu interests in subdivision and development activities, including:

- (a) Encouraging developers to engage with Papatipu Rūnanga in the early stages of development planning to identify potential cultural issues; including the preparation of Cultural Impact Assessment reports;
- (b) Ensuring engagement with Papatipu Rūnanga at the Plan Change stage, where plan changes are required to enable subdivision;
- (c) Requiring that resource consent applications assess actual and potential effects on tāngata whenua values and associations;
- (d) Ensuring that effects on tāngata whenua values are avoided, remedied or mitigated using culturally appropriate methods;
- (e) Ensuring that subdivision consents are applied for and evaluated alongside associated land use and discharge consents; and
- (f) Requiring that 'add ons' to existing subdivisions are assessed against the policies in this section.

P4.3 To base tāngata whenua assessments and advice for subdivision and residential land development proposals on a series of principles and guidelines associated with key issues of importance concerning such activities, as per Ngāi Tahu subdivision and development guidelines (pages 107-109). [https://www.mkt.co.nz/wp-content/uploads/2016/05/Mahaanui-IMP-web\\_Part11.pdf](https://www.mkt.co.nz/wp-content/uploads/2016/05/Mahaanui-IMP-web_Part11.pdf)

### **Papatuanuku: Stormwater**

P6.1 To require on-site solutions to stormwater management in all new urban, commercial, industrial and rural developments (zero stormwater discharge off site) based on a multi-tiered approach to stormwater management:

- (a) Education - engaging greater general public awareness of stormwater and its interaction with the natural environment, encouraging them to take steps to protect their local environment and perhaps re-use stormwater where appropriate;
- (b) Reducing volume entering system - implementing measures that reduce the volume of stormwater requiring treatment (e.g. rainwater collection tanks);
- (c) Reduce contaminants and sediments entering system - maximising opportunities to reduce contaminants entering stormwater e.g. oil collection pits in carparks, education of residents, treat the water, methods to improve quality; and

(d) Discharge to land based methods, including swales, stormwater basins, retention basins, and constructed wetponds and wetlands (environmental infrastructure), using appropriate native plant species, recognising the ability of particular species to absorb water and filter waste.

P6.5 To encourage the design of stormwater management systems in urban and semi urban environments to provide for multiple uses: for example, stormwater management infrastructure as part of an open space network that provides for recreation, habitat and customary use values.

### **Papatuanuku: Waste management**

P7.6 To require higher treatment levels for wastewater: “we should not have to rely on mixing and dilution of wastewater to mitigate effects.”

### **Papatuanuku: Discharge to land**

P8.1 To require that discharge to land activities in the takiwā:

- (a) Are appropriate to the soil type and slope, and the assimilative capacity of the land on which the discharge activity occurs;
- (b) Avoid over-saturation and therefore the contamination of soil, and/or run off and leaching; and
- (c) Are accompanied by regular testing and monitoring of one or all of the following: soil, foliage, groundwater and surface water in the area.

P8.2 In the event that that accumulation of contaminants in the soil is such that the mauri of the soil resource is compromised, then the discharge activity must change or cease as a matter of priority.

### **Water quantity: Efficiencies**

WM8.11 To support activities and strategies to improve the efficiency of water use in urban and rural situations, including:

- (a) Water efficiency technology in residential, commercial, industrial and urban environments:
  - (i) rainwater storage tanks;
  - (ii) greywater reuse;
  - (iii) reduced or low flow devices (e.g. low flush toilets and efficient showerheads); and
  - (iv) water efficient appliances.

### **Wāhi tapu me wāhi taonga**

CL3.3 To ensure that local and central government recognise that:

- (a) Existing schedules and maps of cultural sites are not comprehensive nor exhaustive;
- (b) Many sites and information about sites are held by whānau; and

(c) Protecting wāhi tapu and wāhi taonga requires effective working relationships with Papatipu Rūnanga.

CL3.7 To require appropriate policies and rules in territorial and regional plans to protect sites of cultural significance from inappropriate land use and development, including but not limited to:

- (a) Explicit recognition of the relationship of tāngata whenua to wāhi tapu and wāhi taonga;
- (b) Processes for engagement with Papatipu Rūnanga with regard to wāhi tapu and wāhi taonga;
- (c) Recognition of cultural landscapes as a planning tool to identify and assess sites (see Issue CL1);
- (d) Recognition of silent files (see Issue CL4); and
- (e) Recognition that wāhi tapu and wāhi taonga values may extend beyond the physical boundaries of individual sites;
- (f) Setting aside land from development.

CL3.8 To require, where a proposal is assessed by tāngata whenua as having the potential to affect wāhi tapu or wāhi taonga, one or more of the following:

- (a) Low risk to sites:
  - (i) Accidental discovery protocol (ADP) - See Appendix 3 of the Mahaanui Iwi Management Plan.

## Conclusion

The proposed plan change and re-zoning of residential land in Kirwee was discussed with the kaitiaki committee for Te Taumutu Rūnanga on the 22<sup>nd</sup> of May and Te Ngāi Tūāhuriri on May 23<sup>rd</sup>.

While it was recognised that the site is appropriate for increased residential development in some respects, there were a number of concerns raised by both rūnanga around infrastructure capacity.

The reliance on multiple individual wastewater treatment systems is inefficient and culturally inappropriate. The cumulative effects of wastewater discharge on groundwater which ultimately flows into surface water is well recognised in the Selwyn District. Ground and surface waters are subject to multiple sources of contamination. Use of ground and surface waters as receiving environments for contaminants degrades the mauri of these resources. It can also adversely affect other values associated with water, such as mahinga kai.

A more centralised approach with multiple tiers of treatment prior to discharge to land would be a suitable alternative to what is proposed for wastewater management under this increased residential development. It is recognised that Selwyn District Council to are unwilling to provide for increased wastewater infrastructure needs. The extent to which this is the responsibility of the Council or the developer is beyond the scope of this assessment. Nonetheless, residential development must be

undertaken within the capacity of the environment to cope with wastewater in order to prevent adverse effects on cultural values.

Proposed stormwater management via discharge to land is somewhat consistent with Ngāi Tahu principles. Consistent with policy P6.1 (see page 3-4), swales should be planted with locally sourced indigenous vegetation, suited to the ecosystem type. This provides some mitigation to the cultural effects of contaminant discharge through increasing the capacity of the land to filter contaminants and enhancing biodiversity values of the site.

The kaitiaki for Tūāhuriri raised concerns around water availability for increased demands. Efficiency measures including greywater systems and rainwater collection could be appropriately incentivised or required under the Outline Development Plan to lessen pressure on groundwater resources.

The Ngāi Tahu design guidelines highlight the need to promote a sense of community. There were some concerns raised by Te Taumutu that the cul-de-sac layout compromises this and is not reflective of a well-connected, low-impact community design.

Development can provide an opportunity to enhance cultural landscape values. Incentives or requirements for landscaping with appropriate indigenous vegetation could be incorporated into the Outline Development Plan.

Overall, the rūnanga wish to encourage the applicant to amend plans to reflect the relevant Ngāi Tahu Development guidelines in Appendix One. These guidelines provide a framework by which the adverse effects of development on cultural values may be minimised.

## Recommendations

1. A reticulated wastewater treatment system should be established to meet the needs of development under the plan change.
2. The additional pressure on water resources resulting from development under the plan change could be mitigated through incentives or requirements for efficiency measures such as rainwater collection and greywater systems.
3. All development within the plan change area should be guided to follow an Accidental Discovery Protocol for earthworks, consistent with Appendix 3 of the Mahaanui Iwi Management Plan. Unknown wāhi tapu/wāhi taonga values could be disturbed through excavations, and care must be taken to ensure these are handled with the correct tikanga.
4. Landscaping throughout the plan change area should utilise locally sourced indigenous species, suited to the local environment. Stormwater swales should also be planted with appropriate native species.
5. The road layout could be redesigned to provide for a greater sense of community and connectivity than is evident in a cul-de-sac approach.

Mahaanui Kurataiao and its staff are available to discuss this report further or assist in direct engagement with rūnanga if desired.

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### Ngāi Tahu subdivision and development guidelines

*Note: These guidelines are to be read in conjunction with Policies P4.1, P4.2 and P4.3*

#### Cultural landscapes

**1.1** A cultural landscape approach is the most appropriate means to identify, assess and manage the potential effects of subdivision and development on cultural values and significant sites [refer Section 5.8 Issue CL1].

**1.2** Subdivision and development that may impact on sites of significance is subject Ngāi Tahu policy on Wāhi tapu me wāhi taonga and Silent Files (Section 5.8, Issues CL3 and CL4).

**1.3** Subdivision and development can provide opportunities to recognise Ngāi Tahu culture, history and identity associated with specific places, and affirm connections between tāngata whenua and place, including but not limited to:

- (i) Protecting and enhancing sites of cultural value, including waterways;
- (ii) Using traditional Ngāi Tahu names for street and neighborhood names, or name for developments;
- (iii) Use of indigenous species as street trees, in open space and reserves;
- (iv) Landscaping design that reflects cultural perspectives, ideas and materials;
- (v) Inclusion of interpretation materials, communicating the history and significance of places, resources and names to tāngata whenua; and
- (vi) Use of tāngata whenua inspired and designed artwork and structures.

#### Stormwater

**2.1** All new developments must have on-site solutions to stormwater management (i.e. zero stormwater discharge off site), based on a multi-tiered approach to stormwater management that utilises the natural ability of Papatūānuku to filter and cleanse stormwater and avoids the discharge of contaminated stormwater to water [refer to Section 5.4, Policy P6.1].

**2.2** Stormwater swales, wetlands and retention basins are appropriate land based stormwater management options. These must be planted with native species (not left as grass) that are appropriate to the specific use, recognising the ability of particular species to absorb water and filter waste.

**2.3** Stormwater management systems can be designed to provide for multiple uses. For example, stormwater management infrastructure as part of an open space network can provide amenity values, recreation, habitat for species that were once present on the site, and customary use.

**2.4** Appropriate and effective measures must be identified and implemented to manage stormwater runoff during the construction phase, given the high sediment loads that stormwater may carry as a result of vegetation clearance and bare land.



**2.5** Councils should require the upgrade and integration of existing stormwater discharges as part of stormwater management on land rezoned for development.

**2.6** Developers should strive to enhance existing water quality standards in the catchment downstream of developments, through improved stormwater management.

### **Earthworks**

**3.1** Earthworks associated with subdivision and development are subject to the general policy on Earthworks (Section 5.4 Issue P11) and Wāhi tapu me wāhi taonga (Section 5.8, Issue CL3), including the specific methods used in high and low risk scenarios for accidental finds and damage to sites of significance.

**3.2** The area of land cleared and left bare at any time during development should be kept to a minimum to reduce erosion, minimise stormwater run-off and protect waterways from sedimentation.

**3.3** Earthworks should not modify or damage beds and margins of waterways, except where such activity is for the purpose of naturalisation or enhancement.

**3.4** Excess soil from sites should be used as much as possible on site, as opposed to moving it off site. Excess soil can be used to create relief in reserves or buffer zones.

### **Water supply and use**

**4.1** New developments should incorporate measures to minimise pressure on existing water resources, community water supplies and infrastructure, including incentives or requirements for:

- (i) low water use appliances and low flush toilets;
- (ii) grey water recycling; and
- (iii) rainwater collection.

**4.2** Where residential land development is proposed for an area with existing community water supply or infrastructure, the existing supply or infrastructure must be proven to be able to accommodate the increased population prior to the granting of subdivision consent.

**4.3** Developments must recognise, and work to, existing limits on water supply. For example, where water supply is an issue, all new dwellings should be required to install rainwater collection systems.

### **Waste treatment and disposal**

**5.1** Developments should implement measures to reduce the volume of waste created within the development, including but not limited incentives or requirements for:

- (i) Low water use appliances and low flush toilets;
- (i) Grey water recycling; and
- (ii) Recycling and composting opportunities (e.g. supporting zero waste principles).

**5.2** Where a development is proposed for an area with existing wastewater infrastructure, the infrastructure must be proven to be able to accommodate the increased population prior to the granting of the subdivision consent.

**5.3** New rural residential or lifestyle block developments should connect to a reticulated sewage network if available.

**5.4** Where new wastewater infrastructure is required for a development:

- (i) The preference is for community reticulated systems with local treatment and land based discharge rather than individual septic tanks; and
- (ii) Where individual septic tanks are used, the preference is a wastewater treatment system rather than septic tanks.