Project Number: 5-WT696.00

Marton Rail Hub Comprehensive Development Plan

Landscape and Visual Assessment

5 August 2021

CONFIDENTIAL

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Contents

This report ('**Report**') has been prepared by WSP exclusively for Rangitikei District Council ('**Client**') in relation to the Landscape and Visual Assessment ('**Purpose**') and in accordance with the Conditions of Contract for Consultancy Services Contract with the Client dated 29th January 2021]. The findings in this Report are based on and are subject to the assumptions specified in the Report. WSP accepts no liability whatsoever for any reliance on or use of this Report, in whole or in part, for any use or purpose other than the Purpose or any use or reliance on the Report by any third party.

1 Scope

WSP has been commissioned by Rangitikei District Council to prepare a Comprehensive Development Plan (CDP) and resource consent applications to the Rangitikei District Council to construct and operate a rail siding and log yard at a news Industrial Development Area located between the North Island Main Trunk Line (railway line) and State Highway 1 (SH1) in Marton.

A pre-requisite to any resource consent application to establish any industrial activity on the proposed site requires a Comprehensive Development Plan (CDP) to be prepared for the overall site.

This Landscape and Visual Assessment (LVA) will inform the CDP and will be used to assess the potential landscape and visual effects of the proposed log yard and rail siding developments which are both located on sites that are internal to the CDP. Effects may be positive or adverse.

This LVA evaluates the landscape effects arising from the proposed changes that will result from the development envisaged by the CDP and whether this is consistent with the relevant provisions of Part 2 of the Resource Management Act 1991 (RMA) with regards to landscape and visual effects.

The LVA will be used to help guide and inform the preparation of a CDP for the Project site. In doing so, it will recommend mitigation measures that will ensure landscape and visual effects are minimised, so that the envisaged development fits well with its surroundings.

2 Description of the Project

The Project site is located at the southern urban boundary of Marton trending in an east west direction between the railway line and SH1. The Project Site is bordered by Makirikiri Road immediately to the south and rural land to the north (Figure 2-1).

Rangitikei Forestry Holdings Limited propose to establish a log yard and private rail siding at the project site, also known as the Marton Industrial Area (Figure 2-2). As a result, resource consent is required along with a CDP and necessary reporting pursuant to Rule B5.

In preparing the CDP, a series of landscape mitigation measures were identified to help inform and enhance the layout and design of the future development of the site, and to mitigate any adverse effects. These landscape design measures are illustrated in **Appendix A** – Plans section of this report.

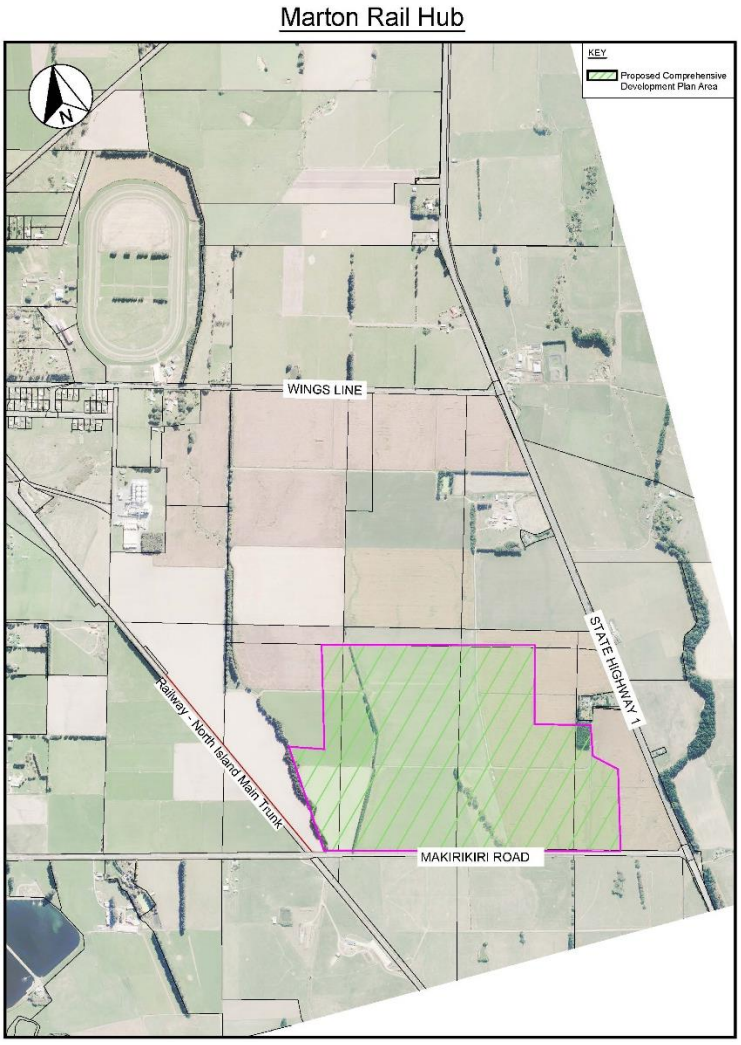


Figure 2.1 Proposed comprehensive Development Plan Area

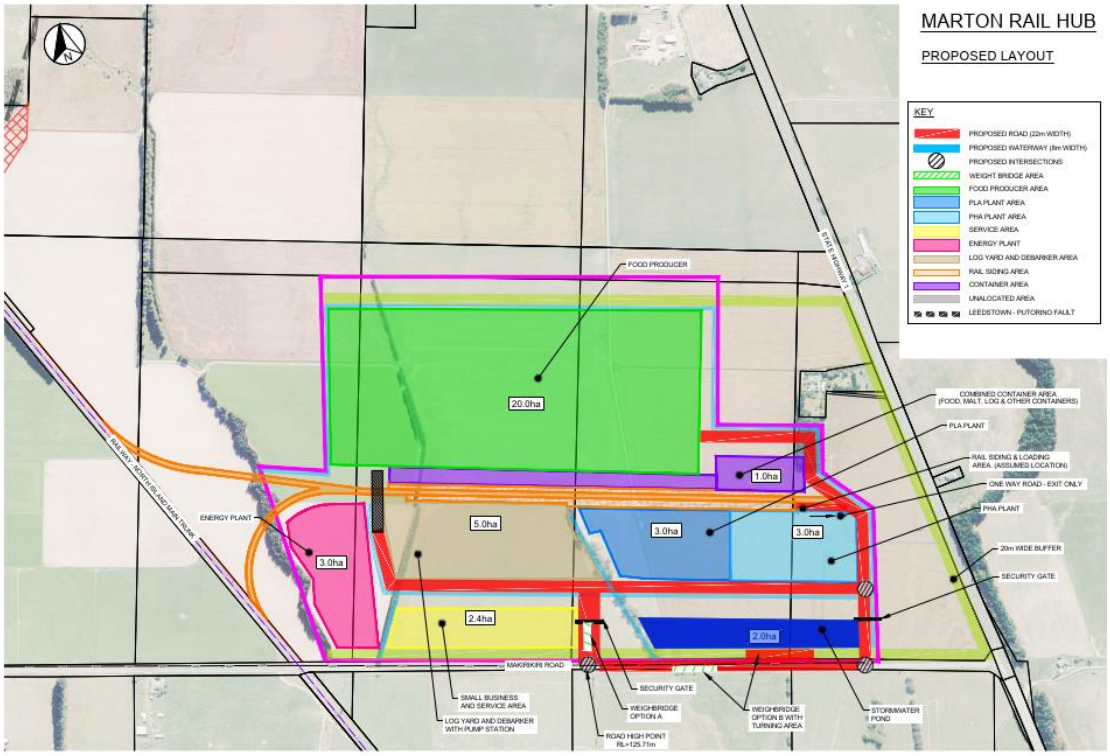


Figure 2.2 Proposed rail siding and log yard

3 Methodology

This LVA is based on Landscape Architecture best practice and draws on the following information:

- Site visit undertaken by Stefan Steyn, Registered Landscape Architect on 9 March 2021;
- The proposed layout plans 5-WT696.00_PLANNING MAP(B); and,
- A desktop study using Rangitīkei District Council maps and Google Earth.

A seven-point scale of effects was used. This scale of effects is based on the Aotearoa New Zealand Landscape Guidelines; Prepared by New Zealand Institute of Landscape Architects (NZILA) 8 December 2020 (currently in draft form). 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. This assessment also includes an interpretation of this assessment in terms of the accepted RMA terminology relating to effects. This is to better inform any subsequent AEE.

- **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.

It is generally understood that '**Very Low**' and '**Low**' are broadly equivalent with 'Less than Minor' effects.

This LVA also includes an interpretation of the accepted RMA terminology relating to effects. This is to better inform any subsequent AEE.

4 Relevant Statutory and Non-Statutory Provisions

4.1 Rangitikei District Plan

Proposed Plan Change 1165, 1151 and 1091 State Highway 1, Marton ('the Plan Change') was released as a draft to the public on 29 June 2019. The Proposed Plan Change relates to the proposed rezoning of 1165, 1151 and 1091 State Highway 1, Marton, from Rural to Industrial. The Council approved the decision made by an Independent Hearing Commissioner and released in August

2020. The decision rezoned approximately 40ha of land adjoining the North Island Main Trunk Railway (NIMTL), with access off Makirikiri Road, from Rural to Industrial, overlain with an 'Industrial Development Area' notation in the Rangitikei District Plan.

In addition to the current District Plan provisions that apply to the Industrial Zone, the Plan Change introduced a set of provisions that specifically apply to the subdivision, development and use of the Industrial Development Area overlay.

The Plan Change amended sections A5 and B5 and the Definitions section of the Rangitikei District Plan and amended the District Plan maps to show the area as Industrial Zone with an Industrial Development Area overlay. It introduced provisions into rule B5 of the Rangitikei District Plan classifying any industrial activities located within the area as a Discretionary Activity and to require certain information as part of any resource consent applied for under this rule.

An appeal was lodged against the Plan change decision, and the CDP is firstly being prepared to support the resolution of that appeal. Following resolution of the appeal, the CDP will ensure the structured development of the land including addressing roading and 3 water services and measures to avoid or mitigate environmental effects (for example, through landscape planting and buffer strips)

Rule B5 states:

> *Without limitation on any requirement of section 88 of the RMA 1991, or any other requirement in the District Plan, prior to any initial development occurring within the Industrial Development Area, a resource consent application submitted under (c) for the first stage of site development must include a Comprehensive Development Plan for the entire Industrial Development Area*

The rule requires mandatory information to be provided within the CDP. The information relevant to this LVA includes:

1. *Sufficient information to demonstrate consistency with the objectives and policies of the District Plan addressing, at a minimum, the following matters:*
    a. *site arrangement and layout including internal roading, building platforms and landscaped areas*
2. *An assessment of effects arising from the implementation of the Comprehensive Development Plan, particularly the avoidance, remediation and mitigation of any adverse effects, and including, at minimum, consideration of the following matters:*

    […]

    c. *landscape values*

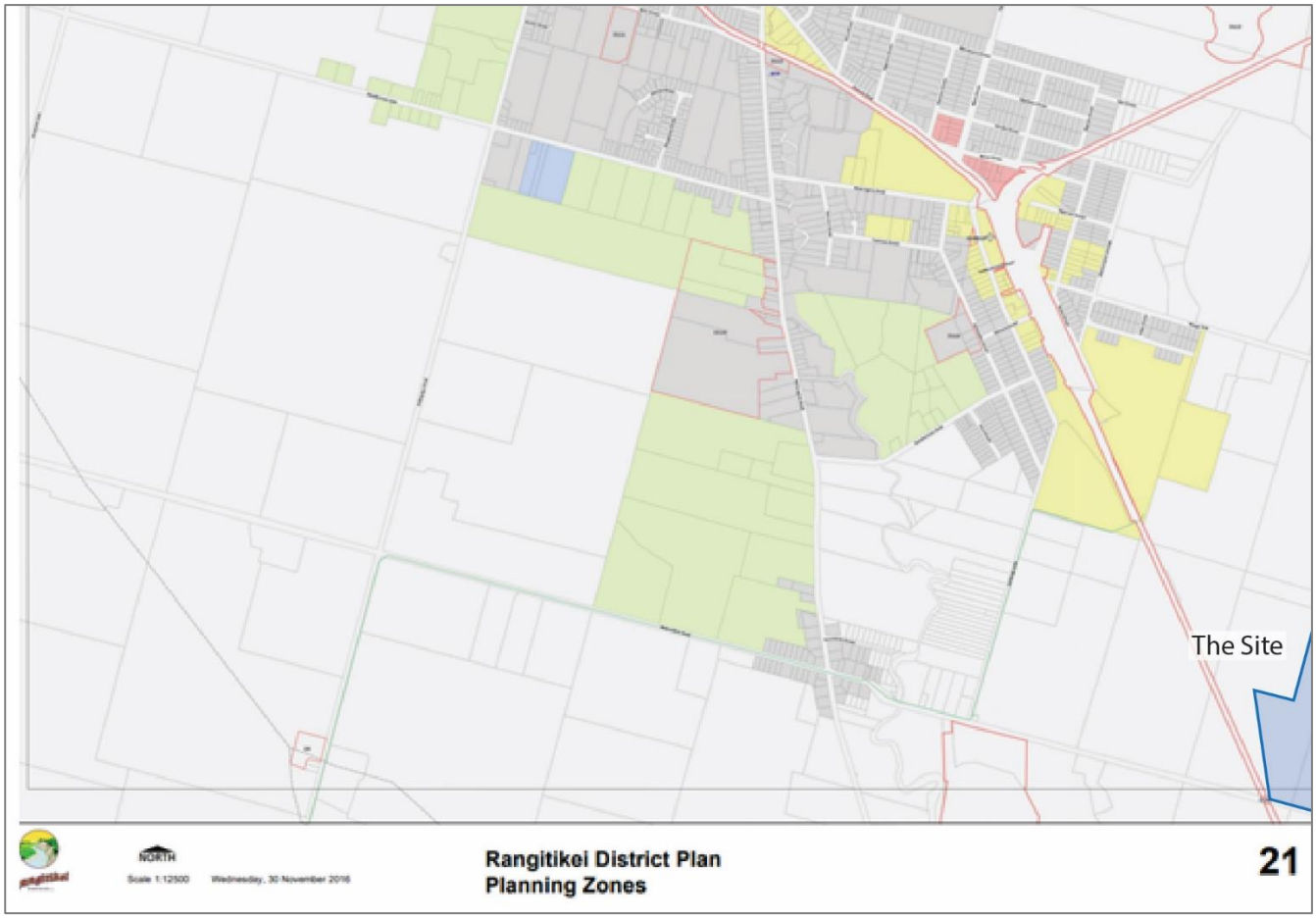
    d. *identification of the persons affected by the activity, any consultation undertaken, and any response to the views of any person consulted.*

No part of the site is identified as an Outstanding Natural Landscape/Feature (ONL/F) in the Rangitīkei District Plan.

4.2 Resource Management Act 1991

This LVA responds to the RMA, which provides a framework for managing the effects of activities on the environment, and therefore is a critical component to any development. This LVA has considered effects on:

- The physical landscape in relation to section 7 (c) *the maintenance and enhancement of amenity values* and section 7*(f) maintenance and enhancement of the quality of the environment*. These matters are referred to as 'landscape effects' within this report, which take into account:
    - Landform (earthworks including cut and fill)
    - Loss of vegetation and existing structures; and
    - Effects on land use.
- Levels of amenity in relation to section 7 (c) *the maintenance and enhancement of amenity values* and section 7 (f) *maintenance and enhancement of the quality of the environment*. These matters are referred to as 'visual effects' within this report, which take into account:
    - The 'fit' within existing landscape character and patterns
    - The visual amenity in relation to the appearance of structures such as buildings; and
    - Visual effects as seen from dwellings and private property.



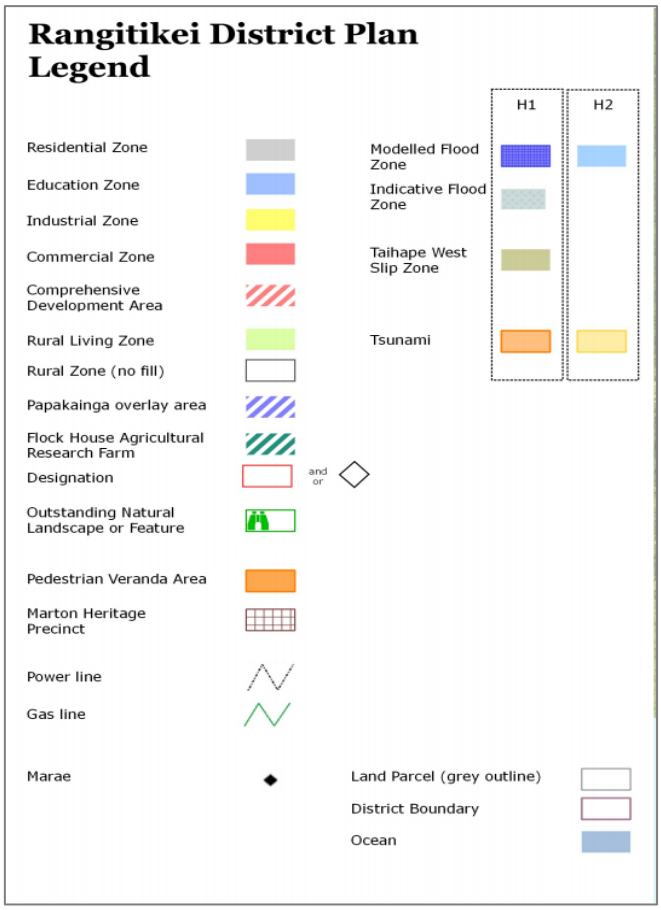


Figure 3.1 Rangitīkei District Plan, Planning Zones

5 Landscape Character and Context

5.1 The Landscape Context and Visual Catchment

The site is located on flat land adjoining the urban-rural fringe of Marton. The wider landscape is largely rural to the east, south and west of the Project site. Most of the surrounding rural farmland has an open rural character that includes pastoral farming, small scale forestry woodlots and rural lifestyle activities with rectilinear shelterbelts. Apart from a small number of lifestyle properties, local roads and SH1 this rural area is characterised by minimal built development.

In contrast with the rural character described above, a mix of industrial and commercial buildings, derelict sites, Marton Railway Station and the railway line, and residential land use activities are situated to the north and northwest of the Project site. These urban land use patterns are diverse and more structured in layout when compared to the rural farmland, imposing a strong industrial/utilitarian character to that area. The influence of the railway activities creates a strong link with the industrial character of the area.

5.2 The Viewing Audience

The potential viewing audience has been identified from a desktop study and confirmed following field work and includes:

- Users of local roads (Wings Line, Makirikiri Road and Goldings Line) and SH1 – these people will have varying views of the Project site due to their orientation, intervening vegetation and buildings. Roads further afield were not assessed in further detail due to the screening effect of intervening buildings, vegetation and distance from the Project site where the changes will be difficult to discern.

- Occupiers of rural residential properties spread along the local roads identified above and Malteroup factory staff: Their views towards the Project site are likely to be open or partially screened by intervening landform, vegetation or distance from the area. As such, only representative viewpoints where there are clear views to the site along the four local roads and proximate to the Project site were selected.
- Permanent residents located to the southeast of the site approximately 1.2 kms away. Views from here will look northwards to the site - however, the site and proposed changes will be screened from view by intervening vegetation and the rising intervening landform. As such, these viewpoints were not assessed in any further detail; and
- Permanent residents located beyond the four local roads identified above: These views to the Project site will be screened by intervening vegetation and landform. Where the Project site is visible it will be sufficiently distant where there will be no discernible change to these views

6 Assessment of Landscape and Visual Effects

6.1 Landscape Effects

6.1.1 Landform

Due to the Project site's comparatively flat and gently sloping landform, the site does not require significant landform modifications to construct building platforms, roads and other infrastructure elements.

Nonetheless, the scale of the earthworks will vary across the Project site. As a result, small to medium scale earthworks may be prominent in localised areas but will have a small footprint and landscape effect when considered in relation to the extent of the wider site and wider area. The proposal will result in some finer grain landform features such as small depressions and drains to be lost, and the modified surface will be levelled in places. The proposed landform changes will not result in significant cut and fill batters.

The vertical profile of the tracks in the yard, has been designed to provide a maximum 1 in 200 grade (0.50%) in order to allow for trains to stop/ park/ couple/ uncouple and to be loaded or unloaded.

The access tracks into the yard (Marton RH – Road 01 & 02) follow a 0.5% grade once they come off the existing NIMT line.

In order to balance out earthworks volumes in the yard, the vertical profile of the mainline alignment for MRH access roads will have grades that also help maintain a volume of earthworks to the minimum within the area. The proposed landform changes to construct the log yard and rail sidings will not result in significant landform modifications.

Within the immediate and wider rural context the potentially adverse landscape effects regarding landform will be '**Low**'.

6.1.2 Landcover

Most of the existing native vegetation cover within the rural zone including the Project site has been historically cleared to provide for rural land use. The remaining landcover patterns are dominated by pasture, exotic shelterbelts, small exotic woodlots, scrub like vegetation, rural-residential development, roads, railway tracks and remnant stands of native vegetation. Vegetation patterns within the site, and the wider rural landscape has been substantially modified, and is subsequently less sensitive to change.

An extensive shelterbelt comprising tall, mature evergreen exotic trees is located on the eastern site boundary contributing to rural amenity value. Two small sections of the shelterbelt at the southern extent of the Project site is proposed to be removed to accommodate the new railway connection. A smaller exotic shelterbelt located approx. 250 m further to the east will be cleared. This will have a small effect on the vegetative pattern, quality and values of the rural landscape. The overall level of potentially adverse effects relative to changes in the vegetative pattern is considered to be '**Low**'.

6.1.3 Land Use

The Project site abuts SH1 to the east and Makirikiri Road to the south. It is part of a large farm block that is adjacent to the NIMTL to the west and industrial zoned land to the north west. The proposal will be located approximately 1.6 kms to the south east of this industrial zoned land and urban boundary, resulting in a land use change from pastoral activities to a permanent industrial development. Therefore, pastoral use of the site will be lost, which will result in a '**Moderate to Low**' landscape effect.

Overall, the proposal will have a '**Moderate to Low**' potentially adverse effect on the immediate rural and residential landscape character. However, the proposed screen planting is consistent with shelterbelts and the overall vegetative patterns within the rural landscape and will help to assimilate the proposed development into its setting.

6.2 Effects on Views and Visual Amenity

Four typical viewpoint locations have been identified as being the most representative within the surrounding landscape. Photographs were taken from locations accessible to the public. The representative viewpoints were chosen according to the following:

- Location and context of a specific viewpoint (how the proposed changes will conflict or contrast with its context);
- Number of potential viewers (for example, the rural hinterland will have a small number of sensitive viewpoints spread throughout a large area);
- Degree of visibility (whether there are screening effects or not);
- Distance from the Project site (for viewpoints over 1 km from the Project site the perceived visual changes will diminish rapidly); and
- Where most change is anticipated as well as the sensitivity of the viewpoint.

These representative public viewpoints were chosen based on where the proposal is assessed to be most visible by people from roads, recreation spaces or near private places on public roads where the views/effects would be similar. These viewpoints have been used as the basis for analysing the extent of any potential visual effects of the proposal.

Potential changes to these views include:

- Removal of shelterbelt vegetation along the lower part of the eastern boundary,
- Earthworks to construct building platforms,
- Internal roads and increase in vehicle movements,
- Railway sidings,
- Timber log yards,
- Stacked containers,
- Security fences,
- Lights,
- Dust plumes,
- Industrial structures; and
- Buildings.

Viewpoints are limited primarily to locations proximate to the proposal such as near residential properties and from roads along the periphery or close to the proposal. Therefore, where the proposal would not be visible from, or where the visual effects were considered to be '**Low**' to negligible at the time of the site visit, the potential effects from these viewpoint locations were not assessed further.

The location of the representative viewpoints is illustrated in **Figure 6-1**.

Figure 6.1 Photo viewpoint locations

In terms of the analysis of the visual effects and the assessment of the change to views from the selected viewpoints, this section of the LVA provides the following:

- A description of the visual audience and existing view;
- An assessment of the sensitivity of each viewpoint;
- A description of the changes that will occur to each view; and,
- An assessment of the level of effect (magnitude of change) on each of the representative viewpoints.

6.3 The Site

The site is rectangular in shape, generally open and characterised by a series of paddocks. The site is bounded by rural land to the north, Makirikiri Road to the south and an evergreen shelterbelt and ephemeral stream that trends in a north south direction to the west. The railway line and embankment are located immediately to the west of the shelterbelt. The eastern extent of the Project site is defined by a narrow piece of rural land that buffers SH1 from the site. This rural strip

includes a residential dwelling surrounded by hedges and a small stand of trees. Similar to the wider landscape, the site is flat to gently rolling with a moderate overall slope which falls in a north-south direction towards the corner of SH1 and Makirikiri Road. The most elevated part of the site is near to its northern edge at the Wings Line boundary.

Pasture grass is the predominant vegetation, with the only variation to this being the two exotic shelter belts at the western extent of the site.

6.3.1 Viewpoint 1

Figure 6.3 Viewpoint 1: Representative view looking south from the eastern extent of Wings Line towards the northern edge of the Project site. (Photograph by S. Steyn 9 March 2021, stitched to form panorama).

Viewpoint 1 is representative of a range of viewpoints throughout the rural landscape which comprises a small number of farm and rural residential dwellings, users of the Racecourse and users of Wings Line.

Rural residents will have varying views of the proposal determined by landform, vegetation and their own proximity and orientation. Effects on views range from those who are further afield and may discern a slight change, through to dwellings proximate to the development where there will be a visible and recognisable new element within the landscape. The existing views from this general location towards the south and Project site now include a rural-industrial outlook, including paddocks, shelter belts, amenity planting along property boundaries, the Malteroup Factory, railway line, commercial properties and the occasional farm shed in the distance. Where the site is partially screened by amenity planting located around property boundaries or where views of the site are screened by the Malteroup Factory, the residents will be less sensitive to the proposed changes. These properties are located along Princess Street between Duke Street and the entrance to the Malteroup Factory.

Potential changes to these views include removal of pasture and shelterbelt vegetation along the lower part of the eastern boundary, earthworks to construct building platforms,

internal roads and increase in vehicle movements, railway sidings, timber log yards, stacked containers, security fences, lights, dust plumes, industrial structures and buildings.

Views to the proposal from locations further to the north of Wings Line including the Racecourse will be screened by intervening residential dwellings, the Malteroup Factory and vegetation. When the proposal is viewed from these distant viewpoints, the proposal is deemed to have an overall '**Very Low**' potentially adverse visual effect

Malteroup Factory staff are close to the site where glimpsed views of the site are visible between gaps in the existing screen planting and through the factory gates. However, given the industrial context from the source of these views, viewer sensitivity of the proposed changes to the site from this location will be low.

For views from residential properties along Wings Line where screening is not present, the proposal will potentially form a recognisable new element in the background. From these properties the proposal including log yard activities and rail siding will have a potentially negative effect on the visual amenity of the viewer. Similarly, if the proposal is lit at night, this would result in a noticeable negative visual effect as a floodlit development will be in contrast with the existing non-illuminated rural character in the background to these views. However, viewer sensitivity will be low due to the distance from the site. Given the limited number of viewers scattered throughout the rural landscape and distance from the site the overall degree of change for these viewpoints is '**Moderate to Low'.**

Motorists travelling along Wings Line will experience the CPD area in their background views. Views of the proposal will be fleeting and form a small part of the wider view. Consequently, the proposed development will be seen for a short timeframe. The prominence of the northern edge of the proposal will be limited which reduces the overall sensitivity of the road user's view to low where any potentially adverse visual effects for road users is considered to be '**Low**'.

For these viewpoints, the visual effect of the proposal can be mitigated by screen planting. The proposed mitigation planting will reduce the prominence of the proposed Rail Hub and help to minimise the adverse visual effects to the extent that the effect is reduced from overall '**Moderate to Low**' to '**Low**'.

6.3.2 Viewpoint 2

Figure 6.4 Representative view looking west from SH1 towards the Project site in the distance. (Photograph by S. Steyn 9 March 2021, stitched to form panorama).

The viewing audience comprises the occupants of a small number of rural residential properties and farms located along SH1, and users of the highway.

The existing views towards the west and the site comprise a rural outlook including paddocks, shelter belts, amenity planting along the site boundaries and the occasional farm shed in the distance.

Potential changes to these views include: removal of pasture and shelterbelt vegetation along the lower part of the eastern boundary, earthworks to construct building platforms, internal roads and increase in vehicle movements, timber log yards, rail siding, stacked containers, security fences, lights, dust plumes, industrial structures and buildings.

Due to the proximity of the eastern extent of the site to these people, the proposed Rail Hub will potentially form a visible and recognisable new element within the landscape and have a noticeable adverse effect on the visual amenity of the viewer. This include anticipated visual effects relating to the internal road network, rail activities associated with the rail sidings, log yard and night lights. The initial visual effect from this location without screen planting is '**Moderate**'. As a result, this potential visual effect on the rural-residential properties and road users will need to be addressed. A recommendation to install screen planting along the south eastern boundary of the proposal is included in the CDP to assist with the mitigation of visual effects.

Views from dwellings to the east beyond SH1 will not be affected by the proposal as the properties are screened from the Project site by intervening hedges along their boundary fences, shelterbelts and distance. As such, viewer sensitivity from these locations will be negligible and the development is deemed to have a '**Very Low**' visual effect.

The proposed landscape mitigation measures have been developed to mitigate adverse visual effects for sensitive viewpoints in proximity to the Project site. These measures will minimise adverse effects on the visual environment and reduce the overall effect on residential activities from '**Moderate**' to '**Low**'.

6.3.3 Viewpoint 3

Figure 6.5 Viewpoint 3: Representative view looking north from Makirikiri Road towards the Project site in the foreground. (Photograph by S. Steyn 9 March 2021, stitched to form panorama).

The viewing audience proximate to the proposal comprises the occupants of a small number of rural residential properties, farms, and users of Makirikiri Road.

The existing northwards views to the site have a rural outlook including paddocks, shelter belts, amenity planting along property boundaries and the occasional farm shed in the distance. Apart from the Malteroup Factory, the rural landscape is predominantly free of built development.

Potential changes to these views following the proposal include removal of shelterbelt vegetation along the lower part of the southern boundary, new main entrance, earthworks to construct building platforms, internal roads and increase in vehicle movements, timber log yards, rail siding, stacked containers, security fences, lights, dust plumes, industrial structures and buildings.

Due to the proximity of the southern extent of the site to these people, their levels of visual sensitivity of the proposal will be '**Moderate**' as the visual change to their outlook will be noticeable.

Traffic volumes at the proposed intersection have been assessed and it is noted that the proposal is predicted to have a medium net increase in traffic movements per day. From residential viewpoints proximate to the proposed site entranceway, the visual changes will be noticeable due to the increase in vehicles entering and departing the site. The increase in vehicle movements will be noticeable during peak periods where the changes will have a marked effect on the overall quality of these views. The effects on the visual amenity is therefore assessed as '**Moderate**' This will provide an opportunity to create a high-quality main entrance to the Rail Hub through the use of amenity and enhancement planting.

The changes to the site associated with the proposed development will be clearly visible to these views. The proposal will increase the visual presence of industrial activities associated with the area and these elements will appear more dominant than they currently are. As such there will be a negative change from these viewpoints. Therefore, these potentially adverse visual effects from these rural viewpoints and users of Makirikiri Road are required to be mitigated through the proposed screen planting and the enhancement of the main entrance, as discussed in the mitigation strategy section of this report (**Section 7**). This will provide an opportunity to soften the visual effect of a hard-industrial edge along this rural section of Makirikiri Road and create a high-quality main entrance to the site through the use of amenity planting. It is anticipated that the visual effects will diminish over time as the planting will take 3 to 5 years to establish and form a degree of screening with growth beyond year 5 to 7 mitigating the visual effects of the proposal, where any potentially adverse visual effects will be '**Low**'.

Motorists travelling along Makirikiri Road will see the proposal in their foreground view as they approach the intersection. It is important to note, however that views of the proposal will be possible for a short timeframe which reduces road users' overall sensitivity to changes on site to low. Consequently, any potentially adverse visual effects on motorists will be '**Low**'.

6.3.4 Viewpoint 4

Figure 6.6 Viewpoint 4: Representative view looking east from the residential properties at the northern extent of Goldings Line towards the Project site in the foreground.

The viewing audience proximate to the proposal comprises a small number of rural and urban residential properties, farms, and users of Goldings Line.

Views to the south west are mostly rural in outlook and include paddocks, shelter belts, amenity plants along the property boundaries and the occasional farm shed in the distance.

The existing views to the north west are more industrial in character and include the Malteroup Factory, railway tracks and earth embankments. Apart from the industrial area and rail tracks in the mid distance, the rural landscape is predominantly free of development.

Potential changes to these views include earthworks to construct building platforms, internal roads and increase in vehicle movements, railway sidings, timber log yards, stacked containers, security fences, lights, dust plumes, industrial structures and buildings.

The overall visual appearance and character of this western outlook will not be affected by the development of the Rail Hub. The full length of the western edge of the Rail Hub will be screened from these views by the intervening shelterbelt that extends along the western boundary of the CDP area. The only exception is where small gaps in the shelterbelt, created for the railway tracks and rail sidings will potentially afford views into the site. For these views a small portion of the rail sidings and log yard will be seen in the mid distance and the visual effect will be small. The initial visual effect from this location without screen planting is 'Very Low'.

Views of the proposal will be fleeting seeing that road users will typically be more focussed on the road corridor itself which is orientated away from the proposed development. Therefore, visual effects associated with the proposal on road users will have a 'Very Low' effect.

7 Mitigation

This section proposes measures to minimise or alleviate potential negative landscape and visual effects that the proposed development may have on the existing landscape and to integrate the proposed Rail Hub into the wider environment. It is therefore expected that over time, any adverse landscape and visual effects will be reduced to an acceptable level and the proposal will be integrated into the existing landscape.

The following measures will minimise adverse effects on the environment and reinforce the visual amenity of the area:

7.1 Mitigation Screen Planting and Vegetation Site Enhancement Plan

A mitigation screen planting and vegetation site enhancement plan (mitigation plan) has been produced (Appendix A). This mitigation plan specifies the type and location of proposed vegetated areas to be planted and maintained on site. The proposed planting will have the following benefits including:

- Achieving a dense visual screen in a short timeframe to mitigate the landscape and visual effects of the rail siding, log yard and wider CDP area;
- Visually 'anchoring' the proposal into the landscape. This can be achieved by using screen planting that has a high level of compatibility with shelterbelt planting patterns from the surrounding rural landscape;
- Reducing the scale and bulk of the proposed buildings, effectively rendering them less noticeable;
- Enhance the visual amenity of the road frontage and,
- Encouraging dust suppression and screening dust plumes by locating tall vegetation on the periphery of, and in strategic locations throughout the site.

The screen planting typologies are explained in more detail below.

7.1.1 Road Frontage Interface Buffer Strip

A 5 m to 10 m wide amenity and enhancement planting strip is proposed at the main entrance to the proposal. The low to medium height planting strip is also proposed immediately adjacent to the SH1 and Makirikiri Road frontages to reduce the potential for adverse visual effects and soften the interface between the road corridor and the proposal. Plant selection is important as it will create a sense of arrival, provides the first impressions of entering the site and creates a positive visual environment for the community, travelling public and workers at the proposed Rail Hub.

7.1.2 Rural Interface Buffer Strip

The stormwater reserve and rural properties are buffered from the proposal by a rural buffer strip. Along this boundary it is proposed to set aside a 10 m planted native buffer strip that is smaller in scale when compared to the Mixed Shelter discussed below. This smaller buffer strip will create a gradual, tiered transition from the road frontage to the interior part of the site, thus avoiding unattractive 'tunnel' like effects arising from long lines of tall shelterbelts along Makirikiri Road.

7.1.1 Mixed Native and Exotic Shelter

A 10 m to 20 m wide mixed planting strip is proposed along the majority of the site boundary to obscure views from the surrounding landscape towards the proposal. In terms of plant selection, a mix of native shrubs and exotic shrubs and trees is proposed, with a height of 40 m minimum at maturity. Plant densities will ensure that a dense visual screen is achieved. This will be tiered to soften the interface between the proposed development and surrounding land uses, avoiding a 'wall' effect that may otherwise occur with more traditional shelterbelt planting.

7.1.1 Stormwater Pond and Swales

A mixture of native riparian grasses and rushes, shrubs and trees are proposed for the stormwater reserve, stream and swales. Low-growing plant species are proposed along the Makirikiri Road boundary which will maintain views from the roading corridor into the stormwater reserve, creating a positive relationship with the road frontage. A Rural Interface Buffer is located at the rear of the stormwater reserve to help screen views of the proposal in the background.

7.2 Recommendations

- A detailed landscape planting plan and specification should be prepared by a suitably qualified landscape architect for the entire Project site. The specification should cover plant installation and ongoing maintenance for a period of 24 months. The planting plan should specify the type and final location of new plant species, plant grades, densities, stock sizes, plant quantities and the arrangement of vegetation to be planted and maintained on site.
- All native plants shall be sourced from the Rangitikei Ecological District.
- All riparian species used alongside diverted streams and around stormwater ponds shall include plant species as identified in the Native Plants for Riparian Margins, Horizons Regional Council[1]
- Exotic species for bat roosting should include the following species:

Common name	Latin name	Value to bats
Exotic Trees		
Giant gum	*Eucalyptus regnans*	Roosting
Brown Barrel	*Eucalyptus fastigata*	Roosting
Messmate	*Eucalyptus obliqua*	Roosting

[1] Native Plants for Riparian Margins, Manawatu Plains Ecological Area prepared by Horizons Regional Council provides a list that contains suitable plants for the Manawatu Plains Ecological Area.

Tasmanian Blackwood	*Acacia melanoxylon*	Roosting
Radiata pine	*Pinus radiata*	Roosting
London plane	*Platanus x acerifolia*	Roosting
Sessile oak	*Quercus petraea*	Roosting

- All lighting should be shielded to minimise light spillage and pollution. No direct light sources should be seen from outside the site.
- The proposed buildings and ancillary structures would benefit from utilising recessive, low reflective coloured materials to help them blend with the surrounding landscape and to minimise any potentially adverse visual effects generated by these buildings and structures. Recessive colours may include grey, green and brown colours such as Resene Blast or Battleship Grey or dark green colours such as Resene Earth Green or Flax Pod.
- It is recommended to plant a 5 m wide band of local native riparian plants on both sides of the stream that will utilise a mix of wetland species and taller growing species to improve the stream environment.

8 Conclusion

This LVA has been produced to determine the actual or potential effects of a proposed new Rail Hub development on the southern urban boundary of Marton.

The proposal introduces noticeable new industrial activities and structures into an existing rural site that is located within the urban-rural fringe of Marton. While the proposed changes will be consistent with the existing industrial character defining the western urban fringe of Marton, the proposal will have the effect of shifting the existing urban-rural interface southwards by approximately 1.6 kms. Due to the presence of industrial activities nearby, the ability of the landscape to accommodate the proposal is favourable. However, the scale and visual prominence of the proposal will have a noticeable and enduring landscape effect on the rural landscape amenity. The proposal will have a '**Low**' adverse effect on the key attributes of the surrounding landscape. Visual effects at the outset will be '**Moderate**' reducing over time to '**Low**' as the mitigation planting establishes.

There will initially be a noticeable change in landscape character from rural to industrial and a reduction in the visual amenity derived from the existing landscape character and its values, following the proposal. However, any potential adverse landscape and visual effects will be mitigated through context sensitive design, in particular including rural type screen planting. The establishment of mitigation planting will after approximately 5 to 7 years screen the proposal from view, allowing the proposal to be gradually assimilated into the wider landscape. This will maintain the rural visual attributes at the perimeter of the site. As such, the proposal will largely retain a visual character in keeping with existing rural patterns of land use, and an existing and urban industrial interface environment, allowing for a more coherent integration into the landscape.

Once the proposed mitigation planting has established any potentially adverse landscape and visual effects are considered to be '**Low**'.

Appendix A
Plans

MARTON RAIL HUB

KEY

- ZONE BOUNDARY OPTION
- RAIL SIDING AREA
- STORMWATER POND
- MIXED LOWLAND SHELTER (SCREEN)
- RURAL INTERFACE BUFFER STRIP
- ROAD FRONTAGE INTERFACE STRIP

MIXED NATIVE AND EXOTIC SHELTER

STATE HIGHWAY 1

RURAL INTERFACE BUFFER STRIP
(LOW TO MEDIUM HEIGHT NATIVE SPECIES)

MIXED NATIVE AND EXOTIC SHELTER

RAILWAY - NORTH ISLAND MAIN TRUNK

STORMWATER POND

MAKIRIKIRI ROAD

ROAD FRONTAGE INTERFACE STRIP
(LOW TO MEDIUM HEIGHT NATIVE AND EXOTIC SPECIES)

MIXED NATIVE AND EXOTIC SHELTER

ROAD FRONTAGE INTERFACE STRIP
(LOW TO MEDIUM HEIGHT NATIVE AND EXOTIC SPECIES)

Appendix B
Methodology

A seven-point scale of effects was used. This scale of effects is based on the Aotearoa New Zealand Landscape Guidelines; Prepared by New Zealand Institute of Landscape Architects (NZILA) 8 December 2020 (currently in draft form). 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. This assessment also includes an interpretation of this assessment in terms of the accepted RMA terminology relating to effects. This is to better inform any subsequent AEE.

- **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.

It is generally understood that '**Very Low**' and '**Low**' are broadly equivalent with 'Less than Minor' effects.

This LVA also includes an interpretation of the accepted RMA terminology relating to effects. This is to better inform any subsequent AEE.

Sensitivity

The sensitivity of the visual amenity is based upon a sliding scale of importance, ranging from "Very High/International" to "Low/Local". The sensitivity of these depends upon the level of modification (pristine natural versus modified engineered) and how sensitive the environment is to change. The factors that contribute to the sensitivity of the viewing audience are:

- *Level of modification (pristine or highly modified);*
- *Quality and condition (coherence/variability);*
- *Number of viewers and frequency; and*
- *Distance from the Project.*

Viewing audience	Definition
High	Viewed within internationally and nationally designated landscape, the setting of historic buildings and their setting. Viewed using:

	Public walkways/tracks, reserve walkways, national parks and botanical gardens. Viewed within residential settings.
Moderate	Viewed within: Locally important landscapes, outdoor sports and recreation, passengers travelling on trains, people within cars on local roads.
Low	People using motorways and major roads, workers within business premises.
Negligible	Viewed within non-designated landscapes, workers within industrial premises.

Distance

The distance from the Project influences the visual sensitivity of the viewing audience:

Viewing audience	Distance
Foreground views (High)	Views within 500 metres of the viewer (high level of detail will be visible).
Mid-distance views (Moderate)	Views between 500 metres and 800 metres of the viewer (medium level of detail will be visible).
Background views (long distance views - Low)	Views 800 metres and further (viewers will see the object but will find it difficult to distinguish detail.

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