

# Appendix D

## Richmond South Water Supply Reservoir

Landscape Assessment & Graphics

# Proposed Richmond South Low Level Reservoir

Tasman District Council

5 June 2024



Landscape and Visual Assessment

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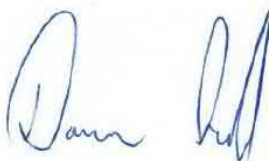
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Attachment A – Visual Assessment Graphics

# 1 Introduction

This Landscape and Visual Assessment (LVA) assesses the potential landscape<sup>1</sup> and visual effects<sup>2</sup> of a water reservoir ('tank') proposed by Tasman District Council on the outskirts of Richmond, Nelson. The original LVA was completed in 2019 and authored by Jeremy Head, NZILA (Registered). The original proposal was postponed, and the design re-evaluated in 2023 by Rachel Hill (Registered). This LVA updates the information and is current to 2024.

The Proposal consists of one above-ground tank, surrounding hardstand area, access drive, temporary laydown area/carpark and associated infrastructure. The infrastructure elements include one engineered retaining wall and one 2 m tall security fence. The tank is circular, 22 m in diameter (internal) x 8.67 m high (2,500 m<sup>3</sup> capacity). External width is 22.6 m diameter. A steel balustrade partially encloses the top of the tank. The tank will be constructed in concrete. Earth and landscape works are proposed around the site where the Proposal is located at 520 Hill Street South, Richmond, Nelson (**Attachment A Page 4**).

All of the above changes to the site are included as the 'Proposal'. The primary viewing audience is located on the rising topography southeast of the site, accessed largely via Sunview Heights (a road) which connects with Hill Street South near the site entrance point. From this rising topography, the proposed changes to the site will be directly visible. Twenty to twenty-five dwellings will have fixed views of the Proposal from between 95 m and 355 m away<sup>3</sup> (**Attachments page 5**).

Public views from Hill Street South are limited and views from other streets and public places are also very limited or not visible. This is due to the generally developed baseline environment of rural and rural residential activities, intervening topography and vegetation - particularly along roadsides (**Attachments Page 6**). In time, proposed screen planting will further reduce or screen views of the Proposal from private and public places. Partly excavating the site approximately one meter, then forming a bench for the tank will further reduce the visual effects from views from the north, south, and east. This is assisted by the Proposal being depressed down into, rather than sit on top of, the small knoll where the site is located.

In addition, and of relevance, the Proposal replaces an existing building – a two storey dwelling which is currently located where the tank is proposed. For this reason, a built form located on the top of the knoll forms part of the baseline environment and the current outlook for several residents living around the site (**Figure 1**).

Where there are views of the Proposal, the tank will be visually screened over time. This is due to existing tall and dense mixed tree and shrub vegetation located to the west of the tank which will be retained (**Figure 2**). Additional tree cover located around the tank will help to further screen the proposal from view where the new vegetation will visually merge with other vegetated patterns in the landscape.

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<sup>1</sup> 'Landscape' effects concern physical changes to the setting which may or may not be seen but are otherwise understood to exist. A landscape effect is a consequence of a change in a landscape's character and value/s.

<sup>2</sup> 'Visual' effects are a subset of landscape effects. Visual effects are consequences of change on landscape values as experienced in views and are one tool to help understand landscape effects. Other senses contribute to amenity values such as sound and smell, however the visual is typically pre-eminent for most people.

<sup>3</sup> To the closest part of a water tank which is considered to be the primary generator of adverse visual effects.

The built part of the Proposal comprises one main built form – a circular water storage tank. The majority of public and private views originate from the south of the site. The curved tank form, and tank surface painted in a recessive natural colour will contribute to reducing any adverse visual effects of bulk and scale in the short term, through physically and visually softening the built form.

The area around the tank and hardstand area within the site will be remediated and extensively planted in accordance with the proposal's Landscape Plan. Any re-contoured areas will be battered back to natural grades and where not planted as described above, sown in pasture grass. Other than the pasture grass which will be grazed – essentially added into other existing grazed areas, any new planting around the site will be fenced from stock with a standard post and wire rural stock fence (**Attachments Page 7**).

It is considered on the seven-point scale of effects<sup>4</sup> (**Appendix 1**) that the tank will have 'Moderate'<sup>5</sup> landscape<sup>6</sup> and visual effects on the receiving environment in the short term. This level of effect is tempered by the fact that there is a two-storey dwelling and associated tall planting located on site now.



**Figure 1** Northwards view to site from footpath on Sunview Heights. (Photograph taken 19 November 2019, by J. Head, 50mm focal length).

<sup>4</sup> From New Zealand Institute of Landscape Architects Te Tangi a te Manu – Aotearoa New Zealand Landscape Assessment Guidelines, Final, July 2022; Very high – High – Moderate to high – Moderate – Moderate to low – Low – Very low ('Low' effects are generally accepted as equal to 'Minor').

<sup>5</sup> **Moderate**: A moderate level of effect on the character or key attributes of the receiving environment and/or the visual context within which it is seen; and/or have a moderate level of effect on the perceived amenity derived from it. (Oxford English Dictionary Definition: Moderate: adjective-average in amount, intensity or degree).

<sup>6</sup> Landscape effects include physical changes to the setting and changes to the landscape character. Landscape effects may not necessarily be seen but are otherwise understood to exist.

After approximately seven years, the 'Moderate' landscape and visual effects will gradually reduce to 'Low'<sup>7</sup> after the proposed tree planting has established<sup>8</sup>. The remainder of the Proposal – the driveway, hardstand area, retaining walls, fencing and planting will have between 'Low' and 'Very low'<sup>9</sup> landscape and visual effects in the short to longer term respectively. This is since a driveway, garaging, retaining walls, fencing and planting occurs on site now - the Proposal introduces no new or foreign elements.



**Figure 2** View from site towards existing vegetation on west boundary of site that will be retained in the Proposal. (Photograph taken 19 November 2019, by J. Head, 50mm focal length).

## 2 In Brief

The objective of this Landscape and Visual Assessment (LVA) is to assess the potential landscape and visual effects of the water tank and associated infrastructure (the Proposal) at the site.

The Proposal comprises several above ground features, including a water tank, various smaller infrastructure including retaining walls, access drive and hardstand areas, fencing, earthworks and landscape planting. A more detailed description of the proposed works is provided in Section 3 of this LVA and is illustrated in **Attachment A Page 7**.

An LVA is required to ascertain any potential effects of the Proposal on landscape character<sup>10</sup> (landscape effects) and amenity (visual effects) which may affect landscape values<sup>11</sup>. Effects may be positive or adverse.

<sup>7</sup> **Low:** A low level of effect on the character or key attributes of the receiving environment and/or the visual context within which it is seen; and/or have a low level of effect on the perceived amenity derived from it. (Oxford English Dictionary Definition: Low: adjective-below average in amount, extent, or intensity).

<sup>8</sup> The Southern Woods tree nursery states that *Eucalyptus Rodwayi* has a 'rapid' growth rate and will reach 6m in height after 5 years ([www.southernwoods.co.nz](http://www.southernwoods.co.nz)).

<sup>9</sup> **Very Low:** Very low or no modification to key elements/features/characteristics of the baseline or available views, i.e. approximating a 'no-change' situation.

<sup>10</sup> Landscape 'character' includes the physical, associative and perceptual dimensions.

<sup>11</sup> Landscape 'Value' is the relative regard (quality, meaning, importance, merit, worth) with which a landscape is held. Values may be physical, associative and perceptual.

This LVA describes the landscape context (Section 4), assesses the landscape and visual effects from the works (Section 7), and provides an assessment of the statutory documents (Section 8).

## 3 The Proposal

The proposed works are to improve the potable water supply for the Richmond area. The following summarises the visible elements of the proposed works and associated infrastructure as illustrated in the Civil Design Drawings in the application document (5-G3141.09 Sheets C20 to C21<sup>12</sup>).

### 3.1 Above-ground built elements

- A cylindrical 22.6 m external diameter (22 m internal diameter), 2,500 m<sup>3</sup> storage tank, concrete construction. The tank is 8.7 m high excluding the open steel balustrade which extends for approximately 1 m further around a portion of the roof space. The tank's base is set at an excavated level of 62.35 m.
- A retaining wall (approx. 1 m high) below the formed hardstand area.
- An approximately 3-4 m area of asphalt hardstand around the tank and an approx. 4 m wide asphalt driveway (below the hardstand, connecting to the existing driveway). Total hardened surfaces equal 1,220 m<sup>2</sup> (tank, asphalt and retaining wall).
- A 2 m high security fence encloses the eastern side of the facility and the drive accessway, next to the asphalt surface. A steel vehicle barrier is installed at the drive entry.
- An approximately 400 m<sup>2</sup> temporary laydown area (construction phase only) adjacent to the Hill Street entrance.
- An approximately<sup>13</sup> 500 m<sup>2</sup> temporary laydown and carpark area (construction phase only) on the neighbouring property (177 White Road) to the west of the site (subject to landowner approval).

### 3.2 Site and Landscape works

- Protection of in-situ planting along the western site boundary and the uplift.
- Removal of other mixed native and exotic trees and shrubs currently growing close to the existing house and separate double garage.
- Removal of existing dwelling, separate garage and surrounding minor structures including retaining walls, decks, pergolas, paved areas and some fencing.
- Removal of existing driveway.
- Topsoiling, mitigation planting and pasture grass seeding around the site.

## 4 Landscape Description

*"Landscape is the cumulative expression of natural and cultural features, patterns and processes in a geographical area, including human perceptions and associations."*<sup>14</sup>

<sup>12</sup> The retaining wall below the hardstand area is not included on these drawings.

<sup>13</sup> Final size to be confirmed.

<sup>14</sup> NZILA Best Practice Note; Landscape Assessment and Sustainable Management **10.1** (02.11.2010).



## 4.1 Landscape Character of Site and Site Context

### 4.1.1 Site visit

A site visit was undertaken on 11 November 2019 by Jeremy Head. The purpose of the site visit was to identify the potential visibility of the Proposal, view and assess the site context, and site. During the visit the site itself was walked, with several ground-based photographic images taken from the site looking outwards from the tank site typically to the surrounding landscape. In addition, drone photography was obtained from elevated locations approximating the upper extent of the tank. This enabled a clear understanding of the extent and location of the various potentially affected parties living within the receiving environment which were largely located on the rising ground to the south of the site.

In completing this update, Rachel Hill visited the site in December 2023. The photos from the original LVA have been retained as there is no material difference.

## 4.2 The site

The site occupies the top of a small ridge that extends in a north-south direction and is used for grazing and Rural Residential activities. A two-storey house with a separate double garage and curtilage area (including vehicle parking and manoeuvring, a clothesline, patio areas and garden beds) is located at the high point of the ridge where this development has a typically Rural Residential character (**Figure 3**). To the west of the house within the site, an area of dense mixed vegetation occurs which includes some tall evergreen trees. An asphalt driveway extends up the hill from Hill Street South to the dwelling - lined in part with timber post and rail retaining walls and an avenue of palms. Between the road and the dwelling/curtilage area the sloping ground is in pasture grass. In summary the existing site is well kempt and has a pleasant lived-in Rural Residential amenity (**Attachment A cover image and Pages 6 and 9**).



**Figure 3** Two storey house located on site where the tank will be centred. (Photograph taken 19 November 2019, by J. Head).

### 4.3 Site context

The contextual setting was also walked including along Sunview Heights and Hill Street South. Two public walkways were walked, one linking Sunview Heights with Hill Street South and the other linking Hill Street with Hill Street South. The contextual setting was also inspected by vehicle, including along White Road, Paton Road and State Highway 6 (SH6). The site could not be seen from Paton Road and SH6 due to topography, vegetation and built development - particularly along roadsides. There was a brief glimpse of the western treed side of the site from White Road.

To the south of the site there is a Rural Residential Zone that extends to higher elevations than the site and includes many large houses set within generously planted gardens. Further south again, and on higher ground the Rural 2 Zone is located which is characterised by a mix of forestry and pastoral activities and sporadic vegetation patterns.

To the north of the site, the Rural 1 Zone and its landscape comprises a mosaic of geometric shaped paddocks and horticultural blocks often demarcated by roads, roadside planting and internal shelterbelts. The site sits within this zone which is a modified rural landscape characterised by pastoral activities, horticulture and Rural Residential activities.

The basis of this context has been drawn from both the site visit and a desk top analysis of relevant maps and plans. The proposed works are located at the cusp of three zones; Rural 1, Rural Residential and Rural 1 Deferred Residential. The Proposal is located within the Rural 1 Zone.

### 4.4 Site context summary

In summary, the landscape character of the contextual setting includes:

- A small but distinctive ridgeline where the site is located on a small saddle high point.
- Gently rolling topography where settlement predominantly occurs with less settled, steeper terrain located to the south.
- Steeper, more dissected, less accessible terrain towards the upper extent of the landform backdrop to the south (Rural 2 Zone). This part of the setting appears drier and is generally planted in plantation trees. Other land features include bare de-forested areas, logging tracks, broom and gorse cover and a transmission line corridor. This area has a more 'wild', less attractive character.
- Small ephemeral streams located in some gully bottoms. Vegetation growing along the banks reinforce these less geometric organic patterns in places.
- Hill Street South which forms a strong edge/contrast in the landscape between the Rural Residential development (Rural Residential Zone) to the south of the road and traditional pastoral activities and land use patterns to the north of the road (Rural 1 Zone), including the site.
- Part of the Rural 1 zone where the land appears, well-managed, verdant and used efficiently for rural practices. Trees and tree belts are typically located along property boundaries where they help define the geometric patterning of land use practices.
- Traditional 1.2 m tall stock fencing. Road verges are less intensively managed, left in long grass for periods which gives these roadside strips a pleasant rustic character in places.
- Some large-scale horticultural activities in the Rural 1 zone which are precluded from all views other than aerial view (e.g., large areas of glass houses), due to dense, tall vegetation located around these activities.

- A Rural Residential zone which appears well developed with large, high-quality dwellings set within established well-planted gardens. Dwellings clearly orientate for the sun and broad northward vistas. The Rural 1 zoned site as it is currently developed appears as an attractive Rural Residential 'island' as it has similar characteristics to the Rural Residential development to the south.
- Built development which is either buffered by or fully screened from road views by generous areas of vegetation including trees.
- Generous areas of tree planting including shelterbelts, which line the major roads such as Hill Street South and Whites Road. This planting often precludes sideways views and creates attractive rural corridors and 'leafy lanes'. The screening effect of trees will reduce in the winter when some trees lose their leaves, allowing views through them.
- Tree planting is mixed in type and includes exotic and native, evergreen and deciduous species. Trees found in the area are generally tall and appear to be in good condition. Planting in the Rural Residential Zone is lower, more varied in species type and foliage colour, typical of a more domestic aesthetic. Palm trees are a feature of the streetscape in the Rural Residential Zone and the driveway of the project site.

## 5 Assessment Methodology

The methodology for assessment is based on the NZILA Landscape Assessment Guidelines<sup>15</sup> and utilises information obtained from both desk top study (Google Earth, Tasman District Council mapping, the design drawings) and site / site context investigation through field study. Coordination with other technical specialists was carried out to access information relevant to the LVA.

This assessment is prepared recognising the statutory framework of the Resource Management Act in accordance with Schedule 4, clause 2(b)<sup>16</sup> which seeks that, in any assessment of a proposed activity, consideration is given to landscape and visual effects. The assessment considers positive and adverse effects.

As previously noted, a site visit was undertaken on 19 November 2019 to examine the landscape character and values of the broader context and of the site. During the site visit, the degree of visibility of the site and Proposal was ground-truthed following earlier desktop study. A photographic record and field notes were taken at the time. These findings remain relevant for this current update.

A seven-point scale of effects<sup>17</sup> has been used in this LVA when assessing the potential adverse landscape effects arising from the Proposal. This effects scale ranges between: 'Very Low' to 'Low' to 'Moderate to Low' to 'Moderate' to 'Moderate to High' to 'High' to 'Very High'. It is generally understood that 'less than minor' effects are equivalent to the 'Very Low' and 'Low' effects ratings (Appendix 1).

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<sup>15</sup> New Zealand Institute of Landscape Architects Te Tangi a te Manu – Aotearoa New Zealand Landscape Assessment Guidelines, July 2022.

<sup>16</sup> 2 Matters that should be considered when preparing an assessment of effects on the environment.

Subject to the provisions of any policy statement or plan, any person preparing an assessment of the effects on the environment should consider the following matters:

(b) any physical effect on the locality, including any landscape and visual effects:

<sup>17</sup> As per the above.

Mitigation measures are discussed in **Section 7** of the LVA.

In preparing this assessment the following matters are addressed:

- A description of the site and its context in terms of landscape character and amenity.
- A description of the proposed activities' landscape and visual effects.
- Identification of any avoidance, mitigation and remediation measures that may be required to counter any minor or more than minor adverse effects on landscape character and visual amenity.
- Consideration of statutory documents where they are relevant to landscape matters, including the Resource Management Act 1991 and the TRMP.

## 6 Landscape Status

The Proposal will be in the Rural 1 Zone where it is also located on a protected ridgeline<sup>18</sup>. It is understood that the Proposal has Discretionary status as it departs from Rule 16.6.2.4<sup>19</sup> in the Tasman Resource Management Plan (TRMP).

## 7 Landscape and Visual Effects

### 7.1 Landscape effects

Landscape effects refer to physical changes in the landscape including changes to landscape character. Landscape effects may not necessarily be seen and if not, are otherwise understood to exist. Changes to the physical setting arising from the Proposal includes:

- The formation of new retained platforms and cut and fill batters.
- Removal of a dwelling and general evidence of residential activity and replacing it largely with a tank and area of hardstand.
- Removal of areas of planting and replacement with other planting.
- Relocation and reforming of a vehicle access point from Hill Street South to the site.

In terms of landscape character effects, the Proposal introduces a tank and associated infrastructure to the site. The tank forms the primary change in landscape character. The other changes constitute amendments, removals and relocations of existing site features (driveway, hardstand areas, planting) and will have only **'Very low'** adverse effects because of this. The proposed tank is higher, broader and covers a larger part of the site than the existing buildings do. The tank is physically different and includes a form, materiality, colour and texture that differs from the existing dwelling, and associated residential development patterns, which will be removed from the site. For these reasons there will be **'Moderate'** landscape effects that will require addressing to provide an appropriate 'fit' in the landscape, discussed later in this report.

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<sup>18</sup> TRMP Planning Map 133. It is understood that there is no information included in the TRMP regarding what criteria has enabled this ridgeline to be identified as protected and what any protection mechanisms are.

<sup>19</sup> Rule 16.6.2.4 Discretionary Activities (Network Utilities, Public Works, and Aviation and Marine Navigational Aids) "*The upgrading of an existing facility or **construction of a new facility** for any network utility, public work, aviation or marine navigational aid or beacon, or any change in activity within an existing facility that does not comply with the conditions for a permitted activity, is a discretionary activity; except that this rule does not apply to slimline, self-supporting masts and poles and attached infrastructure.*" (My emphasis in **bold**).

### 7.1.1 *Associative and Sensory Values*

This attribute relates to peoples' expectations of the landscape and meaningful attachments derived from living within it and significant historic events or traditions. In the RMA 'amenity values' definition, cultural attributes equate with those that are associative.

It is also acknowledged that water tanks such as proposed are not uncommon at elevated locations, including hill tops within the rural landscape. For this reason, the Proposal is consistent with reasonable expectations for the rural setting.

### 7.1.2 *Positive landscape effects*

Currently the site is lived-in where there are vehicles regularly coming and going, night lighting and various other activities associated with the regular 'pulse' of domestic Rural Residential life. The Proposal will essentially be static where there will be infrequent vehicle movements and people operating on site. The Proposal includes no lighting which will be particularly noticeable during the hours of darkness, where the Proposal will be essentially invisible.

### 7.1.3 *Summary*

For the foregoing reasons, the existing values derived from the potentially affected landscape will change to a reasonable degree – particularly in the short to medium term (0-5 years). This change is primarily generated by the removal of the dwelling and its replacement with a tank. Other proposed changes will be, on balance, neutral and will have '**Very Low**' effects. The landscape character of the site will change from a Rural Residential one to a utility/infrastructure one. In this regard the character of the site, once developed will differ markedly from the landscape character of the broad hillslopes to the south where the primary potentially affected parties are located. At present the character of the site is similar and therefore has a high degree of compatibility with the large Rural Residential Zone to the south. On balance, there will be '**Moderate**' adverse effects in terms of the area's associative attributes in the short to medium term. However, in the medium to long term this will reduce to '**Low**' adverse effects as the Proposal becomes concealed from view and will likely be accepted as a more familiar part of the setting.

## 7.2 **Visual Effects**

On the seven-point scale of effects, any potentially adverse visual effects of the Proposal will be similar to the landscape effects discussed earlier. That is; '**Moderate**' in the short to medium term (0-5 years) reducing to '**Low**' in the medium to long term after the proposed planting has established.

The conclusion reached at a '**Moderate**' level of visual effects in the short to medium term has been partly informed when examining the appearance of the surface treatment on a similar TDC concrete water tank - the same surface treatment which is proposed in this case (**Figure 4**). This surface treatment will go some way towards reducing the reflectivity of the new concrete and will further assist the tank to blend with the foliage colours of the existing and proposed tree planting over time. In addition, the site is already built upon which lessens the visual effects of the Proposal compared to the top of the knoll being in open pasture or having a highly natural character.

The small knoll where the site is located, forms the southernmost high point of a small saddle. This saddle is part of an Important Ridgeline<sup>20</sup> that dips, then rises northwards of the site

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<sup>20</sup> Defined as such in the Tasman District Plan, Map 133.

culminating at the higher saddle point where it forks and drops down to the Waimea Plains. At present this ridgeline and the isolated residential development on it is clearly visible from parts of the Rural Residential Zone and Rural 2 Zone to the south of and at typically higher elevations relative to the site. The visibility is largely due to the ridge flanks which is generally pasture grass. This means the ridge and saddle landform have clear legibility in the broader rolling landscape (**Figure 2**). From roadside views, the ridge is less visible and legible as it is often screened by vegetation.



**Figure 4** Existing water tank at Marsden Valley, Stoke, Nelson with 'Permeon' colouration/oxidation process applied to the raw concrete (*Photograph taken 3 February 2020, by Noelia O'Leary, design engineer, WSP*).

### 7.2.1 Private views

The site is elevated and clearly visible to the occupants of up to twenty residences located around the site. Views to the site from these residences were not assessed as part of this report. The visibility of the Proposal was determined by walking around the site, and by examining the drone footage which approximated views out to the potentially affected viewing audience from a point approximate to the top of the tank. The potentially affected properties and a receiving environment<sup>21</sup> were mapped (**Attachment A Pages 5 & 9**). It is acknowledged that the occupants of twenty dwellings to the south of the site will see the Proposal in their primary north facing field of view. There will be south-eastwards views to the site from one dwelling located to the northwest of the site. However, this view would not be a primary one.

### 7.2.2 Public views

Public views from roads and walkways around the site were inspected during the site visit. It was evident that the site was not highly visible due to the generally developed context including large dwellings and generously planted gardens. Other limiting factors included topography where ridges restricted views. In this case, views to the west and east where White Road and Faraday Rise are located essentially marked the limits of views to the site. In other regards roadside planting including shelterbelts precluded views of the site. Existing planting located on the western side of the site screened some views when viewed from the west. This planting will

<sup>21</sup> The area where the Proposal could potentially be seen or otherwise appreciated from. Locations beyond the receiving environment may be able to see and appreciate the Proposal, although any effects would not be adverse.

be retained in the Proposal. To summarise, from various public places, the site and Proposal could be glimpsed through a few gaps between houses and planted areas. These areas are mapped (**Attachment A Page 4**).

### 7.2.3 *Photographic viewpoint locations and visualisations*

The existing 7.6 m high<sup>22</sup> two-story dwelling on site, located central to where the tank is proposed provided a helpful landscape reference point (**Attachment A Page 10**). This allowed the Proposal to be modelled and overlain on site photographs with a high degree of certainty as to its final size (**Attachment A Pages 11 and 13**). The photographic visualisations on page 13 of Attachment A illustrate how the Proposal will appear at day one when its visual effects will be greatest.

Three key photographic viewpoint locations described below were considered during the site visit as the public places where the Proposal would be most visible from and how the Proposal may also appear from private properties (viewpoints 2 and 3) (**Attachment A Pages 4, 11 & 13**):

1. **Viewpoint 1** from the entrance to the site on Hill Street South. This is the closest, unobstructed public viewpoint to the Proposal. From here there is no existing vegetation cover to screen or buffer views. The development will be obvious rising above the viewer and appearing on a skyline. The viewing audience will include those driving past the site as they come and go from their homes (Hill Street South is no-exit and therefore is not a widely used through-road) and those walking past the site as they engage in passive recreational activities (such as walking the dog). From Hill Street South the Proposal will be visible for approximately 260 m.
2. **Viewpoint 2** from Sunview Heights. A 40 m stretch of the road/footpath is the only elevated continuous public viewpoint. As in Point 1 above, Sunview Heights is a no-exit street and is likely to be only used by residents. From this viewpoint the tank will be fully visible (before the proposed planting has established), however it will be seen with a vegetated backdrop. Other short duration glimpses are possible from Sunview Heights.
3. **Viewpoint 3** from the end of Hill Street (east). This represents a glimpse of the Proposal through a gap in vegetation cover. The viewing audience here is likely limited to those living in the two properties accessed from this end of the street. It is unlikely that the general public will see the Proposal from this viewpoint as it is on an access to private property.
4. There are other small glimpses possible from public walkways and roads/footpaths, but these are fleeting, and the Proposal would likely go unnoticed to all but focussed, stationary views. Views from these few locations were observed during the site visit but are considered trivial and are not commented on further.

### 7.2.4 *Conclusion – visual effects*

It was clear from these three photo simulations that the Proposal requires generous planting around it to lessen the effects of bulk and scale. Additional planting will, in time, provide an effective screen to a development that is fundamentally different to what occurs there now, and what people (from both public and private locations) have become accustomed to having in their view – a residential dwelling. This will be particularly necessary due to the numbers of private properties with northwards views towards and past the Proposal as part of their wider panoramic views.

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<sup>22</sup> The height of the house was measured by WSP surveyor Clinton O'Leary on 11 March 2020 using a standard 'Total Station' for terrestrial observations.

It was determined that any proposed planting should not become so high that wider landscape views become compromised. That is, the planting will be required to screen or buffer the tank from view, and not extend much beyond the visual envelope of the Proposal. Planting type will need to have a high level of compatibility with other species type, colour and planted pattern in the contextual setting, in order that the planting itself does not become visually distracting over time. This planting is shown on the Landscape Plan (**Attachment A Page 7**). In the photo visualisations (**Attachment A Pages 12 and 13**) the planting is shown in its mature state. The tree species proposed (*Eucalyptus Rodwayi*<sup>23</sup>/*swamp peppermint*) have a rapid growth rate and will reach 6 m in height after 5 years. Maximum height for this tree species is 15 m.

### 7.2.5 Other infrastructure

Other infrastructure within the Proposal includes the driveway and hardstand area, retaining walls and fencing. Any visual effects arising from these elements is either no different in quantum to what is occurring on site now or constitutes changes that would be expected in the rural landscape. It is concluded that any visual effects arising from infrastructure elements will be 'Very Low'.

## 7.3 Amenity Values

Aesthetic coherence of the landscape is derived from all of the senses, although the visual sense is typically pre-eminent for most people where one's appreciation of the landscape is largely obtained. The visual comes under 'amenity values' as defined in the RMA, the other attributes being pleasantness, cultural and recreational.

It is acknowledged and has been discussed throughout that the introduction of the tank to the setting is the key generator of the magnitude of the effects on what is essentially a limited but potentially highly affected viewing audience. The existing view towards the site is of a residence, and as such, is an accepted, normal part of the setting. The tank is different. Other large structures such as glass houses are in the vicinity but are not visible due to screen planting around them.

The Proposal addresses the effects on visual amenity in three ways. Firstly, through the application of a colour system to the tank wall and top surfaces which provides a mottled 'rusty' effect (**Figure 4**), reducing levels of reflectivity and avoiding the tank appearing monolithic<sup>24</sup>. The balustrade around the top of the tank will be painted in a recessive colour (Colorsteel 'Grey Friars'). Secondly, generous levels of planting are proposed around the tank to screen and buffer it from public and private view in a relatively short timeframe. Thirdly, existing vegetation is either retained in situ or relocated on site which will provide a level of immediate screening and buffering to the tank. This planting will also have a high level of compatibility with the proposed colour of the tank.

For the foregoing reasons, existing amenity derived from the potentially affected landscape will change – particularly in the short to medium term where the visual effect will be 'Moderate'. Over

<sup>23</sup> "A fast-growing tree with a tall, dense crown. Holds its lower limbs, making an excellent shelter tree. Tolerant of both drought and wet soils. Bark is smooth and white on smaller branches, becoming rough, fibrous and grey on larger branches and the trunk. Leaves have a peppermint odour when crushed. Ok on clay. Creamy-white flowers from March-June are great for bees. Evergreen. Tolerates cold. Note: Growth, height and grade information are given in good faith but are subject to natural variables beyond our control." (from Southern Woods, Rolleston, Canterbury website).

<sup>24</sup> If a building or structure is described as monolithic, it is generally a negative description where the building or structure appears very large and plain with no character.



time, this level of effect will decrease to 'Low' as planting proposed to be located around the tank establishes and matures.

## 8 Statutory Context

This section outlines the documents that have been reviewed in preparing this LVA.

### 8.1 Resource Management Act 1991 (RMA)

Part 2 of the RMA contains matters relevant to this LVA as follows:

Section 5 sets out that the purpose of the RMA is to promote the sustainable management, and defines sustainable management as:

*"managing the use and development of natural and physical resources in a way which enables people and communities to provide for their social, economic and cultural wellbeing and for their health and safety while sustaining the potential of natural and physical resources to meet the reasonably foreseeable needs of future generations; and safeguarding the life supporting capacity of air, water, soil and ecosystems; avoiding, remedying or mitigating any adverse effects of activities on the environment."*

Section 7 sets out other matters to which particular regard should be made. Matters relevant to this LVA are:

s7(c) *"the maintenance and enhancement of amenity values"*

s7(f) *"the maintenance and enhancement of the quality of the environment."*

It is considered that this Proposal for a new water tank and associated infrastructure meets the relevant requirements of the RMA in terms of landscape and visual effects. The design incorporates consideration of sections 5, 7(c) and 7(f) and through the proposed colouring and planting, the quality of the existing environment will be maintained in the medium to long term.

### 8.2 Tasman Resource Management Plan (TRMP)

The Proposal is a discretionary activity as the Proposal departs from Rule 16.6.2.4<sup>25</sup> in the TRMP. As such, the following Objectives and Policies are considered to be relevant to the proposal:

#### *5.1 – Adverse Off-Site Effects*

*Issue 5.1.1.1 Provision for appropriate protection, use and development of the District's resources so that activities at one site do not adversely affect the use and enjoyment of another site, or resource.*

*Policy 5.1.3.1 To ensure that any adverse effects of subdivision and development on site amenity, natural and built heritage and landscape values, and contamination and natural hazard risks are avoided, remedied, or mitigated. (My emphases in bold).*

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<sup>25</sup> Rule 16.6.2.4 Discretionary Activities (Network Utilities, Public Works, and Aviation and Marine Navigational Aids) *"The upgrading of an existing facility or construction of a new facility for any network utility, public work, aviation or marine navigational aid or beacon, or any change in activity within an existing facility that does not comply with the conditions for a permitted activity, is a discretionary activity; except that this rule does not apply to slimline, self-supporting masts and poles and attached infrastructure."* (Emphasis added in bold).

Levels of site amenity and landscape values held by the community are currently high. This is evident in the majority of homes within the Rural Residential Zone having broad northwards views, including to the site. This has been acknowledged in the Proposal which has been described earlier throughout this report and includes retention of existing vegetation, tank location, tank colour and screen planting.

### *5.3 - Visual and Aesthetic Character*

*Issue 5.3.1.1 Some localities exhibit special characteristics which people wish to retain.*

*Objective 5.3.2 Maintenance and enhancement of the special visual and aesthetic character of localities.*

*Policy 5.3.3.3 To avoid, remedy or mitigate the adverse effects of the location, design and appearance of buildings, signs and incompatible land uses in areas of significant natural or scenic, cultural, historic or other special amenity value.*

*Policy 5.3.3.5 To maintain and enhance features which contribute to the identity and visual and aesthetic character of localities, including: (a) heritage sites and buildings; (b) vegetation; (c) **significant landmarks and views** (My emphasis in **bold**).*

Under the TRMP the site is located on a 'Protected Ridgeline'. Presumably this means that the character of the ridge should be retained although it is understood that there is no particular evidence in the TRMP as to why it is identified as special. There are no specific rules around what a permitted activity entails on a Protected Ridgeline in the TRMP either. Nonetheless the ridgeline on which the site is located forms a gently rolling, legible landform extending from the steep hinterland to the Waimea Plain and is part of the northern scene for many living to the south of the site. The ridge appears largely unbuilt and is otherwise clothed in verdant pasture with belts and clumps of mature trees. This composition is an attractive one, and so this is likely why the ridgeline is considered a significant landmark possibly in the TRMP.

The Proposal will disrupt some of these valued landform and landcover patterns. However, the site comprises a relatively small part of the ridgeline. Most of the ridgeline will not be altered. The proposed tank colour and generous planting and retention of existing planting on site assists with the Proposal's compatibility with natural patterns in the landscape such as belts and clumps of tree cover located on or near ridge high points, particularly in the medium to long term when the additional trees have matured.

### *7.4 - Rural Character and Amenity Values*

*Issue 7.4.1.1 An appropriate level of protection of rural character, ecosystems and amenity values.*

*Issue 7.4.1.2 How to ensure that plant and animal production activities are able to continue to operate without undue constraints in rural areas, including those due to reverse sensitivity.*

*Objective 7.4.2 Avoidance, remedying or mitigation of the adverse effects of a wide range of existing and potential future activities, including effects on rural character and amenity values.*

*Policy 7.4.3.3 To provide for the maintenance and enhancement of local rural character, including such attributes as openness, greenness, productive activity, absence of signs, and separation, style and scale of structures.*

As discussed above, rural character and amenity values will be affected at the outset to a 'moderate' degree. This is due to the replacement of a residential dwelling and curtilage area with a water tank. In the short term, the Proposal will appear markedly different to how the site looks now, and what people living to the south have become accustomed to have forming part of their outlook. In the medium to long term these effects will lessen where the maintenance of rural character and amenity will be restored.

Reverse sensitivity will not be an issue. The Proposal includes no permanent occupants of the site that may object to any existing or future neighbouring rural land use practices.

## **9.2 - Rural Landscape Values**

*Issue 9.2.1.1 Opportunities for landscape design and enhancement of visual amenities.*

*Issue 9.2.1.2 The need for recognition of local as well as wider landscape character and values as a basis for evaluating the acceptability of proposals for subdivision and development.*

*Issue 9.2.1.3 Urbanisation of rural landscapes through reduced setback distances, urban fencing styles and planting in rural areas. The overall effect has been a loss of open character.*

*Objective 9.2.2 Retention of the contribution rural landscapes make to the amenity values and rural character of the District, and protection of those values from inappropriate subdivision and development.*

*Policy 9.2.3.1 To integrate consideration of rural landscape values into any evaluation of proposals for more intensive subdivision and development than the Plan permits.*

*Policy 9.2.3.3 To retain the rural characteristics of the landscape within rural areas.*

*Policy 9.2.3.4 To encourage landscape enhancement and mitigation of changes through landscape analysis, subdivision design, planting proposals, careful siting of structures and other methods, throughout rural areas.*

*Policy 9.2.3.5 To evaluate, and to avoid, remedy or mitigate cumulative adverse effects of development on landscape values within rural areas.*

As discussed above in Section 4 the existing rural landscape values have been identified and considered with regard to the siting of the tank, minimising cut and fill and retaining existing site features where possible (landform and vegetation cover). One of the rural characteristics within the context of the site is the lack of visible infrastructure combined with expansive rural views – particularly from the occupants of the Rural Residential Zone to the south across a pastoral undulating landscape. Careful study of the site and its context in terms of its characteristics and sensitivity to change has been undertaken as part of the landscape assessment of effects. In addition, large rural-type trees (Eucalypts) are proposed to both screen the tank and provide a copse of trees that will not look out of place in the wider rural setting.

The Proposal replaces an existing smaller development on the site and forms a unique infrastructure development in the area, therefore cumulative effects do not come into play.

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### *Schedule 16.6A: Assessment Criteria – Network Utilities and Public Works*

The below assessment criteria are responded to in turn.

*When considering an application for a resource consent, the Council will have regard to the following criteria:*

*(1) The scale, location and potential adverse effects of the activity.*

It is understood that the location of the tank has been determined by elevation/gravity reasons and the need to mesh with other existing and future water supply infrastructure elements in the area. It has been acknowledged that there will be 'Moderate' adverse landscape and visual effects at the outset due to the proposal's location on a landscape high point where there is a large viewing audience looking towards the site and the Proposal.

*(2) The potential to avoid, remedy or mitigate any adverse effects by means such as consideration of alternative locations, appropriate colour scheme design and landscaping.*

The Proposal includes an 'earthy' colour scheme to lessen any immediate visual effects. Substantial planting is proposed around the tank to further lessen any landscape and visual effects in the medium to long term.

*(3) The effects of structures on visual amenity.*

As per the response to point 2 above.

*(4) The environmental setting of the structure having regard to the general locality, topography, geographical features and adjacent land uses.*

The Proposal constitutes a water storage tank. Such structures are not uncommon on high points in the Rural Zone. For this reason, the Proposal has a high degree of compatibility with its setting. The primary issue is the land to the south of the site (and Rural 1 Zone), zoned and now fully developed as a rural-residential enclave who overlook the site and the Proposal.

*(5) The effects on natural character, in particular on the life-supporting capacity of any vulnerable species or examples of significant indigenous community types.*

It is understood that there are no vulnerable species or examples of significant indigenous communities on or around the site or that which may be affected by the development of the site as it is proposed.

*(9) The extent to which any cultural or heritage values of the site or adjoining sites might be compromised by the facility.*

It is understood that there are no cultural or heritage values on or around the site.

*(10) The impact on areas of high landscape values and, in particular, on any Landscape Priority Area or on any identified ridgeline.*

As discussed, the site is on an identified ridgeline in the TRMP. The proposal's effect on this is discussed above under Policy 5.3.3.5.

*(11) The cumulative effect of the activity, particularly in respect of visual amenity, relative to other existing facilities in the locality.*

Cumulative effects are discussed above under Policy 9.2.3.5.

*(12) The potential for the co-location of facilities.*

It is understood that the nature of the Proposal is that it must stand alone as part of a wider water infrastructure network.

*(14) The effects of lighting and glare from the installation.*

The Proposal includes no lighting.

### 8.2.1 Statutory matters - summary

The Proposal is considered to generally meet the requirements of the objectives and policies of the TRMP.

The scale of the Proposal is relatively small when considered in the overall scale of the Rural 1 Zone and it is not unusual for such structures to be located within the rural landscape on high points. Some such structures are also near residential development (Marsden Valley reservoir, **Figure 4**).

With regard to amenity values, it is considered that any effects arising from the tank and associated infrastructure can be adequately addressed through tank colour and landscape planting which in the medium to long term will be in keeping with the character of the existing wider context.

## 9 Conclusion

The LVA has considered the potential and actual effects of the proposed water tank and associated infrastructure. The tank will be the most visible part of the Proposal. The site and the Proposal have a limited but focussed viewing catchment primarily located in the Rural Residential Zone to the south. Other than this viewing audience, the Proposal will be adequately buffered or screened from view by: 1) topography; 2) built development, and 3) patterns of vegetation – particularly along roadsides (or a combination of all three).

In the medium to long term (up to 15 years of vegetation growth), it is conservatively expected that any potential adverse landscape and visual effects falling on these residential dwellings will reduce to 'Low' to 'Very Low'.

The tank will be excavated down into the site by approximately 2 m. Existing vegetation located to the west of the tank will be retained in-situ and several mature palms will be relocated on site. Substantial additional vegetation will be located around the tank predominantly, but also around other parts of the Proposal. These measures will, over time, significantly buffer or screen the Proposal from views from surrounding transient public and permanent private views.

Any overall adverse landscape and visual effects of the tank on the existing environment in the short term is conservatively expected to be 'Moderate'. These effects reduce in the medium to long term to 'Low' and 'Very Low' respectively. The other aspects of the Proposal are considered to be similar to existing or typical and expected rural development patterns and therefore will have 'Low' to 'Very Low' adverse landscape and visual effects in the short through to long term respectively.

# Appendix 1

seven-point scale of effects

## Scale of Effects (7 Point)

From New Zealand Institute of Landscape Architects Te Tangi a te Manu – Aotearoa New Zealand Landscape Assessment Guidelines, July 2022. The definitions come from NZILA national workshop discussions prior to the publication of the guidelines and are based on the Boffa Miskell effects descriptions.

The below seven-point scale is used to describe effects:

- Very High: Total loss to the key attributes of the receiving environment and/or visual context amounting to a complete change of landscape character.
- High: Major change to the characteristics or key attributes of the receiving environment and/or visual context within which it is seen; and/or a major effect on the perceived amenity derived from it.
- Moderate-High: A moderate to high level of effect on the character or key attributes of the receiving environment and/or the visual context within which it is seen; and/or have a moderate-high level of effect on the perceived amenity derived from it.
- Moderate: A moderate level of effect on the character or key attributes of the receiving environment and/or the visual context within which it is seen; and/or have a moderate level of effect on the perceived amenity derived from it. (*Oxford English Dictionary Definition: Moderate: adjective-average in amount, intensity or degree*).
- Moderate-Low: A moderate to low level of effect on the character or key attributes of the receiving environment and/or the visual context within which it is seen; and/or have a moderate to low level of effect on the perceived amenity derived from it.
- Low: A low level of effect on the character or key attributes of the receiving environment and/or the visual context within which it is seen; and/or have a low level of effect on the perceived amenity derived from it. (*Oxford English Dictionary Definition: Low: adjective-below average in amount, extent, or intensity*).
- Very Low: Very low or no modification to key elements/features/characteristics of the baseline or available views, i.e., approximating a 'no-change' situation.

# Attachment A Proposed Richmond South Reservoir Visual Assessment - Graphics





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Darren Rodd | Work Group Manager - Water

**Cover image:** View towards site from existing entrance on Hill Street South.  
Photograph by J. Head 19.11.2019, focal length = 50mm.

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Telephoto view from Sunview Heights. Photograph by J. Head 19.11.2019.



Public locations where the proposal will be visible from.

(Public) photographic viewpoint location

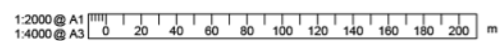
## SITE LOCATION PLAN & VIEWPOINT VISIBILITY



**LEGEND**



PROPERTIES IDENTIFIED WHERE VIEWS TO THE PROPOSAL FROM THE DWELLING ARE POSSIBLE. THIS HAS BEEN DETERMINED FROM DRONE FLIGHT IMAGES. DRONE FLEW LEVEL WITH ROOF RIDGE LINE AT EXISTING DWELLING AT 520 HILL STREET (AT TANK SITE).



# PRIMARY AFFECTED PARTIES LOCATION MAP



Westward view down Hill Street South. Photograph by J. Head 19.11.2019 Focal length = 50mm.



Eastward view down Hill Street South. Photograph by J. Head 19.11.2019 Focal length = 50mm.



Westward view down Hill Street South near 'end of road'. Photograph by J. Head 19.11.2019 Focal length = 50mm.



View from Hill Street South towards Rural Residential Zone. Photograph by J. Head 19.11.2019 Focal length = 50mm.

## VIEWS FROM PUBLIC PLACES



**LEGEND**

- EXISTING TREES AND SHRUBS
- NEW 2 M TALL STANDARD SECURITY FENCE AND GATE
- ROCK FILLED GABION RETAINING WALL
- PLANTING BOUNDARY
- MIX A
- MIX B
- MIX C
- AUSTRADERIA RICHARDII
- COPROSMA ROBUSTA
- HEBE STRICTA VAR. ATKINSONII
- PROPOSED TREE

**MIX A:**

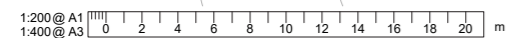
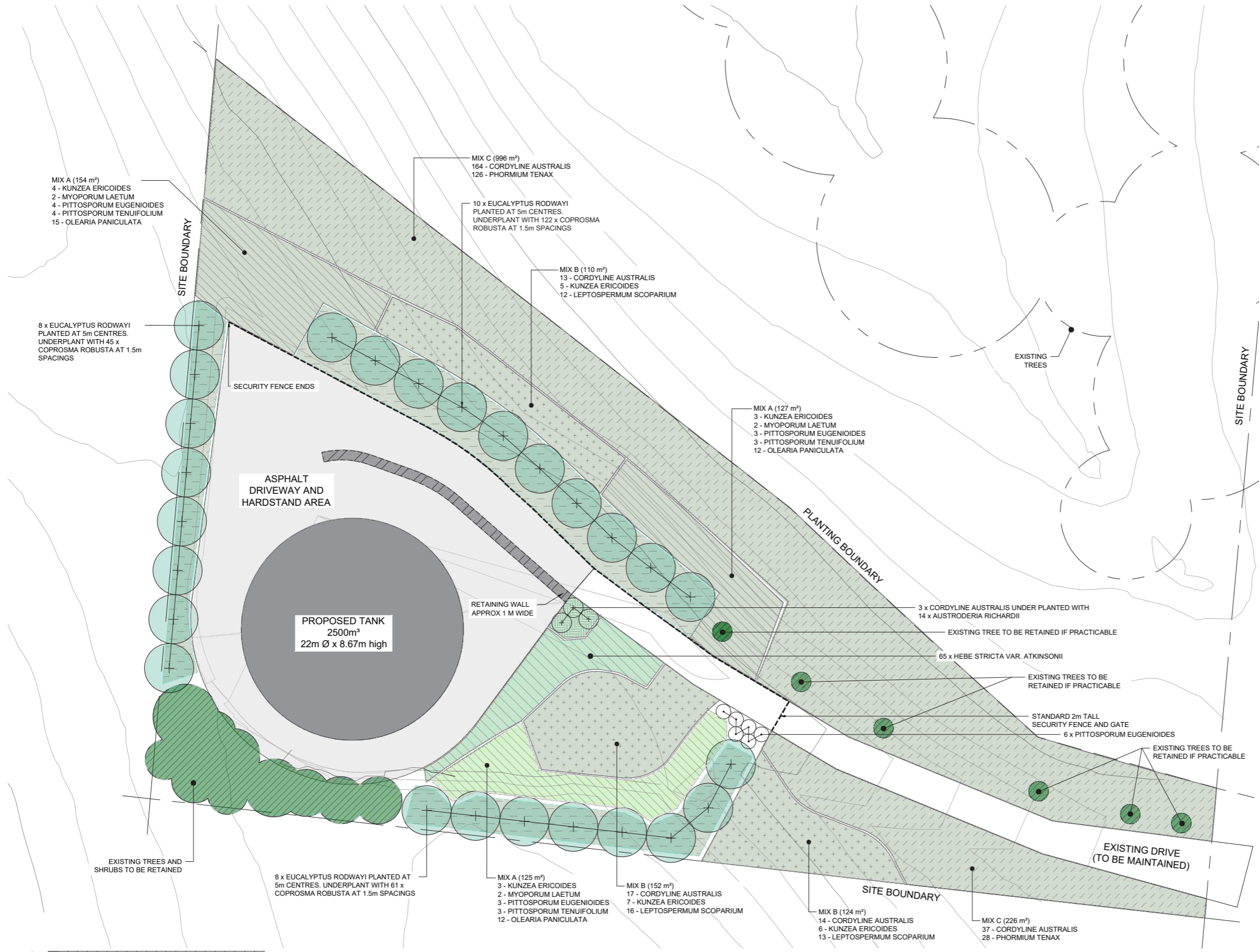
- P. TENUIFOLIUM (20%) AT 3m SPACINGS
- P. EUGENIOIDES (20%) AT 3m SPACINGS
- KUNZEA ERICOIDES (20%) AT 3m SPACINGS
- OLEARIA PANICULATA (20%) AT 1.5m SPACINGS
- MYOPORUM LAETUM (20%) AT 4m SPACINGS

**MIX B: PLANT OUT EACH SPECIES IN GROUPS OF 3, 5 AND 7**

- KUNZEA ERICOIDES (40%) AT 3m SPACINGS
- LEPTOSPERMUM SCOPARIUM (40%) AT 2m SPACINGS
- CORDYLINE AUSTRALIS (100%) AT 3m SPACINGS IN THE GAPS BETWEEN THE ABOVE TREE SPECIES

**MIX C:**

- PHORMIUM TENAX (75%) AT 2.5m SPACINGS
- CORDYLINE AUSTRALIS (100%) AT 2.5m SPACINGS IN GROUPS OF 3, 5 AND 7 SPREAD EVENLY AMONGST THE FLAX



ISSUED FOR CONSENT

# PROPOSED LANDSCAPE PLAN

PLANT SCHEDULE					
Botanical Name	Common Name	% of Mix	Plant Spacing (m)	Total	Notes
<b>PLANT MIXES</b>					
<b>MIX A - 406 m<sup>2</sup></b>					
Kunzea ericoides	Kānuka	20%	3	10	Plant out in equal plant numbers and percentages for area. Mix species evenly.
Myoporum laetum	Ngaio	20%	4	6	
Pittosporum eugenoides	Tarata / Lemonwood	20%	3	10	
Pittosporum tenuifolium	Kōhūhū	20%	3	10	
Olearia paniculata	Akiraho	20%	1.5	39	
<b>MIX B - 386 m<sup>2</sup></b>					
Cordyline australis	Tī kōuka / Cabbage tree	100%	3	44	Plant out each species in groups of 3, 5 and 7.
Kunzea ericoides	Kānuka	40%	3	18	
Leptospermum scoparium	Mānuka	40%	2	41	
<b>MIX C - 1222 m<sup>2</sup></b>					
Cordyline australis	Tī kōuka / Cabbage tree	100%	2.5	201	
Phormium tenax	Harakeke / NZ Flax	75%	2.5	154	
<b>PLANTS IN OTHER AREA</b>					
Austroderia richardii	Toetoe		1	14	
Coprosma robusta	Karamū		1.5	236	
Cordyline australis	Tī kōuka / Cabbage tree		as shown	3	
Hebe stricta var. atkinsonii	Koromiko		1.2	65	
Pittosporum eugenoides	Tarata / Lemonwood		as shown	6	
				<b>Sub Total</b>	<b>324</b>
<b>EUCALYPTUS</b>					
Eucalyptus rodwayi	Swamp Peppermint Gum			26	
				<b>Sub Total</b>	<b>26</b>
				<b>GRAND TOTAL</b>	<b>883</b>

ISSUED FOR CONSENT

## PROPOSED PLANT SCHEDULE



A

B C



B C

D E



D E

A

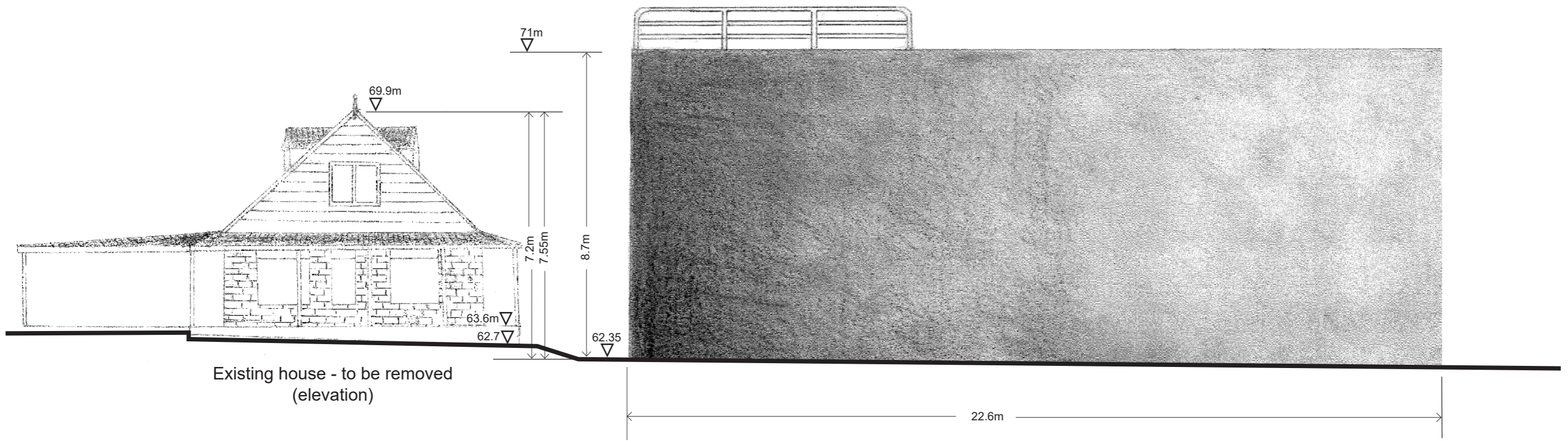
**NOTES**

1. PANORAMIC PHOTOGRAPH CREATED FROM EXTRACTED IMAGE FRAMES FROM DRONE VIDEO. PROPERTIES IDENTIFIED WHERE VIEWS TO THE PROPOSAL FROM THE DWELLING ARE POSSIBLE. THIS HAS BEEN DETERMINED FROM DRONE FLIGHT IMAGES. DRONE FLEW LEVEL WITH ROOF RIDGE LINE AT EXISTING DWELLING AT 520 HILL STREET (AT TANK SITE). LOCATION OF DRONE SHOWN ON SHEET L001.

# RURAL RESIDENTIAL ZONE PROPERTIES



Detail view from Viewpoint 3 towards site and proposal showing relative scale and base level of proposed tank and existing two storey house (also see below).



## SCALE COMPARISON EXISTING HOUSE AND PROPOSED TANK



From Viewpoint 1



From Viewpoint 2

## TANK MODELLED (WITHOUT PROPOSED VEGETATION)



From Viewpoint 1



From Viewpoint 2

## TANK MODELLLED (WITH PROPOSED VEGETATION)



From Viewpoint 3



From Viewpoint 3

## TANK MODELLED (WITHOUT / WITH PROPOSED VEGETATION)