

Appendix G. Landscape and Visual Amenity Assessment Report

ARATAPU WATER STORAGE RESERVOIR

West Coast Road, Te Kopuru

Landscape Assessment

September 2020
20077_01

FINAL



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1.0 INTRODUCTION

Te Tai Tokerau Water Trust Board ('the applicant') have received provincial growth funding to provide improved water supply in Northland. Williamson Water and Land Advisory (WWLA) is leading the provision of a range of technical services to inform the project. Simon Cocker Landscape Architecture (SCLA) has been engaged to prepare this assessment of landscape and visual amenity effects associated with a proposed water supply reservoir (Aratapu Creek Water Supply Reservoir) off West Coast Road, Te Kopuru, Dargaville 0371, in the Kaipara District.

In brief, the applicant proposes to construct a new water supply reservoir, by constructing a dam across the Aratapu Creek, and inundating a section of the Aratapu Creek, including headwaters, and surrounding land (Figure 1 in Appendix 1). The proposed reservoir will have a storage volume of 3,800,000 cubic metre (m³) (at full supply level).

It is the opinion of the author that the proposal is appropriate from a landscape and visual perspective.

2.0 ASSESSMENT METHODOLOGY

The assessment has been prepared by a Registered Landscape Architect with reference to the Quality Planning Landscape Guidance Note 1 and its signposts to examples of best practice, which include:

- Best Practice Note 10.1, Landscape Assessment and Sustainable Management, New Zealand Institute of Landscape Architects (2010).
- Guidelines for Landscape and Visual Impact Assessment 3rd Edition, Landscape Institute (UK) and IEMA (2013).
- Information Requirements for the assessment of Landscape and Visual Effects, Auckland Council (2017).

In addition, this report has been prepared in accordance with the NZILA (New Zealand Institute of Landscape Architects) Code of Conduct¹.

Effects Ratings and Definitions

An outline of the effects ratings and definitions used in this assessment is provided in Appendix 2 – Landscape and Visual Assessment Methodology. In summary, the significance of effects identified in this assessment are based on a seven-point scale which includes very low; low; moderate – low; moderate, moderate – high, high, and very high. A rating of moderate to low equates to minor in terms of RMA terminology.

Desktop study and site visits

In conducting this assessment, a desktop study was completed which included a review of the relevant information relating to the landscape and visual aspects of the project. This information included:

- Northland Regional Policy Statement (2016);
- The Kaipara District Plan;

¹ Contained in Appendix 1 of: http://www.nzila.co.nz/media/50906/registered_membership_guide_final.pdf

- Hydrology and hydraulic assessment K13 Dam Dargaville, prepared by Riley Consultants Ltd., dated 18 August 2020;
- Preliminary geotechnical concept assessment K13 dam and water storage reservoir prepared by Riley Consultants Ltd., dated 14 August 2020;
- Archaeological assessment, prepared by Geometria Limited, Archaeological Assessment of the Proposed Aratapu Water Storage Reservoir, 24 August 2020;
- Aratapu Water Storage Reservoir. Assessment of Ecological Effects, prepared by Puhoi Stour dated 12 August 2020;
- Cultural Impact Assessment, prepared by xxxxxx, and dated xxxxxx;
- Topographical survey plans, and;
- Aerial photography, Kaipara District Council GIS mapping, Google Earth and Streetview

Two site visits were undertaken. The first on 10 June 2020, and the second on 13 July 2020.

3.0 THE PROPOSAL

The proposal is shown on Figures 2a, 2b, 2c and 2d in Appendix 1. The proposed reservoir will store a volume of approximately 3,800,000m³ when at full supply level. The proposal is described in detail in the application and comprises the following elements of relevance to this assessment:

Vegetation clearance

The total quantity of indigenous vegetation loss is 3.56 ha, with an additional 0.82 ha of pine forest, 0.86 ha of pampas-dominated wetland and 1.44 ha of wet pasture removal.

Embankments, Excavation and filling

The proposed dam will span a valley that is 70.0m wide at its base and approximately 170.0m wide at the crest. The embankment is proposed to have a crest level of 29.00m and a full supply level of 27.0m.

The total earthworks volume, allowing for bulking, is expected to be in the order of 794,200m³ consisting of a spillway cut volume of 55,100m³, topsoil strip volume of 239,500m³, a mechanically stabilised base volume of 169,940m³ and an embankment fill volume of 329,660m³. This latter figure includes backfilling on the mechanically stabilised base foundation

The footprint of the embankment will be excavated to remove geotechnical unsuitable materials to a solid foundation and be constructed in horizontal layers zones with certified fill taken from the excavated area. It will comprise a number of key engineering features:

- A riprap facing on the upstream side of the 3H:1V embankment slope to prevent erosion of the dam face;
- The engineering report² estimates that the total earthworks volume, allowing for bulking, is expected to be in the order of 794,200m³ consisting of a spillway cut volume of 55,100m³, topsoil strip volume of 239,500m³, a

² Riley Consultants. *Preliminary Geotechnical concept assessment. K13 Dam and water storage reservoir.* 14 August 2020..

mechanically stabilised base volume of 169,940m³ and an embankment fill volume of 329,660m³. This latter figure includes backfilling on the mechanically stabilised base foundation. .

- The dam face (downstream) will be maintained in grass.

Spillway and construction diversions

A spillway will be constructed to divert overflows during storm events when limited capacity in the reservoir exists. The spillway will operate at a level equal to the top of the freeboard and will likely incorporate a portion in concrete for service spills, with the remaining area being grassed. The spillway will not have gates nor require any external mechanism to operate (e.g. free-overflow).

Landscape and visual mitigation

Opportunities exist for the revegetation of the riparian margins of the reservoir, particularly where these margins comprise steep and erosion prone slopes. In addition, it is also recommended that consideration be given to revegetating riparian margins of watercourses, and associated gully slopes adjoining and 'upstream' of the proposed reservoir with locally appropriate native species.

It is noted that such revegetation planting is not considered necessary for the mitigation of potential adverse visual amenity effects, but would provide benefits in terms of landscape values, as well as rationalising land management, noting that the reservoir will require a buffer area around its margin to exclude grazing livestock.

The revegetation planting depicted in Figure 2d provides an indicative illustration of how such revegetation planting could occur. The suggested areas of revegetation respond to the hydrological and landscape patterns, seeking to enhance the landscape values of these existing features, and the reservoir as proposed, as well as taking into consideration the desire to provide screening of the reservoir and associated earthworks from the wider environment. The plant palette and mixes will reflect locally occurring ecosystem types and species. Plant material will be sourced locally.

It is recommended that the mitigation planting proposal will be refined in conjunction with the project ecologist. The ecological includes the recommendation that suitable offset sites near to the proposed reservoir be sought, and that an 'Offset and Compensation Plan' to address on both freshwater and terrestrial residual effects be prepared and it is recommended that, where possible, areas identified for planting within this document also function as mitigation planting for the landscape and visual amenity effects of the proposal.

It is proposed that either that a standalone Landscape and Visual Mitigation Plan be required as a condition of consent. This plan should be consistent with any ecological management plans required by the consent.

4.0 EXISTING ENVIRONMENT

4.1 Location and land ownership

The subject site is located within a property identified as Allotments 127, 128, 129, 131D, 131E, 131B, 131C, and 131D, PSH of Kopuru and is located on the Pouto peninsula, approximately 4km to the south west of Te Kopuru. The aforementioned properties are owned by either Smith Farms Ltd., Neil Robert Doherty or JH and MK Hadland.

4.2 Topography, geology and soils of the site and its context

ARATAPU WATER STORAGE RESERVOIR
assessment of landscape effects

The long dunes and sand terraces of the Pouto Peninsula form the northern barrier of the Kaipara Harbour. The peninsula was formed by successive layers of sand drifting in over the top of older dunes, some of which have been topped with estuarine and marine sand sediments. The Peninsula ranges in width to a maximum of 10km and is mostly up to 150m high, with some elevations of 200m in the south. The barrier contains mobile and fixed dunes on the western sea side and a mixture of dune, lake, fluvial and estuarine sediments on the eastern harbour side. The Peninsula consists of the loose to poorly consolidated sands of the Holocene windblown deposits, the cemented, dune-bedded sandstone of the Neogene sedimentary rocks (Awhitu Group) and early Pleistocene windblown sand deposits.

Soils of the Pouto Peninsula and northwards to Maunganui Buff fall into two broad categories:

- sands on the rolling hills and
- organic soils in the intervening shallow basins.

Sandy soils are recent (Holocene) sands at three stages of development and fertility. The youngest and most fertile type is Pinaki Sand, well drained and nearly neutral; the oldest and least fertile is Te Kopuru Sand, a poorly drained, acidic soil with a peaty subsoil. Intermediate between them is Red Hill Sand, well drained and mildly acidic. Organic soils (poorly drained acidic peats) occur locally in low-lying basins. The lower flats of the Pouto Peninsula and the Ruawai Plains are characterised by Kaipara Soils, gley soils with heavy clay textures derived from estuarine alluvium.

The proposed reservoir site is contained within a gully on the eastern edge of the Early Pleistocene parabolic dunes, where this geological type adjoins the Awhitu Group dunes (refer to Figure 1, photo 1 and photo 2). This interface is characterised by steeply rounded landform which varies in height between 40 and 100m in height. The Awhitu Group dunes are dissected by incised and steep sided gullies which extend westwards from the eastern low-lying and gently undulating landscape of the lower flats (refer to photo 3).

To the west and south west, the site is contained by a ridge which – varying in height between 100 and 150 metres – and aligned approximately parallel to, and running almost the entire length of the west coast of the Pouto Peninsula. Although the ridge forms a dominant feature within the landscape when viewed from the east, it is less distinct when experienced from the west, where the elevation of the gently undulating landscape is similar to that of the ridge crest.

On its southern side, the site is contained by a north easterly trending ridge – traced by West Coast Road (refer to photo 4), whilst to the north, a series of north easterly trending ridges offer enclosure. A ridge occupied by Redhill Road is the largest of these, and glimpse views from the road are afforded toward the site (refer to photo 5).

4.3 Hydrology of the site and its context

The site is contained within the upper catchment of the Aratapu Creek, which drains into the Wairoa River and thence to the Kaipara Harbour. The Aratapu Creek, like the majority of catchments draining the eastern side of the Pouto Peninsula, is relatively small in area, with the majority of the area being low-lying with gentle gradients. These low lying areas are characterised by rectilinear drainage channels.

Along the western edge of these catchments, the watercourses originate, and flow within the incised gullies on the eastern edge of the Awhitu Group dunes.

4.4 Vegetation of the site and its context

The wider context of the site is primarily under pasture and is grazed and within the site this consists of pasture grass, pugged and wet pasture. Within those areas with greater elevation, pockets of native forest and shrubland are in evidence and are usually associated with steeper slopes, or as fingers of riparian vegetation within gullies. Otherwise, the landscape has an exposed and open character, with only occasional shelterbelts providing an artificial structure to the landscape.

Pine plantations are also a characterising feature of the more elevated parts of the area, and are usually planted on the steeper slopes that are less productive for grazing. The challenge associated with managing these steeper slopes – such as those within the south eastern gully within the site – is evident where vegetation has been cleared and the slopes tend to have revegetated with gorse, Spanish heath and pampas (refer to photo 6).

Gully floors often accommodate wetlands. Where artificial drainage has not been constructed, or has been poorly maintained, the wetland areas can be extensive and diverse. Elsewhere, such as within the subject site, drainage and grazing has degraded these areas.

Pine forest borders the south-western gully within the site. With an approximate dbh of 40cm, the pine plantation encompasses some 30ha, of which 0.82ha is within the reservoir footprint. The pine plantation is bordered by mature wattle with a dbh of approximately 30cm (refer to photo 7).

The ecology report identifies a 2.5 ha wetland complex at the south-western corner of the site. The wetland contains mānuka, gumland, Machaerina scrub sedgeland in the headwaters, which transitions to raupō reedland downstream. Downstream of the raupō reedland, areas of Machaerina, Eleocharis wetland are present before a defined channel forms the main tributary which draws water into the main farm area. The ecology report also notes that some areas of the wetland complex have been severely compromised by invasion of pampas³ (refer to photo 6).

In addition, the ecology report identifies small areas of mamaku treeland which border wetland areas at the south-western end of the site.

4.5 Land use of the site and its context

As described above, the primary land use through the environs of the site is pastoral grazing, although to the south – between the site and Redhill Road – shelterbelts signal an isolated pocket of horticultural production

Settlement tends to be focused along the road corridors with scattered dwellings – often associated with clusters of farm buildings – along West Coast Road and Redhill Road.

Land holdings along West Coast Road tend to be in the order of 30ha – 50ha. A cluster of smaller rural residential lots (Allots 131A PSH of Kopuru - Allots 131E PSH of Kopuru, and Allots 132A PSH of Kopuru - Allots 131D PSH of Kopuru are located to the south and south west, along Redhill Road,.

4.6 Visual catchment of the site

³ Puhoi Stour. *Aratapu Water Storage Reservoir. Assessment of Ecological Effects*. 12 August 2020. Section 5.1.

The visual catchment is constrained by landform to the west, north west, north, north east, south west south and south east by landform. Longer views toward the site are possible from the north east, where the landform is more gently undulating (refer to photo 2).

Views are afforded from roads which occupy the ridges to the north west, south west, south and south east of the site. Photos 5, 8 and 9 illustrate representative views from the West Coast and Redhills Road, or close to the road corridor.

Few residential properties afford views of the site. On West Coast Road, those which do include:

- a recently constructed single storey dwelling within Allot 128 PSH of Kopuru, refer to Figure 3), some 400m from the site⁴;
- two dwellings within a cluster of farm buildings, located some 450m from the site (within Allot 120 PSH of Kopuru), and;
- a single storey dwelling within Lot 1 DP 513607, separated by some 500m from the site.

To the south, on Redhill Cemetery Road, two dwellings located in elevated positions are afforded views to the site from a distance of 900m. These are:

- A single storey dwelling within Lot 1 DP 132345
- A single storey dwelling within Lot 1 DP 145596.

Views from Redhill Road, to the west are very restricted, although potential views are possible from a distance of 1,200m from a dwelling accessed from this road within Lot 1 DP 78025.

4.7 Statutory context

This section provides a brief statutory assessment against the matters set out in section 104(1) of the Resource Management Act 1991 (RMA) and other relevant planning documents with regards to the proposed works, including:

- Part 2 of the RMA
- Northland Regional Policy Statement
- Far North District Plan

4.7.1 Resource Management Act 1991

Part 2 of the Act requires that the proposed activity must meet the purpose of the Act as outlined in Section 5 “to promote the sustainable management of natural and physical resources.”

Section 6 of the Act identifies 8 matters of national importance to be had regard to in achieving the purposes of the Act. The following are of relevance to the proposal:

- The preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development

⁴ It is understood that this dwelling is within the lot occupied by the subject site.

Section 7 of the Act identifies 11 other matters to be had regard to in achieving the purposes of the Act. The following are of relevance to the proposal:

- The maintenance and enhancement of amenity values; and
- intrinsic values of ecosystems; and
- the maintenance and enhancement of the quality of the environment.

4.7.3 Northland Regional Policy Statement (2016)

The site lies some 2km to the east of the West Coast Ocean Beach Outstanding Natural Landscape, which overlays the western landward edge of the peninsula. The coastal edge is also overlain by the Glinks Gully North Natural Character Area which has a ranking of High.

The site is not within the Coastal Environment as delineated in the RPS, and is visually separated from the coastal edge and its associated overlays.

4.7.4 Far North District Plan

The objectives and policies of relevance to this assessment are as follows:

12.5.2

To maintain the rural character and amenity, including the:

- *Sense of openness;*
- *Low dominance of built form;*
- *Pasture and Commercial Forest Areas*
- *Areas of indigenous vegetation and significant fauna; and*
- *Unmodified natural landforms*

12.5.3

To protect areas of significant indigenous vegetation and significant habitats of indigenous fauna so as to avoid, remedy or mitigate the decline of indigenous vegetation and fauna

12.5.4

To ensure that the servicing of new subdivision and development does not adversely affect the environment, in particular sensitive receiving environments

12.5.6

To avoid, remedy or mitigate adverse effects on the quality of the rural environment without unduly restricting productive rural activities e.g. farming and forestry

12.5.9

To maintain sites and buildings during development to avoid adverse visual amenity effects

12.5.10

To encourage innovative development and integrated management of effects between subdivision and land use which results in better environmental outcomes than more conventional or traditional subdivision, use and development

12.6.5

By avoiding, remedying or mitigating the adverse effects of subdivision and development (including ribbon development) on the natural environment values of the rural area.

12.6.6

By promoting the integration of subdivision, use or development with the protection, enhancement or establishment of natural features, vegetation and open space,

12.6.7

By avoiding, remedying or mitigating the adverse effects of activities which pose the greatest threat to remaining areas of significant indigenous vegetation and significant habitats of indigenous fauna), and rural amenity (e.g. vegetation clearance, excavation and fill, the bulk and location of buildings and structures).

12.6.15

By requiring site and building development to demonstrate how adverse visual amenity effects will be addressed over the duration of the development.

Overall it is understood that the activity status of the application is non-complying.

5.0 IDENTIFIED LANDSCAPE VALUES

The identified landscape values are depicted on Figure 4. The subject site is not subject to any landscape overlay within the Northland Regional Policy Statement, in the Kaipara District Plan or in any non-statutory documents.

5.1 Ecological values

The ecology report assigns terrestrial ecological values to the site as follows:

- The mamuku treeland is assessed as having a low ecological value;
- The pine forest is assessed as having a moderate ecological value due to the potential presence of native long tailed bats;
- The Mānuka, gumland, Machaerina scrub sedgeland and kutakuta-isolepis wetland is assessed as having a very high ecological value;
- The machcaerina-dominated wetland, and raupo reedland is assessed as having a high ecological value;
- The isolepis dominated turf wetland and and pampas dominated wetland is assessed as having a moderate ecological value, and;
- The exotic dominated pasture wetland is assessed as having a low ecological value.

Recognising that potential roost habitat exists for long-tailed bats, the report notes that this species has a very high ecological value. The report also considers that the existing wetlands are likely to provide forage for At Risk and Threatened avifauna which it states, have a high and very high ecological value respectively.

5.2 Landscape values

To assist with assigning a value to the landscape, reference has been made to Table 1 in Appendix 3. When assessed against the criteria contained in Table 2, the landscape is assigned a value of 'Ordinary', since it displays a distinguishable landscape structure, has characteristic patterns of landform and has a land cover often masked by landuse. It includes Some features worthy of conservation but also includes some detracting features.

5.3 Archaeological values

The archaeological assessment notes that there are no recorded archaeological sites within 100m of the proposal and identifies a number of site within the surrounding area – the nearest being more than 5km away.⁵

The assessment identifies a number of features. This includes a small terrace and quarry located on the slope at the bottom of a spur on the eastern side which appear to be farm related and not of Maori origin. It also identifies one new archaeological site which consists of a series of terraces and pits. These are located above the inundation level on the western slopes overlooking the proposed dam area and consists at least 28 small terraces, 10 rua pits and several possible whare sites. This site has been recorded as P08/388 and is situated above the proposed inundation level.

The assessment assigns a moderate value to the site with respect to its Integrity, Condition and Information Potential, and Diversity, and low for its Rarity and Uniqueness, Archaeological Context, Landscape Context and Amenity Value and Historical Associations and Community Connections⁶.

5.4 Cultural values

The archaeology report described how the Site lies within the Te Kopuru Block which was seceded to the Crown as compensation for plundering of Forsaith's store at Mangawhare (near Dargaville, in 1842.

Noting that the area lies within the boundary zone between the rohe of Te Uri o Hau, Te Roroa and the south western extent of interests associated with Te Parawhau and the southern iwi/hapu of Whangarei and the upper Wairoa River, it states that little is known about the occupation of the block between 1842 and 1857, when the Tatariki Block immediately south was surveyed after purchase by the Crown. The archaeology report sets out the documented history of the site and its surroundings and describes how the Red Hill settlement was – in the 19th century – located near the southern boundary of the site.

To be completed following receipt of CIA

6.0 ASSESSMENT OF LANDSCAPE EFFECTS

6.1 Background

Preceding sections describe the characteristics of the property and site, its setting and the proposal (including mitigation). The purpose of this section is to define the effects of the application upon the site and setting, to consider how the proposal would impact upon the experience of people viewing the development from outside of the site, and to comment upon the level of landscape, natural character, and visual effects.

Landscape change can, but does not necessarily result in adverse visual effects. Natural and human induced change is a constant within the landscape. The key is to manage this in such a way that any adverse visual effects are avoided, remedied or mitigated.

⁵ Geometria Limited, *Archaeological Assessment of the Proposed Aratapu Water Storage Reservoir*, 24 August 2020

⁶ Ibid Section 7.0

6.2 Assessment of Effects

The effects covered in this assessment, include those that can occur in relation to physical features, viewing audiences and visual amenity and/or on the site's contribution to the existing landscape character and amenity values, as follows:

- Landscape character and amenity effects derive from changes in the physical landscape, which may give rise to changes in its character and how this is experienced. This may in turn affect the perceived value ascribed to the landscape.
- Visual effects relate to the changes that arise in the composition of available views as a result of changes to the landscape, to people's responses to the changes, and to the overall effects with respect to visual amenity.

Landscape and visual impacts can result from change in the components, character or quality of the landscape. Usually these are the result of landform or vegetation modification or the introduction of new structures, facilities or activities. All these impacts are assessed to determine their effects on landscape character and quality, rural amenity and on public and private views. In this report, the assessment of potential effects is based on a combination of the landscape's sensitivity and visibility and the nature and scale of the development proposal.

The nature of landscape and visual effects generated by any particular proposal can, therefore, be:

- Positive (beneficial), contributing to the visual character and quality of the environment.
- Negative (adverse), detracting from existing character and quality of environment; or
- Neutral (benign), with essentially no effect on existing character or quality of environment.

Landscape, and Amenity effects can be rated on a seven-point scale from Very High, through to Very Low.

The degree to which landscape and visual effects are generated by a development depends on several factors, these include:

- The degree to which the proposal contrasts, or is consistent, with the qualities of the surrounding landscape.
- The proportion of the proposal that is visible, determined by the observer's position relative to the objects viewed.
- The distance and foreground context within which the proposal is viewed.
- The area or extent of visual catchment from which the proposal is visible.
- The number of viewers, their location and situation (static or moving) in relation to the view.
- The backdrop and context within which the proposal is viewed
- The predictable and likely known future character of the locality
- The quality of the resultant landscape, its aesthetic values and contribution to the wider landscape character to the area.

Change in a landscape does not, of itself, necessarily constitute an adverse landscape or visual effect. Landscape is dynamic and is constantly changing over time in both subtle and more dramatic transformational ways, these changes are both natural and human induced. What is important in managing landscape change is that adverse effects are avoided or sufficiently mitigated to ameliorate the effects of the change in land use. The aim is to provide a high amenity environment through appropriate design outcomes, including planting that can provide an adequate substitution for the currently experienced amenity.

6.2.1 Biophysical – Abiotic attributes

The key abiotic attributes of the site include the landform, geology, and water catchments. Overall, modification as a result of human processes or human induced processes has been limited to the drainage of some areas of lower lying land, earthworks for the construction of accessways.

The total earthworks volume, allowing for bulking, is expected to be in the order of 794,200m³ consisting of a spillway cut volume of 55,100m³, topsoil strip volume of 239,500m³, a mechanically stabilised base volume of 169,940m³ and an embankment fill volume of 329,660m³. This latter figure includes backfilling on the mechanically stabilised base foundation.

The earthworks are for the purpose of winning material for, and constructing a dam – the form and location of which are illustrated on Figures 2a and 2b. The dam will be constructed across a narrow portion of the gully landform. The side slopes of the dam will be shaped so that they generally reflect the form and angle of the existing ridge flanks (approximately 1:3). This will ensure that the dam does not appear conspicuously artificial.

The proposal will result in localised changes in the abiotic attributes – including the changes to the natural landforms and watercourse – these changes will be of some scale, when considered in the context of the wider catchment, the changes will be relatively modest.

6.2.2 Biophysical – Biotic attributes

The biotic attributes of the site are the living organisms which shape an ecosystem.

It is understood that all vegetation within the reservoir footprint will be removed. The total quantity of indigenous vegetation loss is 3.56 ha, with an additional 0.82 ha of pine forest, 0.86 ha of pampas-dominated wetland and 1.44 ha of wet pasture removal. The ecology report states that without mitigation, removal of vegetation will result in the loss of habitat and foraging resources for indigenous fauna, increased landscape fragmentation and connectivity loss, and the loss of nationally threatened wetland habitat but concludes that If the recommendations of the ecological report are implemented in full, then the overall effects to fauna on site will be 'Low' or 'Very low'.

Furthermore it concludes that vegetation offset and compensation planting will provide habitat for most of the fauna being impacted.

6.2.3 Experiential and perceptual attributes

Experiential attributes comprise the interpretation of human experience of the landscape. This includes visible changes in the character of the landscape – its naturalness as well as its sense of wildness and remoteness including effects on natural darkness of the night sky.

The location of the proposed dam and area of water containment is largely screened from the wider landscape (the visual catchment of the site is described in section 4.6 of this report), although the dam structure is visible from within an extensive, but unpopulated visual catchment to the north west.

The numbers of potentially affected individuals is very small. Intermittent and glimpse views will be possible from the road network – principally from West Coast Road to the east of the subject site (refer to photos xx and xx).

With respect to views from residential properties, relatively proximate views will be possible from a recently constructed single storey dwelling within Allot 128 PSH of Kopuru, situated some 400m from the site, from two dwellings within a

cluster of farm buildings, located some 450m from the site, and from a single storey dwelling within Lot 1 DP 513607, separated by some 500m from the site.

Occupants of these dwellings will experience fragmented views of the reservoir, but will not have the ability to gain views of the dam structure. The water body will represent a change in the composition of the outlook from these properties, but will not form an overly dominant element within the overall outlook.

More distant views of the reservoir will be possible from Redhill Cemetery Road where two dwellings located in elevated positions are afforded views to the site from a distance of 900m. These are:

- A single storey dwelling within Lot 1 DP 132345
- A single storey dwelling within Lot 1 DP 145596.

In addition Views from Redhill Road, potential views will be available from a dwelling within Lot 1 DP 78025 at a distance of 1,200m.

Occupants of these dwellings will experience fragmented views of the water body, but this feature will form a very minor component of the wider panorama available from these locations.

The presence of water bodies within the rural landscape, particularly when integrated into the landscape without significant modification of landform, is accepted and such a feature would not represent a detracting element. Rather, a waterbody has the potential to be regarded as a feature that contributes to the visual interest and diversity of the landscape.

Increased vehicle activity will be apparent during the construction period leaving and entering the site. Construction is expected to occur over a period of two earthworks construction seasons. Overall, it is the opinion of the author that the potential adverse visual amenity effect of activity on the access and within the site will be temporary, and at most, low.

6.2.4 Cultural, spiritual and associative attributes

The archaeological report concludes that there will be no adverse effect on the archaeological values of the site.

To be completed on receipt of the CIA.

6.2.5 Summary of Landscape Effects

The proposal will result in a moderate to high degree of localised change with respect to abiotic attributes, but that the change will be small when considered within the context of the wider landscape. The biotic effect of the proposal can be mitigated or offset such that the effect will be low. With regard to experiential and perceptual values, the proposal will result in a very low impact and the impact on spiritual, cultural and associative attributes will be low.

Overall therefore, it is assessed that the potential adverse landscape character effects on the wider environment that will be generated by the proposal will be low once the mitigation measures are completed.

7.0 EFFECTS ON STATUTORY INSTRUMENTS

The key themes which arise from the relevant District Plan objectives and policies are the maintenance of rural character and amenity, the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna, the avoidance of adverse visual amenity effects during development, and seeking to encourage better environmental outcomes through innovative development and integrated management of effects.

The visual catchment of the proposed reservoir is contained and the potential audience is relatively restricted in number. The water body will be integrated into, and visually contained within the contextual landform such that only glimpse views, or views of limited portions of the water body are available from any one location.

Notwithstanding this, dams and lakes are an accepted feature of the rural landscape and it is the opinion of the author that the proposed reservoir will contribute to the visual diversity and interest of the landscape.

The ecology report states that without mitigation, removal of vegetation will result in the loss of habitat and foraging resources for indigenous fauna, increased landscape fragmentation and connectivity loss, and the loss of nationally threatened wetland habitat. It concludes that if the recommendations of the ecological report are implemented in full, then the overall effects to fauna on site will be 'Low' or 'Very low'.

8.0 CONCLUSION

The application seeks to construct a new water supply reservoir, by constructing a dam across the Aratapu Creek, and inundating a section of the Aratapu Creek, including headwaters, and surrounding land. The proposed reservoir will have a storage volume of 3,800,000 cubic metre (m³) (at full supply level) and the dam crest will be at 29.0m RL. The maximum depth of water at full supply level will be 20.0m.

The proposal includes a landscape and visual mitigation concept which, it is proposed be developed as a condition of consent in conjunction with the project ecologist.

The assessment has determined that the potential adverse landscape effect of the proposal will be low once the proposed landscape and ecological mitigation measures have been completed, and that the temporary adverse effects arising from construction will be (at most) low.

The proposal is considered to be consistent with the objectives and policies of the various statutory instruments where they are of relevance to this assessment.

Overall, the proposal can be supported from a landscape and visual perspective.

Simon Cocker

1 September 2020



ARATAPU WATER STORAGE RESERVOIR
assessment of landscape effects

Appendix 1: Figures



0m 20m 40m 60m 80m

Hydrological catchment boundary

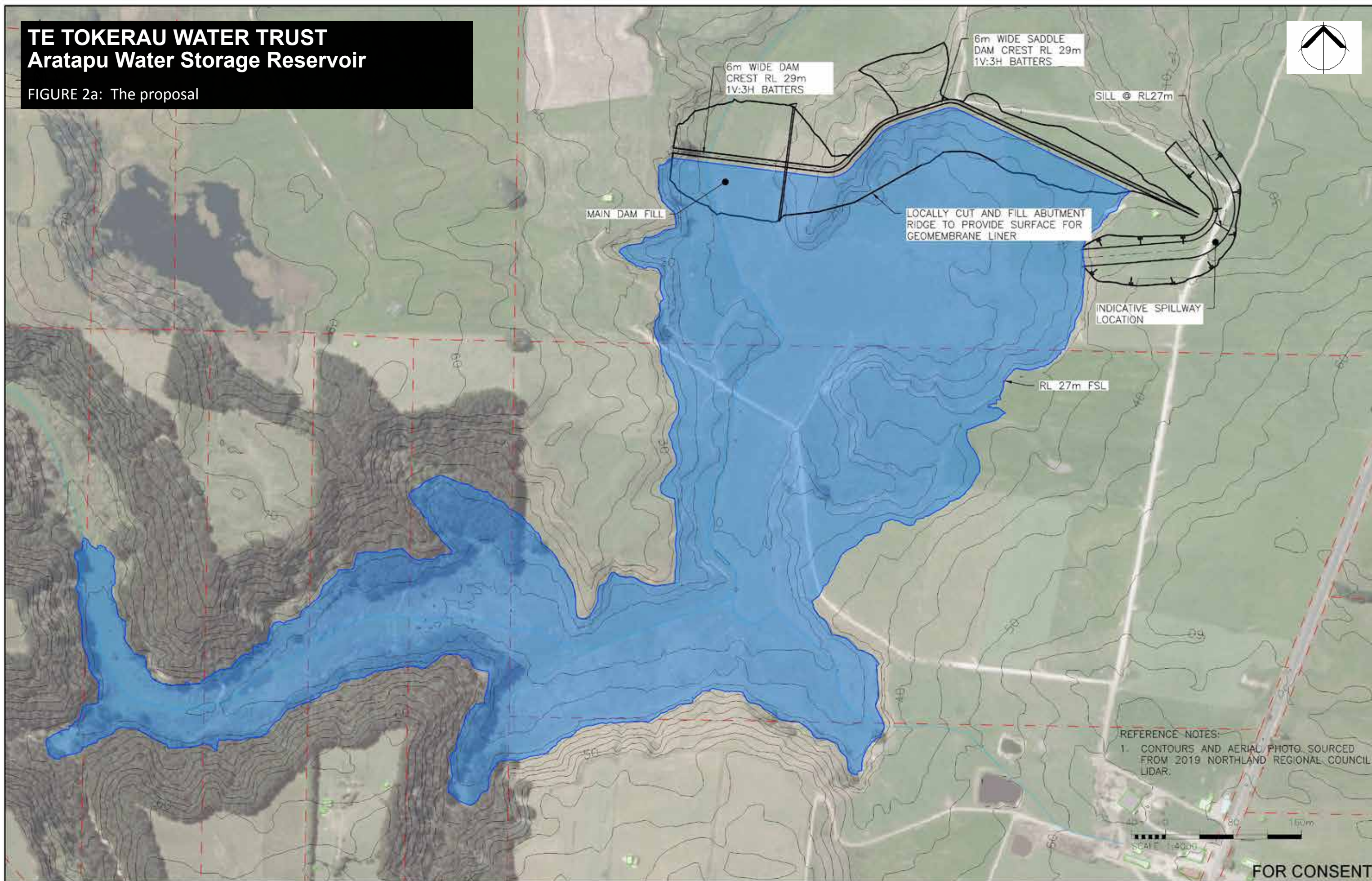
Ridges

The site

TE TOKERAU WATER TRUST Aratapu Water Storage Reservoir

FIGURE 1: The site and its landscape context

FIGURE 2a: The proposal

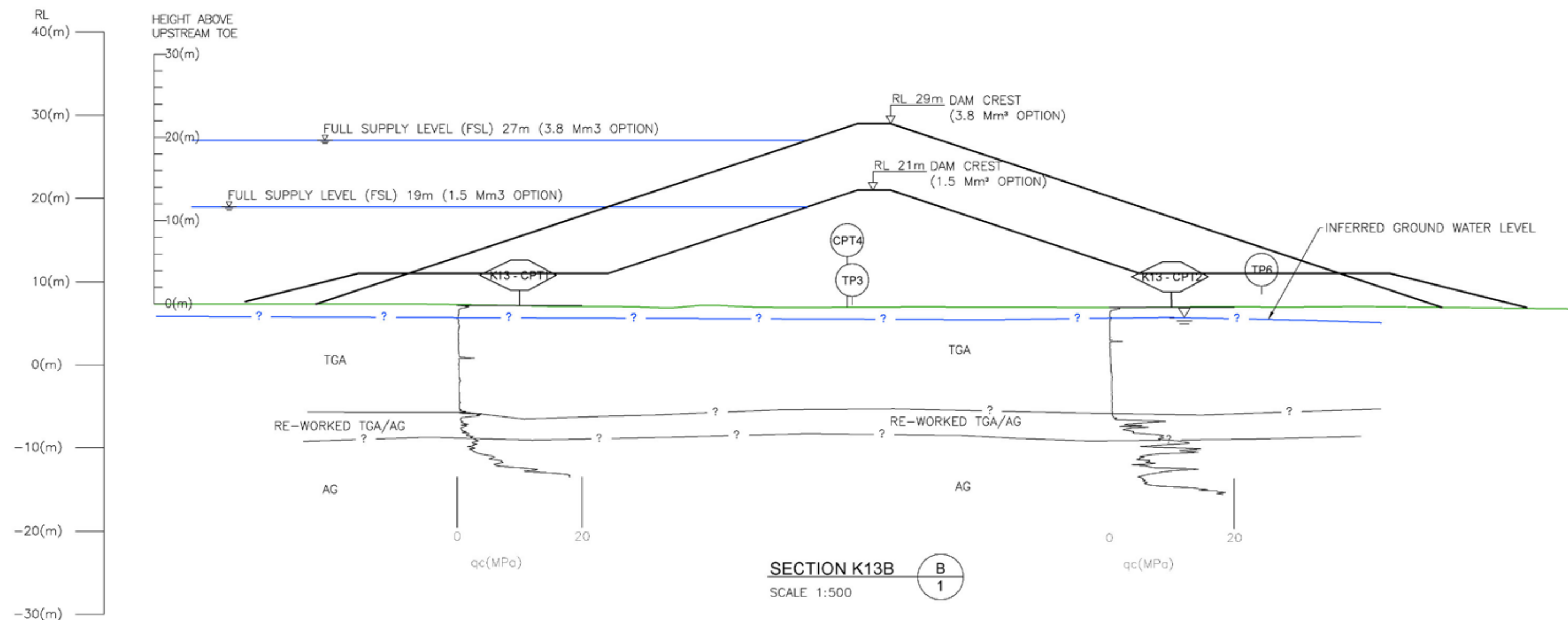


FOR CONSENT

				DESIGN EM	DES. CHECK	APPROVED FOR ISSUE	 www.riley.co.nz		 Te Tai Tokerau Water Trust 1313 Te Kōwhiri Drive, Whangārei Tairāroa Whangārei	CLIENT TE TAI TOKERAU WATER TRUST	NORTHLAND	K13 WATER STORAGE AND USE PROJECT		CADFILE 200240_2-101.dwg
				DRAWN MP	CAD. CHECK									
1	FOR CONSENT	MP	DATE DRAWN AUG. 2020	ISSUE DATE 24 / 03 / 20							DAM & RESERVIOR LAYOUT - 3.8 Mm3 OPTION		DRAWING No. 200240/2-101	REV. 1
REV	DATE	ISSUE	MP	KEY										

TE TOKERAU WATER TRUST Aratapu Water Storage Reservoir

FIGURE 2b: The proposal



- TGA: TAURANGA GROUP ALLUVIUM
- ALLUVIAL, SWAMP AND ESTUARINE DEPOSITS
 - SOFT TO VERY SOFT ORGANIC SILT AND SILT
 - RECENT DEPOSITS (<12,000 YEARS OLD)
- REWORKED TGA/AG
- REDEPOSITED AWHITU GROUP DEPOSITS MIXED WITH RECENT ALLUVIUM
- AG: AWHITU GROUP SAND DUNES
- LOOSE TO MODERATE DENSE SAND OR
 - EXTREMELY WEAK TO VERY WEAK SANDSTONE (WEAKLY CEMENTED)
 - LOCALISED CARBONACEOUS LENSES
 - LATE PLIOCENE (1.8M TO 3.6M YEARS OLD)

10 0 20 40m
SCALE 1:1000

FOR CONSENT

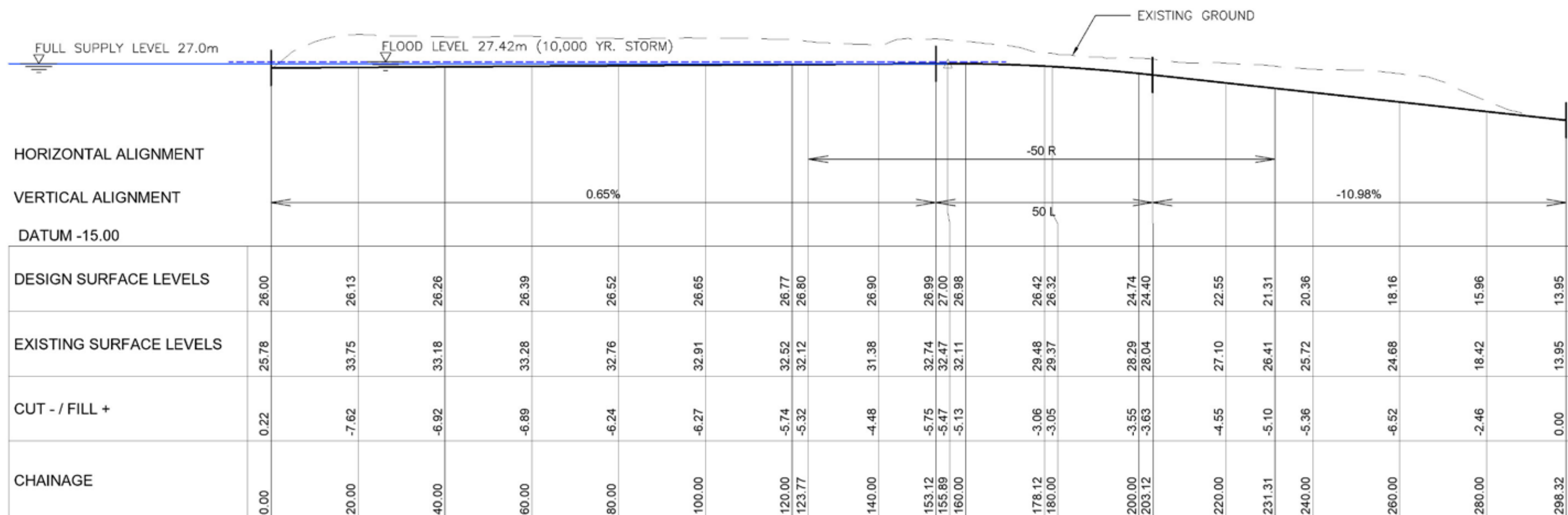
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				EM			DRAFT	
				DRAWN		CAD CHECK		
				MP			ISSUE DATE	
1 FOR CONSENT				MP			24 / 03 / 20	
REV	DATE	ISSUE	BY	DATE DRAWN				
				AUG. 2020				

RILEY CONSULTANTS		WILLIAMSON		TE TAI TOKERAU WATER TRUST	
www.riley.co.nz				Tūhono Kōwhiri, He Haka Oranga Tōrangia He Haka Oranga Whenua The Springs of Water, A gift of life to our people, A gift of life to our land	

CUSTOMER	TE TAI TOKERAU WATER TRUST	
ADDRESS	NORTHLAND	
PROJECT	K13 WATER STORAGE AND USE PROJECT	
SHEET TITLE	DAM GEOTECHNICAL CROSS SECTION K13B	

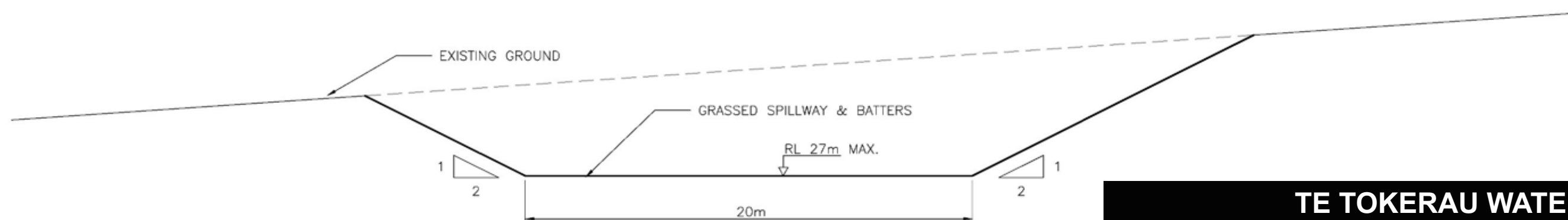
ACENZ		ISO 9001:2015	
GCS			

CADFILE		200240_2-2&3.dwg	
SCALE (A3)		1:4000	
ORIG. SHEET SIZE		A3	
DRAWING No.		200240/2-3	
REV.		1	



10 0 20 40m
SCALE 1:1000

SPILLWAY LONG SECTION
SCALE 1: 1000 HOR & VERT



2 0 4 8m
SCALE 1:200

TE TOKERAU WATER TRUST
Aratapu Water Storage Reservoir

FIGURE 2c: The proposal
FOR CONSENT

						DESIGN	DES CHECK	APPROVED FOR ISSUE	 RILEY CONSULTANTS www.riley.co.nz	 WILLIAMSON WATER & LAND CONTROL	 TE TAI TOKERAU WATER TRUST Tei Parei Wai He iho Ora Ngāi Tāngata He iho Ora ngāi Wāhau The Springs of Water A gift of life to our people A gift of life to our land	CLIENT	TE TAI TOKERAU WATER TRUST			 ACENZ	CADFILE	
					EM		DRAFT					ADDRESS	NORTHLAND				200240_2-103.dwg	
					DRAWN	CAD CHECK	DATE					PROJECT	K13 WATER STORAGE AND USE PROJECT				SCALE (A3)	ORIG. SHEET SIZE
1		FOR CONSENT			MP			ISSUE DATE				AS SHOWN		A3				
REV	DATE	ISSUE		BY		DATE	DRAWN					DRAWING No.		REV.				
						AUG. 2020		24 / 03 / 20				200240/2-103		1				



0m 100m 200m 300m 400m

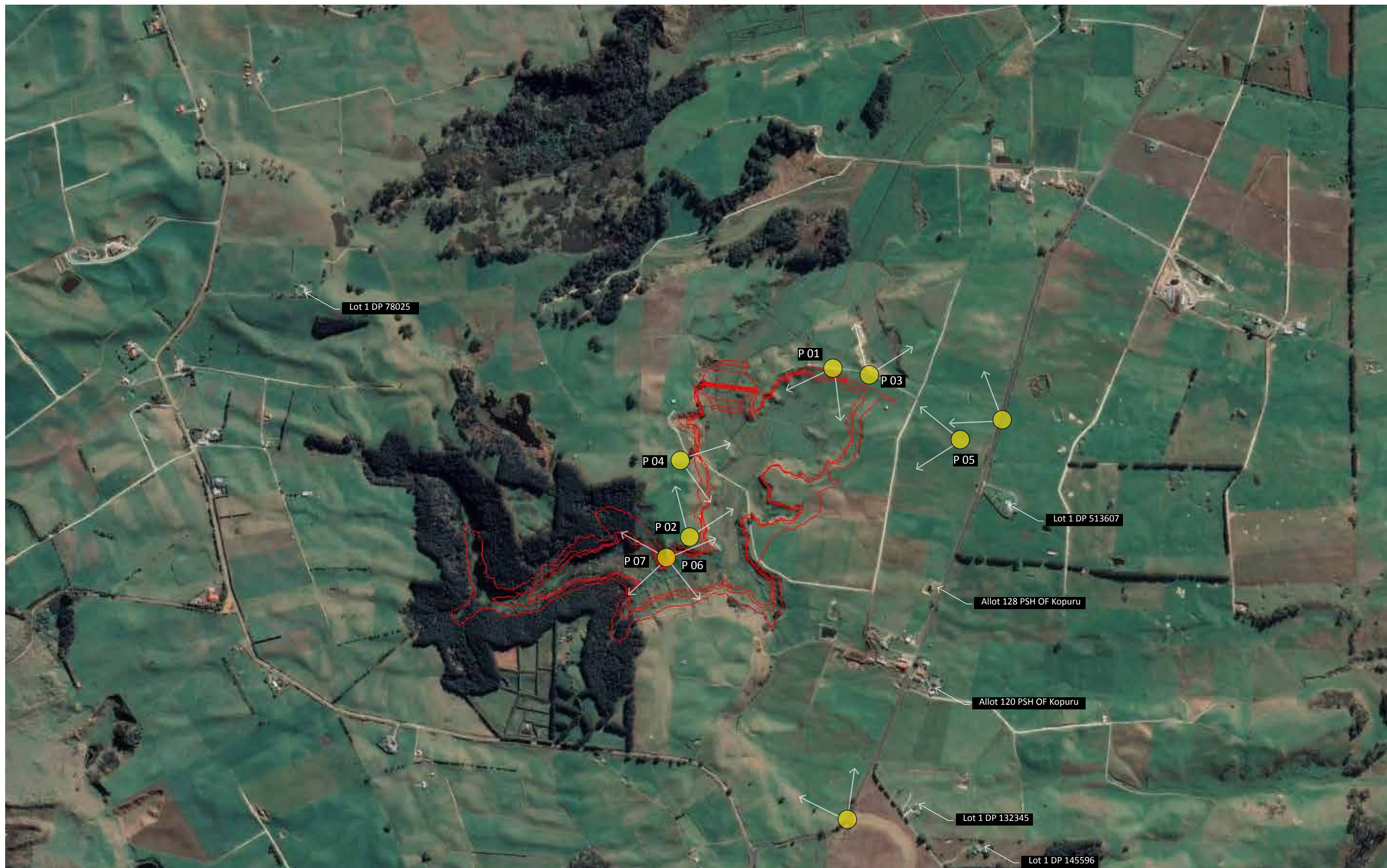


Potnetial riparian and dryslope revegetation planting

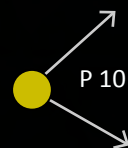
Storage area innundation to bank crest

TE TOKERAU WATER TRUST Aratapu Water Storage Reservoir

FIGURE 2d: Indicative Landscape mitigation Concept



0m 200m 400m 600m 800m



Photograph locations

TE TOKERAU WATER TRUST Aratapu Water Storage Reservoir

FIGURE 3: Immediate context of the site and photo locations



Photo 1: View south west across site

Photo date: 13 July 2020.

Aratapu Water Storage Reservoir

Photographs

Photos taken with digital equivalent of 50mm focal length unless otherwise specified.
Photos represent a 124° horizontal and 55° vertical field of view, and should be read at a distant of 400mm



Photo 2: View north east across site

Photo date: 13 July 2020.

Aratapu Water Storage Reservoir

Photographs

Photos taken with digital equivalent of 50mm focal length unless otherwise specified.
Photos represent a 124° horizontal and 55° vertical field of view, and should be read at a distant of 400mm



Photo 2: View to north east from site

Photo date: 13 July 2020.

Aratapu Water Storage Reservoir

Photographs

Photos taken with digital equivalent of 50mm focal length unless otherwise specified.
Photos represent a 124° horizontal and 55° vertical field of view, and should be read at a distant of 400mm



Photo 4: View to east across site to WEst Coast Road ridge

Photo date: 13 July 2020.

Aratapu Water Storage Reservoir

Photographs

Photos taken with digital equivalent of 50mm focal length unless otherwise specified.
Photos represent a 124° horizontal and 55° vertical field of view, and should be read at a distant of 400mm



Photo 5: View west across site toward Redhills Road ridge

Photo date: 13 July 2020.

Aratapu Water Storage Reservoir

Photographs

Photos taken with digital equivalent of 50mm focal length unless otherwise specified.
Photos represent a 124° horizontal and 55° vertical field of view, and should be read at a distant of 400mm



Photo 6: View east across site to south eastern gully

Photo date: 13 July 2020.

Aratapu Water Storage Reservoir

Photographs

Photos taken with digital equivalent of 50mm focal length unless otherwise specified.
Photos represent a 124° horizontal and 55° vertical field of view, and should be read at a distant of 400mm



Photo 7: View west up south western gully within site

Photo date: 13 July 2020.

Aratapu Water Storage Reservoir

Photographs

Photos taken with digital equivalent of 50mm focal length unless otherwise specified.
Photos represent a 124° horizontal and 55° vertical field of view, and should be read at a distant of 400mm



Photo 8: View north from West Coast Road toward site

Photo date: 13 July 2020.

Aratapu Water Storage Reservoir

Photographs

Photos taken with digital equivalent of 50mm focal length unless otherwise specified.
Photos represent a 124° horizontal and 55° vertical field of view, and should be read at a distant of 400mm



Approximate location of dam structure

Photo 9: View from ridge above Redhill Road (view not available from road)

Photo date: 13 July 2020.

Aratapu Water Storage Reservoir

Photographs

Photos taken with digital equivalent of 50mm focal length unless otherwise specified.
Photos represent a 124° horizontal and 55° vertical field of view, and should be read at a distant of 400mm

Appendix 2: Landscape and visual effects assessment methodology

Landscape and Visual Effects Assessment Methodology

Introduction

The landscape and visual effects assessment process provides a framework for assessing and identifying the nature and level of likely effects that may result from a proposed development. Such effects can occur in relation to changes to physical elements, the existing character of the landscape and the experience of it. In addition, the landscape assessment method may include an iterative design development processes which includes stakeholder involvement. The outcome of any assessment approach should seek to avoid, remedy or mitigate adverse effects. A separate assessment is required to assess changes in natural character in coastal areas and other waterbodies.

When undertaking landscape and visual effects assessments, it is important that a structured and consistent approach is used to ensure that findings are clear and objective. Judgement should always be based on skills and experience, and be supported by explicit evidence and reasoned argument.

While landscape and visual effects assessments are closely related, they form separate procedures. The assessment of the potential effect on the landscape forms the first step in this process and is carried out as an effect on an environmental resource (i.e. landscape elements, features and character). The assessment of visual effects considers how changes to the physical landscape affect the viewing audience. The types of effects can be summarised as follows:

Landscape effects:

Change in the physical landscape, which may change its characteristics or qualities.

Visual effects:

Change to views which may change the visual amenity experienced by people.

The policy context, existing landscape resource and locations from which a development or change is visible all inform the 'baseline' for landscape and visual effects assessments. To assess effects, the landscape must first be described, including an understanding of the key landscape characteristics and qualities. This process, known as landscape characterisation, is the basic tool for understanding landscape character and may involve subdividing the landscape into character areas or types. The condition of the landscape (i.e. the state of an individual area of landscape or landscape feature) should also be described alongside a judgement made on the value or importance of the potentially affected landscape.

This outline of the landscape and visual effects assessment methodology has been undertaken with reference to the Quality Planning Landscape Guidance Note¹ and its signposts to examples of best practice which include the UK guidelines for landscape and visual impact assessment² and the New Zealand Landscape Institute Guidelines for Landscape Assessment³.

Assessing landscape effects requires an understanding of the nature of the landscape resource and the magnitude of change which results from a proposed development to determine the overall level of landscape effects.

Nature of the landscape resource

Assessing the nature of the landscape resource considers both the susceptibility of an area of landscape to change and the value of the landscape. This will vary upon the following factors:

- Physical elements such as topography / hydrology / soils / vegetation;
- Existing land use;
- The pattern and scale of the landscape;

¹ <http://www.qualityplanning.org.nz/index.php/planning-tools/land/landscape>

² Landscape Institute and Institute of Environmental Management and Assessment (2013) Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3)

³ Best Practice Note Landscape Assessment and Sustainable Management 10.1, NZILA

- Visual enclosure / openness of views and distribution of the viewing audience;
- The zoning of the land and its associated anticipated level of development;
- The value or importance placed on the landscape, particularly those confirmed in statutory documents; and
- The scope for mitigation, appropriate to the existing landscape.

The susceptibility to change takes account of both the attributes of the receiving environment and the characteristics of the proposed development. It considers the ability of a specific type of change occurring without generating adverse effects and/or achievement of landscape planning policies and strategies.

Landscape value derives from the importance that people and communities, including tangata whenua, attach to particular landscapes and landscape attributes. This may include the classification of

Outstanding Natural Landscape (RMA s.6(b)) based on important biophysical, sensory/ aesthetic and associative landscape attributes, which have potential to be affected by a proposed development.

Magnitude of Landscape Change

The magnitude of landscape change judges the amount of change that is likely to occur to existing areas of landscape, landscape features, or key landscape attributes. In undertaking this assessment, it is important that the size or scale of the change is considered within the geographical extent of the area influenced and the duration of change, including whether the change is reversible. In some situations, the loss /change or enhancement to existing landscape elements such as vegetation or earthworks should also be quantified.

When assessing the level of landscape effects, it is important to be clear about what factors have been considered when making professional judgements. This can include consideration of any benefits which result from a proposed development. Table 1 below helps to explain this process. The tabulating of effects is only intended to inform overall judgements.

Contributing factors		Higher	Lower
Nature of Landscape Resource	Susceptibility to change	The landscape context has limited existing landscape detractors which make it highly vulnerable to the type of change which would result from the proposed development.	The landscape context has many detractors and can easily accommodate the proposed development without undue consequences to landscape character.
	The value of the landscape	The landscape includes important biophysical, sensory and associative attributes. The landscape requires protection as a matter of national importance (ONF/L).	The landscape lacks any important biophysical, sensory or associative attributes. The landscape is of low or local importance.
Magnitude of Change	Size or scale	Total loss or addition of key features or elements. Major changes in the key characteristics of the landscape, including significant aesthetic or perceptual elements.	The majority of key features or elements are retained. Key characteristics of the landscape remain intact with limited aesthetic or perceptual change apparent.
	Geographical extent	Wider landscape scale.	Site scale, immediate setting.
	Duration and reversibility	Permanent. Long term (over 10 years).	Reversible. Short Term (0-5 years).

Table 1: Determining the level of landscape effects

Visual Effects

To assess the visual effects of a proposed development on a landscape, a visual baseline must first be defined. The visual 'baseline' forms a technical exercise which identifies the area where the development may be visible, the potential viewing audience, and the key representative public viewpoints from which visual effects are assessed.

The viewing audience comprises the individuals or groups of people occupying or using the properties, roads, footpaths and public open spaces that lie within the visual envelope or 'zone of visual influence' of the site and proposal. Where possible, computer modelling can assist to determine the theoretical extent of visibility together with field work undertaken to confirm this. Where appropriate, key representative viewpoints should be agreed with the relevant local authority.

Nature of the viewing audience

The nature of the viewing audience is assessed in terms of the susceptibility of the viewing audience to change and the value attached to views. The susceptibility of the viewing audience is determined by assessing the occupation or activity of people experiencing the view at particular locations and the extent to which their interest or activity may be focused on views of the surrounding landscape. This relies on a landscape architect's judgement in respect of visual amenity and reaction of people who may be affected by a proposal. This should also recognise that people more susceptible to change generally include: residents at home, people engaged in outdoor recreation whose attention or interest is likely to be focused on the landscape and on particular views; visitors to heritage assets or other important visitor attractions; and communities where views contribute to the landscape setting.

The value or importance attached to particular views may be determined with respect to its popularity or numbers of people affected or reference to planning instruments such as viewshafts or view corridors.

Important viewpoints are also likely to appear in guide books or tourist maps and may include facilities provided for its enjoyment. There may also be references to this in literature or art, which also acknowledge a level of recognition and importance.

Magnitude of Visual Change

The assessment of visual effects also considers the potential magnitude of change which will result from views of a proposed development. This takes account of the size or scale of the effect, the geographical extent of views and the duration of visual change which may distinguish between temporary (often associated with construction) and permanent effects where relevant. Preparation of any simulations of visual change to assist this process should be guided by best practice as identified by the NZILA⁴.

When determining the overall level of visual effect, the nature of the viewing audience is considered together with the magnitude of change resulting from the proposed development. Table 2 has been prepared to help guide this process:

Contributing factors		Higher	Lower
Nature of Landscape Resource	Susceptibility to change	Views from dwellings and recreation areas where attention is typically focussed on the landscape..	Views from places of employment and other places where the focus is typically incidental to its landscape context. Views from transport corridors.
	The value of the landscape	Viewpoint is recognised by the community such as an important view shaft, identification on tourist maps or in art and literature. High visitor numbers.	Viewpoint is not typically recognised or valued by the community. Infrequent visitor numbers..
Magnitude of Change	Size or scale	Loss or addition of key features in the view. High degree of contrast with existing landscape elements (i.e. in terms of form scale, mass, line, height, colour and texture). Full view of the proposed development	Most key features of view retained. Low degree of contrast with existing landscape elements (i.e. in terms of form scale, mass, line, height, colour and texture). Glimpse / no view of the proposed development.
	Geographical extent	Front on views. Near distance views; Change visible across a wide area.	Oblique views. Long distance views. Small portion of change visible.
	Duration and reversibility	Permanent. Long term (over 15 years).	Transient / temporary. Short Term (0-5 years).

⁴ Best Practice Guide: Visual Simulations BPG 10.2, NZILA

Nature of Effects

In combination with assessing the level of effects, the landscape and visual effects assessment also considers the nature of effects in terms of whether this will be positive (beneficial) or negative (adverse) in the context within which it occurs. Neutral effects can also occur where landscape or visual change is benign.

It should also be noted that a change in a landscape does not, of itself, necessarily constitute an adverse landscape or visual effect. Landscape is dynamic and is constantly changing over time in both subtle and more dramatic transformational ways, these changes are both natural and human induced. What is important in managing landscape change is that adverse effects are avoided or sufficiently mitigated to ameliorate the effects of the change in land use. The aim is to provide a high amenity environment through appropriate design outcomes.

This assessment of the nature effects can be further guided by Table 3 set out below:

Nature of effect	Use and definition
Adverse (negative):	The proposed development would be out of scale with the landscape or at odds with the local pattern and landform which results in a reduction in landscape and / or visual amenity values
Neutral (benign):	The proposed development would complement (or blend in with) the scale, landform and pattern of the landscape maintaining existing landscape and / or visual amenity values
Beneficial (positive):	The proposed development would enhance the landscape and / or visual amenity through removal of restoration of existing degraded landscapes uses and / or addition of positive elements or features

Table 3: Determining the Nature of Effects

Cumulative Effects

During the scoping of an assessment, where appropriate, agreement should be reached with the relevant local authority as to the nature of cumulative effects to be assessed. This can include effects of the same type of development (e.g. wind farms) or the combined effect of all past, present and approved future development⁵ of varying types, taking account of both the permitted baseline and receiving environment. Cumulative effects can also be positive, negative or benign.

Cumulative Landscape Effects

Cumulative landscape effects can include additional or combined changes in components of the landscape and changes in the overall landscape character. The extent within which cumulative landscape effects are assessed can cover the entire landscape character area within which the proposal is located, or alternatively, the zone of visual influence from which the proposal can be observed.

Cumulative Visual Effects

Cumulative visual effects can occur in combination (seen together in the same view), in succession (where the observer needs to turn their head) or sequentially (with a time lapse between instances where proposals are visible when moving through a landscape). Further visualisations may be required to indicate the change in view compared with the appearance of the project on its own.

Determining the nature and level of cumulative landscape and visual effects should adopt the same approach as the project assessment in describing both the nature of the viewing audience and magnitude of change leading to a final judgement. Mitigation may require broader consideration which may extend beyond the geographical extent of the project being assessed.

Determining the Overall Level of Effects

⁵ The life of the statutory planning document or unimplemented resource consents

The landscape and visual effects assessment concludes with an overall assessment of the likely level of landscape and visual effects. This step also takes account of the nature of effects and the effectiveness of any proposed mitigation.

This step informs an overall judgement identifying what level of effects are likely to be generated as indicated in Table 4 below. This table which can be used to guide the level of landscape and visual effects uses an adapted seven-point scale derived from NZILA's Best Practice Note.

	Effect rating	Use and definition
More than minor • • • •	Very high	Total loss of key elements / features / characteristics, i.e. amounts to a complete change of landscape character
	High	Major modification or loss of most key elements / features / characteristics, i.e. little of the pre-development landscape character remains. Concise Oxford English Dictionary Definition High: adjective- Great in amount, value, size, or intensity
	Moderate to high	Modifications of several key elements / features / characteristics of the baseline, i.e. the pre-development landscape character remains evident but materially changed.
	Moderate	Partial loss of or modification to key elements / features / characteristics of the baseline, i.e. new elements may be prominent but not necessarily uncharacteristic within the receiving landscape. Concise Oxford English Dictionary Definition Moderate: adjective- average in amount, intensity, quality or degree
Minor • • • •	Moderate to low	Minor loss of or modification to one or more key elements / features / characteristics, i.e. new elements are not prominent or uncharacteristic within the receiving landscape.
	Low	No material loss of or modification to key elements / features / characteristics. i.e. modification or change is not uncharacteristic and absorbed within the receiving landscape. Concise Oxford English Dictionary Definition Low: adjective- 1. Below average in amount, extent, or intensity
Less than minor	Very low	Little or no loss of or modification to key elements/ features/ characteristics of the baseline, i.e. approximating a 'no change' situation.

Table 4: Determining the overall level of landscape and visual effects

Determination of “minor”

Decision makers determining whether a resource consent application should be notified must also assess whether the effect on a person is less than minor⁶ or an adverse effect on the environment is no more than minor⁷. Likewise, when assessing a non-complying activity, consent can only be granted if the s104D 'gateway test' is satisfied. This test requires the decision maker to be assured that the adverse effects of the activity on the environment will be 'minor' or not be contrary to the objectives and policies of the relevant planning documents.

These assessments will generally involve a broader consideration of the effects of the activity, beyond the landscape and visual effects. Through this broader consideration, guidance may be sought on whether the likely effects on the landscape resource or effects on a person are considered in relation to 'minor'. It must also be stressed that more than minor effects on individual elements or viewpoints does not necessarily equate to more than minor effects on the wider landscape resource. In relation to this assessment, moderate-low level effects would generally equate to 'minor'.

⁶ RMA, Section 95E

⁷ RMA Section 95D

Appendix 3: Determination of landscape quality

Determination of landscape quality		
Category	Criteria	Typical Example
High - Exceptional	Strong landscape structure, characteristics, patterns, balanced combination of landform and land cover	International or nationally recognised site – national park.
	Appropriate management for land use and land cover	
	Distinct features worthy of conservation	
	Sense of place	
	No detracting features	
High	Strong landscape structure, characteristics, patterns, balanced combination of landform and land cover	Nationally or regionally recognised site – national park
	Appropriate management for land use and land cover but potential scope for improvement.	
	Distinct features worthy of conservation	
	Sense of place	
	Occasional detracting features	
Good	Recognisable landscape structure, characteristics, patterns, balanced combination of landform and land cover still evident	Nationally, regionally recognised site all or great majority of area of local landscape importance
	Scope to improve management for land use and land cover	
	Some features worthy of conservation	
	Sense of place	
	Some detracting features	
Ordinary	Distinguishable landscape structure, characteristic patterns of landform and land cover often masked by landuse	
	Some features worthy of conservation	
	Some detracting features	
Poor	Weak landscape structure, characteristic patterns of landform and land cover often masked by landuse	
	Mixed land use evident	
	Lack of management and intervention has resulted in degradation	
	Frequent detracting features	
Very poor	Degraded landscape structure, characteristic patterns of landform and land cover are masked by landuse	
	Mixed land use dominates	
	Lack of management and intervention has resulted in degradation	
	Extensive detracting features	
Damaged landscape	Damaged landscape structure	
	Single land use	
	Disturbed or derelict land requires treatment	
	Detracting features dominate.	

Table 1 has been adapted for NZ conditions from an example of threshold criteria used by practitioners in the United Kingdom. The original document was prepared by Jeff Stevenson Associates and published in Guidelines for Landscape and Visual Assessment ("GLVIA") 3rd Edition. Landscape Institute (UK) and IEMA 2013