Boffa Miskell

Matamata Industrial Plan Change

Assessment of Landscape and Visual Effects
Prepared for Calcutta Farms Limited

16 September 2022

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1.0 Introduction

1.1 Scope of the report

This landscape and visual effects assessment has been prepared in support of a private plan change (PPC) application for the rezoning of rural zoned land between No. 126 and 220 Tauranga Road (State Highway 24), and which is located on the southern side of the road. The land is owned by Calcutta Farms Ltd and adjoins the eastern entry along State Highway 24 into the township of Matamata.

This assessment of landscape and visual effects (LVA) focuses on the land use change from rural productive land use to industrial and the landscape change as a consequence. In order to undertake the assessment a site visit was undertaken by on the 14th of September 2021 where the site and surrounding landscape were observed and photographed.

The authors of this report have contributed to the outcomes provided in the PPC for the Industrial land use with regard to landscape and urban design outcomes that address the change in landscape character and visual amenity. Recommendations within this report have been integrated into the development standards and supporting Development Area Plan (DAP) through layout, architectural and site design controls and landscape planting treatments. These measures have been relied upon in reaching the degrees of effect within this assessment.

1.2 Project background

Boffa Miskell landscape architects were engaged to contribute to the preliminary and developed structure planning design phase. The private plan change will be Plan Change 57 (PPC 57) to the Matamata-Piako District Plan (MPDP). It is a private plan change to request the rezoning of an area of land located at the eastern extent of Matamata. More specifically, PPC 57 seeks to rezone an approximately 41ha site, which is currently zoned Rural in the MPDP, to Industrial with a supporting Development Area Plan.

As detailed in the Assessment of Environmental Effects Report (AEE), prepared by Bloxam Burnett and Olliver (BBO), Calcutta intends to develop specific areas of this land holding in an integrated and staged manager, refining a 250ha masterplan concept as more detailed development plans for each stage are prepared and the associated plan changes and resource consents sought. Under the Master Plan, an approximate 40ha portion of the land adjoining Tauranga Road (State Highway 24) has been identified as an 'Employment Zone'. This PPC gives effect to the Master Plan by rezoning the identified Employment Zone to Industrial. The change in terminology from an Employment Zone to an Industrial Zone is to ensure alignment with a National Planning Standards requirement to use consistent terminology and definitions.

1.3 Other Technical Relevant Reports

Prior to conducting the landscape and visual assessment, a desktop study was completed which included a review of relevant information relating to the landscape values aspect of this development. This information included:

- The Preliminary Visual and Landscape Study, Matamata Piako District, October 1992, LA4 Ltd.
- The Waikato Regional Landscape Assessment, Mary Buckland, 2010[1]

[1] https://www.waikatoregion.govt.nz/assets/WRC/WRC-2019/TR201012.PDF

- Technical Reports in preparation of this application, being:
    - Assessment of Ecological Effects from the stormwater design, prepared by BFL Forestryand Environmental Services
    - Infrastructure report prepared by Bloxam Burnett & Olliver, with a focus on stormwater management
    - Cultural Values Report

1.4 Method of Assessment

The assessment of landscape and visual effects, although linked, are separate procedures. The existing landscape and its existing visual context or visual envelope all contribute to the existing 'baseline' for landscape and visual assessment studies. The assessment of the potential effect on the landscape is carried out as an effect on an environmental resource (i.e. landscape features or character). Visual effects are assessed as one of the interrelated effects on the surrounding viewing audience. The differences between these types of effects can be summarised as follows:

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

To determine the overall nature and significance of landscape and visual effects, an understanding of the sensitivity of the landscape or viewing audience has been combined with an assessment of the magnitude of change resulting from the proposal in order to determine the overall significance of effects. This assessment has been undertaken with reference to the Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines[2]. In summary, the effects ratings are based upon a seven-point scale which ranges from very low to very high, a description of which is included in **Appendix 1**.

2.0 Landscape Context

2.1 Broader Context

The site is placed within the broader Waikato Plains that extends inland from the Firth of Thames to just beyond Matamata. This landscape is intensively farmed for agricultural and horticultural purposes. The landscape forms a pastoral landscape character that is ordered in a series of rectilinear patterns, reflective of a european plains landscape. Many of these farms and paddocks include patterns of large rural tree planting either in patterns or groupings throughout paddocks. This is characteristic of the Matamata area, particularly for land use where equestrian, cropping or stock grazing is predominant.

Throughout the linear pattern is the juxtaposition of the natural landscape patterns of rivers, hill ranges, wetlands and gully systems. Many have been managed to accommodate agricultural land use, with smaller areas of native vegetation extending through the unproductive land areas.

[2]1 'Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines', [final draft subject to final editing, graphic design, illustrations, approved by Tuia Pito Ora/NZILA 5 May 2021]'

Broadly across the plains three rivers wind their way toward the Firth of Thames, cutting a swathe through the paddocks, hedgerows and trees. Vegetation patterns follow natural systems and the grid patterning of the land use (Refer figure 1 below). Established urban centres amongst this landscape are often positioned near river systems and comprise large avenue tree planting at the main entrances. Matamata and Cambridge are two towns within the Waikato Plains that reflect this established character. Often the large exotic tree plantations have been established in early colonial and post-World War I and World War II memorial plantings. Matamata is characterised by dominant exotic tree plantations along the main routes into town, with the site's road corridor including a more recent memorial avenue.

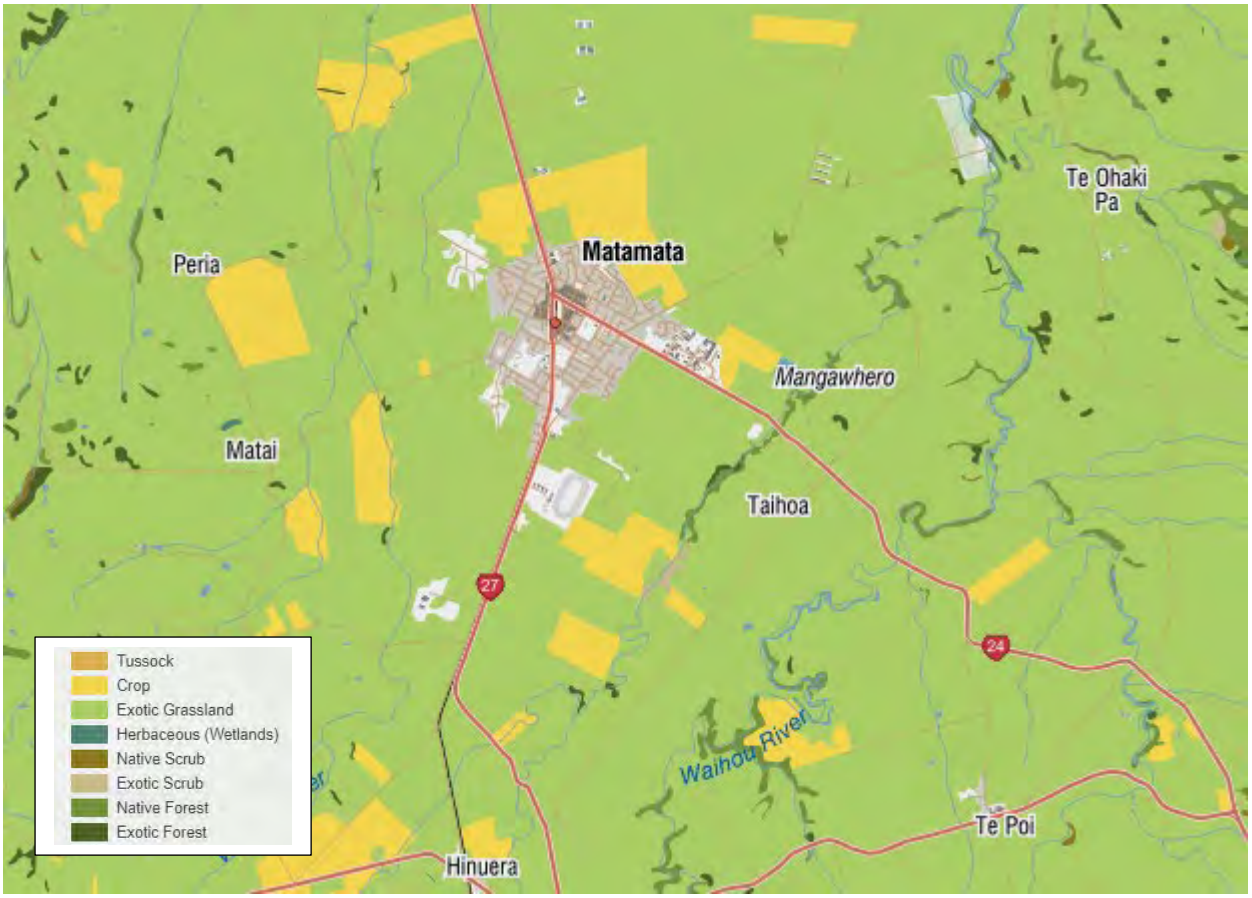


Figure 1: Land Cover Database V5[3]

2.2 Local Context

The site sits at the eastern entrance to Matamata township and to the west of the Mangawhero Stream. The gateway to the surrounding landscape of Matamata resides at the intersection of this stream and State Highway 24 / Tauranga Road (SH24). It is noted State Highway 24 covers Tauranga Road and its transition into Mangawhero Road. The gully system formed by the Mangawhero Stream extends in a north-east / south-west direction forming a distinctive edge to the township and between a wider plains landscape that resides between the stream and the rolling hills to the west beyond Matamata. The Mangawhero Stream flows northwards connecting with the Waihou River approximately 4km north of the site. The Waihou River discharges into the Firth of Thames.

Matamata forms an intersection between State Highways 24 and 27, feeding into the centre of town from the east, north and south. Corridors of large exotic trees line the sides and centre of the road entrances and create formal gateways to Matamata. The eastern entrance along SH24 comprises a rural entrance with a southern

[3] Extracted from Manaaki Whenua Website - https://ourenvironment.scinfo.org.nz/maps-and-tools/app/Habitats/lcdb5_veg

lined avenue of Pin Oak Trees set in front of a post and 4-rail fence. Rural cropping land use transitions to a mix of residential, commercial, and industrial land use as the road user approaches Matamata from the east.

Residential character typically comprises single storey housing on large ¼ acre to 600m^2 sections set within subdivisions around the state highways and collector roads. The boundary between rural and urban land use is defined strongly to the north with the southern and eastern edges more fragmented. Recent subdivision north-eastward for industrial / commercial land use and south for the subdivisions of La Veta and Ancroft. Adjoining land uses are a mixture of rural, rural-residential and industrial. More specifically, some of the land directly northwest of the site on the opposite side of Tauranga Road is zoned Industrial[4] and obtains access to Tauranga Road from Rockford and Waihou Streets. This industrial land contains activities such as Allied Concrete, Farmlands, the J Swap depot, aluminium manufacturing, cabinet makers, panel beaters, electrical services, storage sheds, a service station and a gym.

To the west of the site, and off Werati Drive, is 9 rural-residential sized allotments[5] that have or are in the process of being created by Calcutta. Further west of those lots is land zoned Residential which is being developed by Ancroft Stud, and south-west of the site is a pocket of rural land owned by Willow Park Ltd that is planned for future residential development. The character and landscape of the site and its environs can be described as being rural open-spaced to the south and north east of Tauranga Road, whereas to the northwest of Tauranga Road is urbanised and industrial.

2.3 Site Description

Refer Appendix 2 – Graphic Supplement for Site Photography

The site is located to the south of State Highway 24, and the road boundary extent is defined by the Pinoak lined boundary interface (*refer to Figure 2 on facing page*). The trees remain within the boundary of the subject site, with the post and rail fencing sited inside the property boundary to define cropping extent. The site has been used for various agricultural uses including grazing and more recently crop production (asparagus and oats).

The site demonstrates the typical pastoral land use with a patchwork of rectangular paddocks with scatterings of exotic rural trees throughout the paddocks. The landform remains largely flat with a gradual fall from west to east, toward the Mangawhero Stream. Based on the topographical survey and Lidar information the elevation of the existing ground surface varies between approximately RL 63m in the northwest to RL 59m in the southeast.

The eastern boundary of the site adjoins the Matamata transfer station and gun club. East of that land is the Mangawhero Stream, which is located within a deeply incised gully, approximately 20m deep. Small gully arms extend westward into the overall property and are sited at the south eastern extent of the site. Existing farm sheds and a house reside at the eastern third of the site, with two main access tracks extending north/south and east/west connecting paddocks with the farm buildings.

[4] This is the only Industrial area within Matamata and covers approximately 48ha.

[5] Authorised under subdivision consent 101.2016.11205

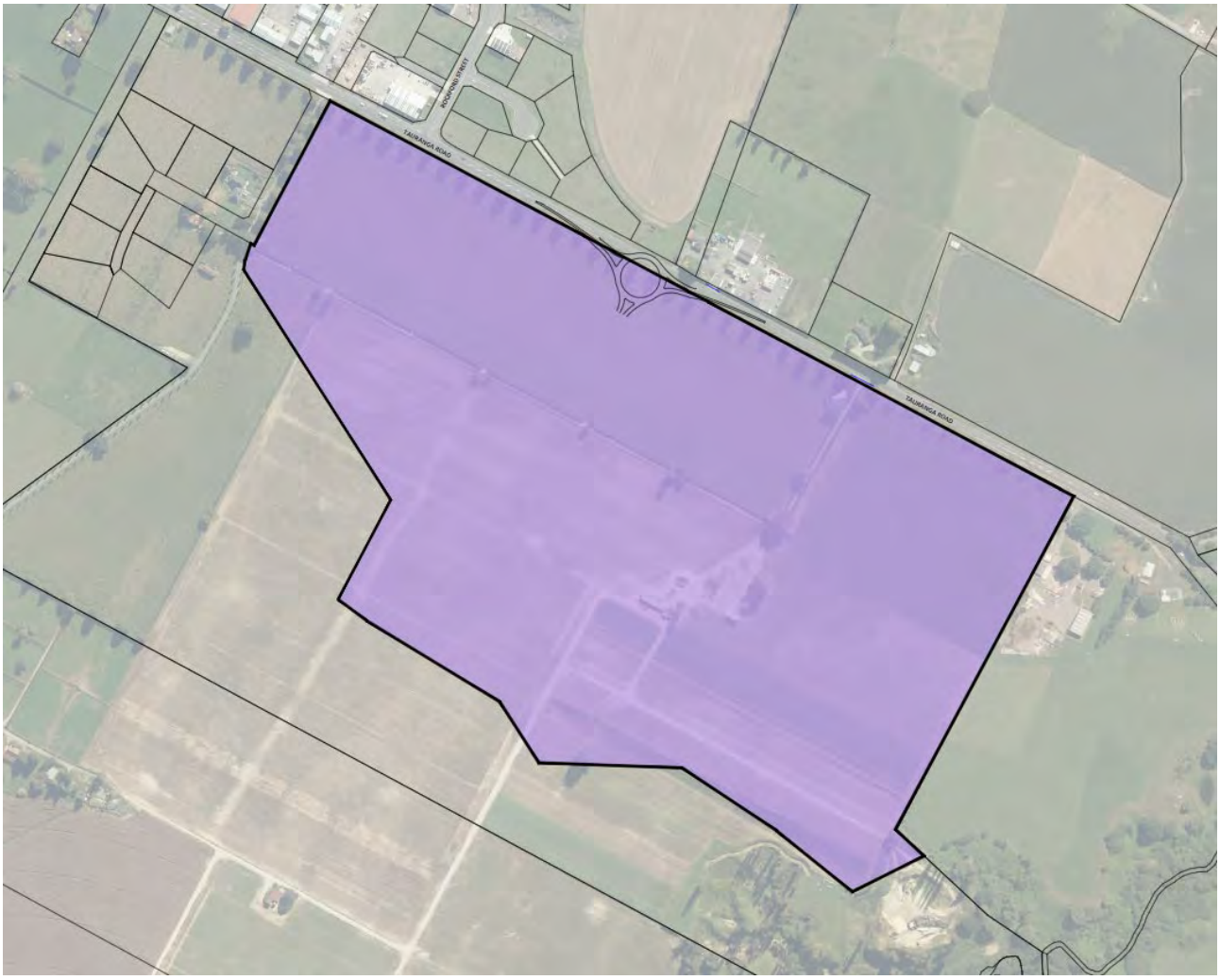


Figure 2 – Site Extent identified in purple.

3.0 Proposed Plan Change

The PPC application seeks to rezone the site from rural to General Industrial Zone. Supporting that zoning is a a Development Area Plan (DAP) which sets the framework for development of the site in a way that manages transportation and stormwater effects, that provides an appropriate interface to the adjoining land (i.e. required areas for landscape treatment) and provides for an integrated walking and cycling network. The DAP is provided in Figure 3.

The proposed land use change has considered through input from varying experts the appropriate treatments to the boundaries, integration of stormwater management and open space, a walking and cycling network, visual buffer planting and architectural design controls. Retention and reflection of the character and gateway entrance SH24 plays for Matamata is maintained. The proposal includes:

- Large tracts of reserve space for amenity and stormwater purposes including a reserve along the sites frontage to SH24 to provides for the retention of the Pinoaks;
- One new transport connection to SH24;
- A main spine road through the site to future proof the potential for the land south of the site to be potentially rezoned for residential development;

- A network of local roads;
- A shared cycle/pedestrian network that connects to existing pedestrian networks and provides a circular arrangement within the site;
- Consistency with a number of the existing industrial zone provisions, including limiting building heights to 12m, limiting signage size, site coverage and setbacks; and
- New provisions that relate to site layout and design that are not already provided for by the industrial zone provisions. .

Building heights are proposed to be maintained to 12m in accordance with the MPDP provisions for industrial zones.

Figure 3: Proposed Development Area Plan

4.0 Relevant Statutory Provisions

As a proposed plan change the provisions of the MPDP do not provide for the proposed industrial land use within the rural zone. Looking to higher order policy documents the Resource Management Act 1991 (RMA) addresses consideration of landscape values under Sections 6 and 7. The purpose of the RMA set out in Section 5 sets the foundation of the following matters of national importance under Section 6 and other matters under Section 7.

Relevant to this landscape assessment is the consideration of Section 6a and 6b being:

6. Matters of national importance

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:

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

(b) *the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:*

Further to this under other matters consideration of *Other Matters* under Section 7 identifies the maintenance and enhancement of amenity values and quality of the environment.

7. Other matters
In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to:

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

(f) *the maintenance and enhancement of the quality of the environment*

The site itself is not within an identified Outstanding Natural Feature or Landscape within the Regional or District Plans. The site connects to the Mangawhero Stream corridor and is proposed to include an ecological area with the purpose of preserving and improving the natural character values of the stream corridor.

Visual amenity is often a term applied when considering the visual sensory attributes of landscape. Visual amenity is largely shorthand for considering how landscape values contribute to the amenity values. Whilst amenity values are distinctive in RMA terms the landscape values encompass the consideration of amenity. Therefore, the following assessment considers landscape effects with regard to landscape character and visual amenity, contributing to the overall landscape values and effects upon those values.

With the change in zoning, the provisions of a District Plan do not anticipate the change, therefore this assessment considers the wider landscape values and effects to provide guidance to the appropriateness of the land use change. In order to do this the assessment considers the *Biophysical, perceptual and associative values* attributed to the landscape and assesses the potential effect on these values with the proposed change.

5.0 Assessment of Landscape Effects

Landscape and visual effects result from natural or induced change in the components, character or quality of the landscape. Usually these are the result of landform or vegetation modification or the introduction of new structures, facilities or activities. All these impacts are assessed to determine their effects on character and quality, amenity as well as on public and private views.

In this study, the assessment of potential effects is based on a combination of the landscape's sensitivity and visibility together with the nature and scale of the development proposal.

Particular effects considered relate to the following:

- Landscape character effects including:
    - Visual amenity effects from public and private locations
    - Effects in relation to statutory provisions.

The principal elements of the proposal that will give rise to landscape and visual effects are:

- Land use change from rural to industrial resulting in a change of open rural landscape to a heavily built up area with large buildings.
- Large buildings interface with the urban characteristics of the Matamata township and the rural and rural residential land use adjoining.

When considering the proposed land use change the scale of the assessment whilst addresses immediate visual connections to the site also addresses the broader landscape character of Matamata township. The composition of the landscape patterns, processes, land uses, and associative values attributed are considered at a localised scale which includes the context of the adjoining industrial, residential, rural residential and rural land uses. The effects assessment considers the effect on the entrance to Matamata and the effect upon the characteristics of Matamata more widely.

5.1 Landscape Character Effects

Landscape character is derived from the distinct and recognisable pattern of elements that occur consistently in a particular landscape. It reflects particular combinations of geology, landform, soils, vegetation, land use and features of human settlement including dwellings. It creates the unique sense of place defining different areas of the landscape.

Landscape Sensitivity

The characteristics contributing to the landscape are representative of the rural pastoral plains landscape of the Waikato plains. The cropping patterns, paddocks, placement of rural trees and accentuation of paddock extents through hedgerows and post and rail fencing are characteristic of the Matamata townships rural periphery. This patterning is frequent and remains a dominant characteristic of the surrounding rural landscape of Matamata. The character of SH24 road frontage creating an avenue of trees provide a transition into the township of Matamata. These patterns are found near settlements within the Waikato Plains and on the edges of Matamata itself.

The Mangawhero Stream and its gully system forms a strong pattern defining the edge of the Matamata plains landscape. This element within the rural landscape forms a natural boundary between the urban, peri urban and rural activities. The stream corridor is a highly sensitive with the rural plains representing a moderate-low degree of landscape sensitivity.

Landscape Change

The PPC brings a dramatic and clear change to land use within the extent of the site itself. The natural patterns are accentuated and integrated into the stormwater systems of the site and the adjoining gully systems. The method of connecting to the existing natural systems and creation of new open space corridors amongst a modified landscape are positive elements to the proposal. The proposed large stormwater reserves (that runs from SH24 to the southern edge of the site) and wetlands will create an opportunity to further enhance the values of the Mangawhero Stream corridor within its natural biotic values.

The change to the human induced landscape patterns of paddocks and rural trees will be modified and will retain the Pinoak tree corridor which will be reinforced with additional native planting and rural planting, at key areas throughout the site including the roading network to enhance the entrance to Matamata township.

The pattern of towns extending along road corridors is common throughout the Waikato plains. Many of these towns are bound by natural patterns and Matamata has a number of natural and cultural boundaries to the extent of the urban development. The proposed plan change references a natural pattern of the Mangawhero Stream as a logical 'end' point or edge to the edge of the town. This approach provides a logical response to the natural and cultural landscape patterns.

Retention of the rural tree plantations and introduction of native vegetation cover provides a juxtaposition of the natural and cultural landscape patterns that exist within Matamata. The landscape change more broadly is consistent and reflective of the natural patterns and whilst extends into the rural landscape, extends into an area experienced as part of the township periphery and within the town landscape.

Taking this into account the magnitude of landscape change is high for the site and at a township wide context of a moderate-low degree.

5.1.1 Visual Amenity

Visibility or change in a view does not result in an adverse visual effect. Visual amenity effects are influenced by a number of factors including the nature of the proposal, the landscape absorption capability and the character of the site and the surrounding area. Visual amenity effects are also dependent on distance between the viewer and the proposal, the complexity of the intervening landscape and the nature of the view.

Visual Catchment

The visual catchment comprises largely the surrounding rural, residential and industrial landscape and road users of State Highway 24. Residents within dwellings along this route extend to the interface with the property and up to near to Kilbride Road. The surrounding residential catchment includes those properties along the urban/ rural interface, to the east of the site, with distance views across toward the site including Grosvenor Drive, Kaimai Drive, Dame Cath Place and Ancroft Drive.

To the south properties off Banks Road will have distance view toward the site. To the east, properties off Taihoa South Road will have distance views from parts of the properties along with glimpse views from SH24 has the user travels toward the site.

To the north the single dwelling at 195 Tauranga Road / SH24 and Weraiti Drive residents (current and future) will have direct views of the site, with the remaining views from the north gained from the existing industrial / commercial businesses off Rockford St, Garland Street, Kea Street and Pepper Street.

The catchment includes those users that are vehicle based, occupants of dwellings with views toward the site and pedestrians along the similar public routes.

Effects from proximate viewing audience

State Highway 24, Weraiti Drive, Garland and Rockford Streets, Matamata Transfer Station and Gun Club

Visual Sensitivity

Views from adjoining properties vary from residential views to commercial and recreational views from the surrounding commercial and recreational properties. Sensitivity of the viewing audience varies based on the use, frequency of use and the susceptibility of the viewer to the change.

The most sensitive viewing audience are those dwellings sited at Numbers 71 and 99 Mangawhero Road (SH24) and 195 Tauranga Road (SH24). Future dwellings within the Weraiti Drive subdivision will also have direct and immediate views toward the site. No. 71 and 99 Mangawhero Road (SH24), views are distanced some 400m and 280m respectively and view the site through other rural residential properties with paddocks and large rural exotic trees between. The sensitivity of this viewing audience is considered to be of a moderate degree.

Sited immediately to the west of the site is the subdivision of Weraiti Drive, views from these properties are immediate and some 100m from the site. Similarly views toward the site from 195 Tauranga Road are screened by its' own onsite Cryptomeria hedgerow. Should this be removed views would be direct toward the site, immediately across the road corridor. As such the sensitivity is considered to be currently moderate-low from the property but has potential to have a high degree of visual sensitivity.

Views from transient viewing audience, being pedestrians, cyclists and motor vehicle users of Tauranga Road, will have a moderate degree of visual sensitivity with a high value of the rural character placed on the approach into Matamata. The visual amenity of the comprises the landscape patterns and characteristics that are representative of Matamata's rural pastoral character, with the site contributing to this in it's composition.

Magnitude of Visual Change

The proposed visual change to the site will be very high, changing from a pastoral open rural landscape character to an urban landform of up to 12m high large industrial buildings interspersed with landscape planting, open space corridors and streets. The visual change from rural open space of cropping and grazing paddocks to buildings will be a high in degree for the immediate viewing audience at Weraiti Drive, 195 Tauranga Road.

For the further distanced viewing audience at 71 and 99 Mangawhero Road and users of Mangawhero / Tauranga Road, the visual change will be set within a wider viewing context, comprising a moderate degree of change.

The rural outlook will change to an urbanised outlook, whilst balanced with vegetation cover to visually integrate the site. It is important to note that the visual change does not equate to an effect. The nature of the change and the sensitivity of the viewing audience contribute to visual effect.

Effects from wider viewing audience

State Highway 24, Banks Road, Grosvenor Drive, Kaimai Drive, Dame Cath Place, Ancroft Drive and Taihoa South Road

Visual Sensitivity

Views from adjoining properties vary from residential and rural residential views. Sensitivity of the viewing audience varies based on the use, frequency of use and the susceptibility of the viewer to the change is considered to be moderate-low. In this instance the views are between 600m – 1km from the site. The viewing context and rural outlook is wider and encompasses a wider context than the site, with intermediary rural land use that provides a retention of rural character in the immediate view.

Magnitude of Visual Change

The proposed magnitude of visual change will be attributed to the views of the southern interface of the proposal, surrounded by wetland and stormwater treatment and of the eastern corner of the site. The visual change will be apparent with the scale of the land use change but remains in the middle distance of the viewing context. As such the visual change will be of a moderate degree when considering the composition and characteristics of this rural landscape.

Nature of Visual Amenity Effect

The proximate viewing audience has varying degrees of sensitivity, ranging from moderate to high. The magnitude of visual change will range from moderate to very high. This applies to the immediate viewing audience. The nature of the effect is considered to be adverse with the change in visual amenity. The degree of the effect of the buildings and infrastructure would result in a moderate – high degree of visual effect. The land use change will be seen in the context of residential subdivision and the expansion of the industrial land to the north of Tauranga Road.

For the wider viewing audience, being within the middle distant views (600m- 1.1km away), the nature of effect remains adverse and in the context of placement in a wider rural setting. The degree of effect for these viewing audiences will be of a moderate degree when considering the change in aesthetic coherence of the landscape.

Visual integration and mitigation of the proposed land use change is integral in minimising the degree of visual effect anticipated for the future industrial land uses. As stated earlier these measures are integrated into the proposed DAP and provides for:

- Retain and protect avenue of Pinoak trees along SH24
- Strengthen amenity planting along SH24 to introduce native tree and shrub planting to integrate with the natural environment.
- Manage building form, colour and signage along SH24 and boundary interface with rural and rural residential land use.
- Integration of walking and cycling networks amongst the site.
- Integration of visual mitigation buffer planting treatments to the eastern, northern and western boundaries.

These measures are fundamental to the visual integration of the industrial landuse into the site. These measures, detailed in Section 5.0 of this report, provide screening for easterly and westerly views, further visually balance buildings with existing and proposed canopy and shrub cover along SH24, integrate large trees into the road network and the wetland / stormwater planting along the southern boundary. The naturalised shaping of the stormwater ponds and wetlands introduces a pattern reflective of the formative natural patterns of this landscape and it connects to the gully network to the east. For the proximate viewing audience from SH24 and Weraiti Drive the degree of visual effect will be minimised from a moderate-high degree to a moderate-low degree.

For the wider viewing audience, the degree of potential adverse effect will be moderate prior to mitigation measures. Post mitigation measures the degree of effect will lessen to a moderate-low degree. This will be

achieved over a period of time, of up to 10 years since planting, with the mitigation beginning to take effect along the eastern, western and southern boundaries in Year 5 since planting.

5.2 Summary of Landscape Effects

Immediately surrounding the site, the viewing audience will experience the greatest degree of change to the site, transitioning from an open rural pastoral landscape to a built up industrial landscape surrounded and interspersed with native and exotic canopy vegetation. The visual amenity effect is encompassed in the landscape value and the effect upon the overall landscape character.

The scale of the assessment for land use change of this nature is imperative in understanding the appropriateness of the activity. With this in mind the assessment has addressed both the visual the sensitivities of the local and wider viewing audiences and considered these in the context of the wider landscape values. Similarly, the landscape sensitivity and change are considered in the broader township context and the relationship the site has with the surrounding landscape. Changing from an unbuilt to built environment of this nature will inherently introduce adverse landscape effects. Within the site's immediate context these will be high, however at localised township context the proposed land use change, whilst an expansion of the township, follows the patterns of development for rural towns in the area. Similarly, it responds to the surrounding industrial land uses and interfaces positively with the natural environment, including introduction of naturalised patterns connecting to the underlying natural landform and Mangawhero Stream.

Integration of these treatments and the management of building design controls, road frontages of SH24 and the proposed collector road (central road) and boundary interfaces **will minimise the landscape, and visual, effects to a moderate-low degree.** Notably over time the land use change will form part of the urban landscape and in doing so the location and design responses to the underlying landscape are important for its successful integration.

6.0 Recommendations

Integrated into the DAP are a number of design and purposeful moves to integrate the land use change into the wider landscape character of Matamata's urban and rural landscape. The following measures are considered key design responses and controls to manage the degree of effect to a moderate-low degree. Each of these measures form part of the wider framework of public and private space that contribute to the maintenance of the character of Matamata township and the integration into the surrounding rural landscape.

Mitigation of the immediate site effects are not possible and are not sought for the land use change, therefore integration and measures to mitigate and manage the character are key to ensuring the proposal is appropriate in its setting.

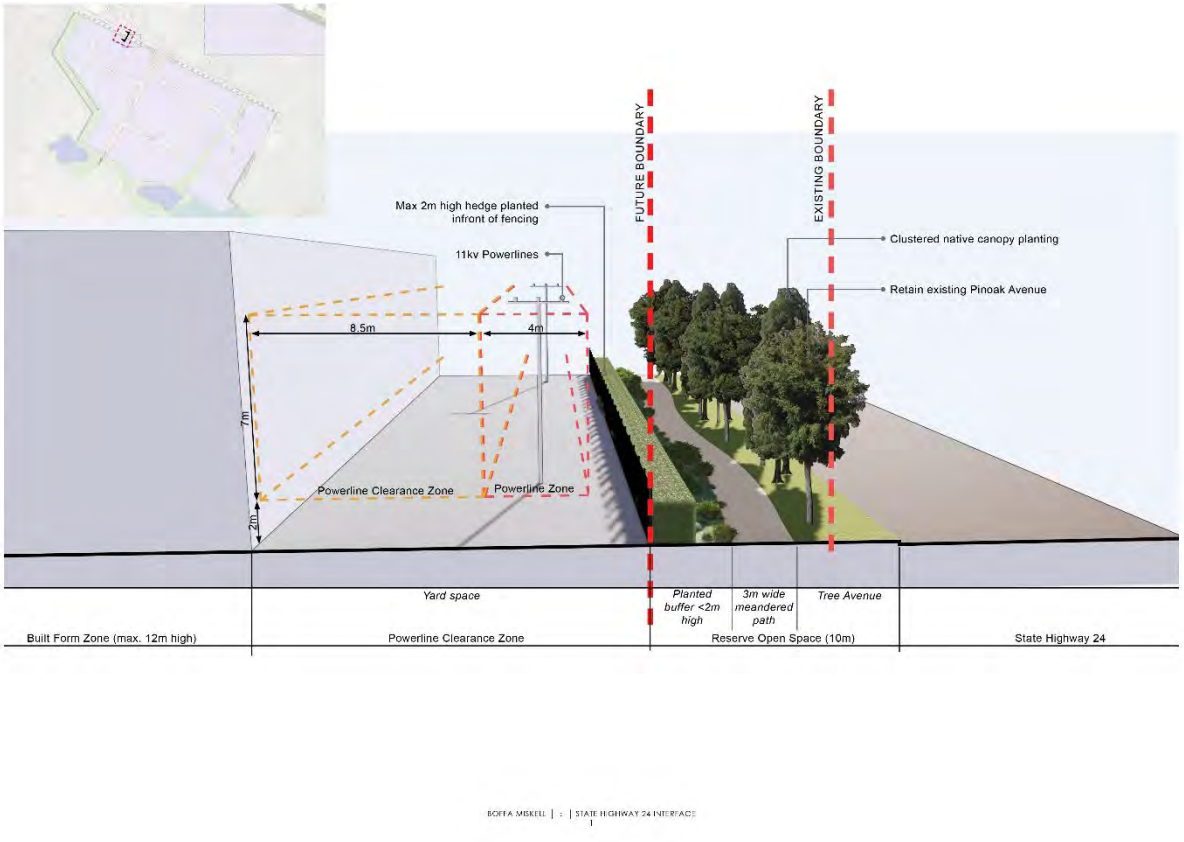
The following recommendations are for integration into PPC and the DAP and its objectives and policies:

State Highway 24

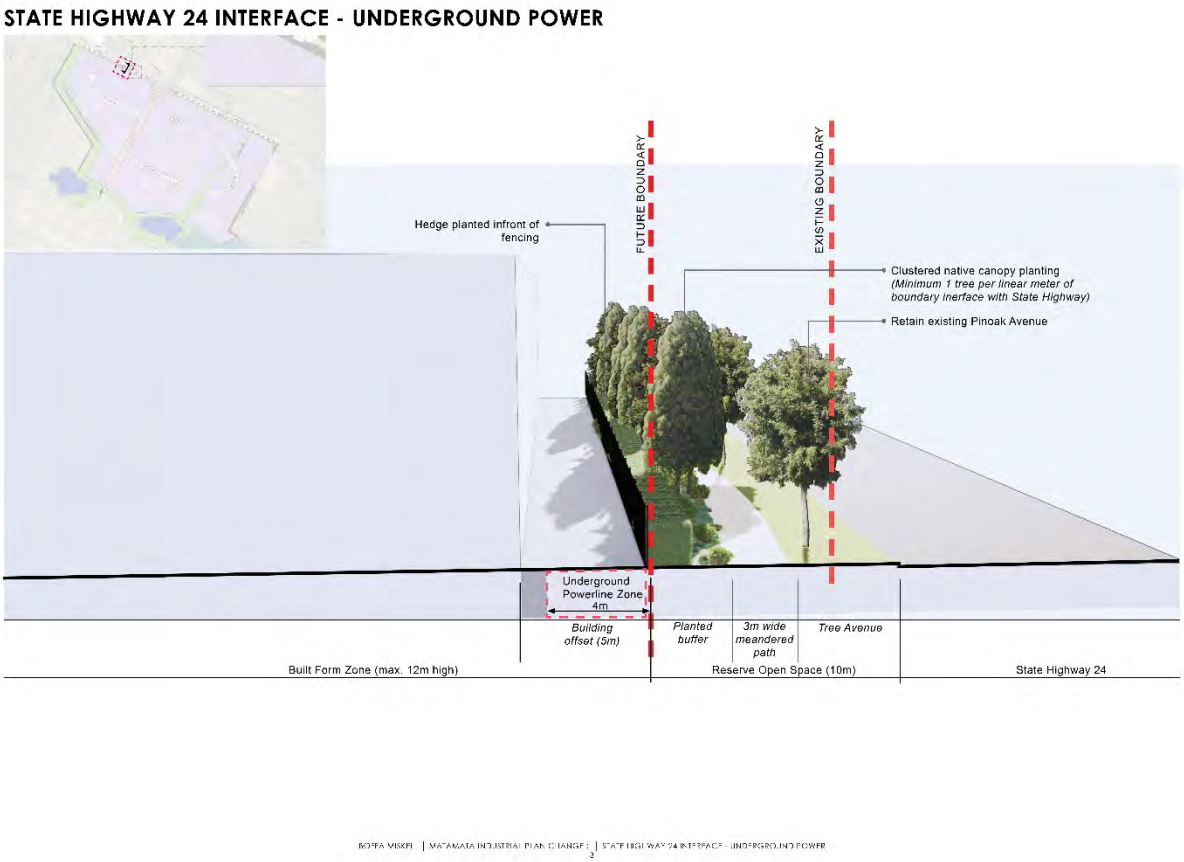
Outcome: To maintain the existing corridor of Pinoaks along State Highway 24 and strengthen the edge with additional groupings of native canopy species and ground cover planting. Retention of the 11kv powerlines will restrict shrub and tree planting due to line clearance requirements. The area would become reserve open space which delivers a high-quality road edge to the industrial estate, prioritising the vegetated character above the built form. The treatment shall meet the following outcomes:

- Retention of Pinoak Trees along the corridor except where the road entrance is required.
- Inclusion of additional Pinoak trees where driveways are closed.
- Inclusion clusters of native canopy planting between the existing Pinoak trees.
- Inclusion of a meandering walkway / cycleway connecting the frontage of the site with its interior network
- Inclusion of low shrub and ground cover planting between the industrial property boundaries and walking/cycling trail.

Refer to Typical Planting Detail 1 and 1a



Typical Planting Detail 1: Above ground powerlines with powerline clearance easement



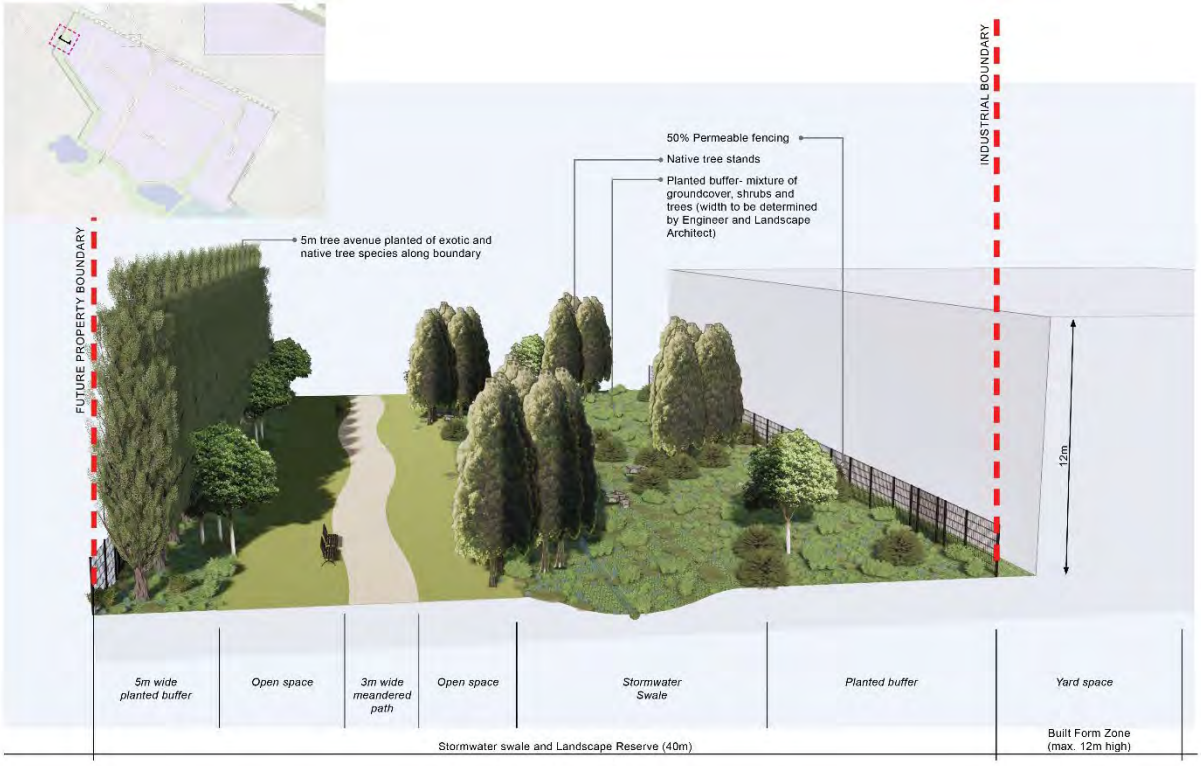
Typical Planting Detail 1a: Underground powerline easement.

Western Boundary Buffer and Stormwater Swale

Outcome: The approach is to provide a visual mitigation buffer that integrates the exotic tree character with native canopy planting in a manner that visually integrates to the 40m stormwater treatment swale. The spatial separation of the swale forms part of the buffer outcomes alongside planting integrated amongst.
The treatment shall meet the following outcomes:

- 5m buffer planting of canopy exotic and native trees along the boundary in a manner that reflects the avenue and naturalised patterns of the rural landscape.
- 40m separation between the zone boundary and industrial lots.
- Integration of walking and cycling trail that meanders through the swale area.
- Integration of 50% visually permeable fencing along industrial property boundaries to enable passive surveillance of pedestrians and cyclists.

  Refer to Typical Planting Detail 2



Typical Planting Detail 2

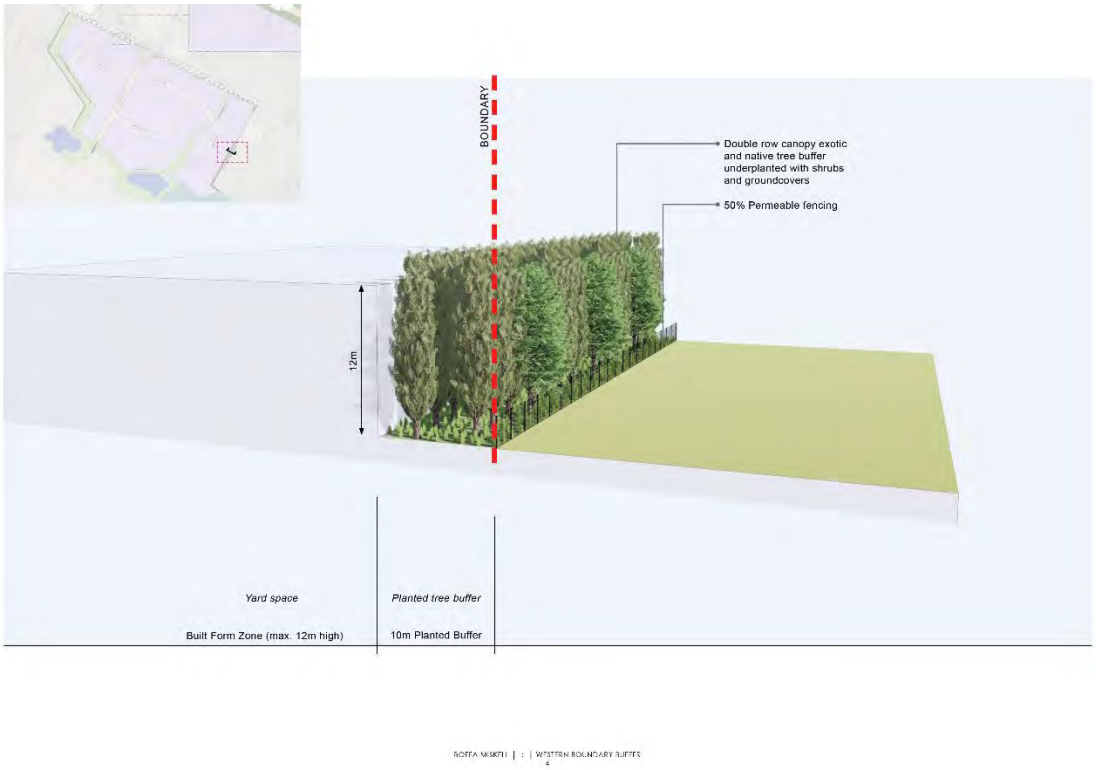
Eastern Boundary Buffer

Outcome: The approach is to provide a visual mitigation buffer that integrates the exotic tree character with native canopy planting in a manner that visually integrates to the nearby stream corridor.

The treatment shall meet the following outcomes:

- 10m buffer planting of double rowed canopy exotic and native trees along the boundary in a manner that reflects the avenue and naturalised patterns of the rural landscape.

  Refer to Typical Planting Detail 3



Typical Planting Detail 3

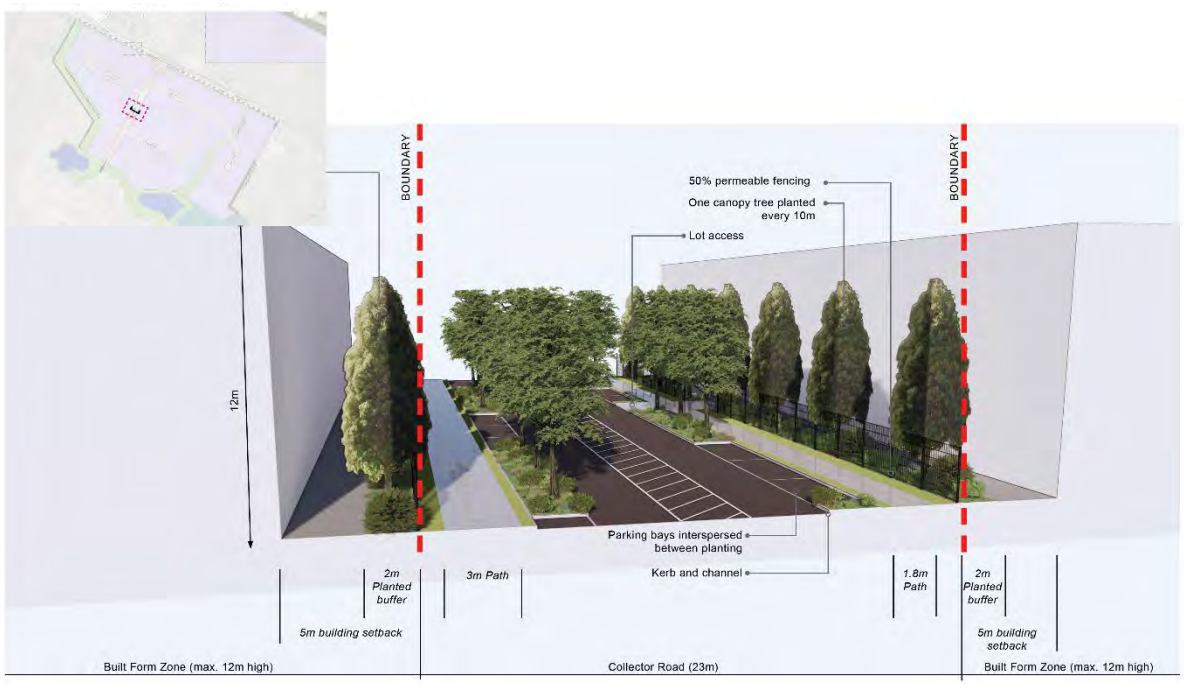
Southern Stormwater Area

Outcome: The approach is to provide a large canopy tree framework planting that integrates with the stormwater planting, integrating with the character of the surrounding rural (current) landscape. Species can be a combination of native and exotic species to allow for varying growth rates. Large rural scaled trees are sought in a sporadic placement to achieve a parkland character (ie avoiding rows). A landscape plan at the time of subdivision should design to achieve this outcome.

Collector Road (23m wide)

Outcome: A collector road corridor that provides a high level of vegetation cover and amenity reflective of the treed character of Matamata. The collector road frontages through the site shall include:

- On all such *sites* frontage landscaping comprising a mix of trees, shrubs and groundcovers shall be provided contiguous to, and to a width of, at least 2 metres measured from the road frontage *boundary*, exclusive of vehicle accessways. For the purposes of this rule, vehicle accessways cannot occupy more than 50% of the width of the road *boundary* of the *site*.
- Provision of canopy tree planting at distance of 1 tree per 10 lineal metres of site frontage within private property.
- Road Corridor
    - Parking bays shall be interspersed with large scaled canopy street trees at regular intervals to achieve an avenue of tree planting. Species shall reflect the exotic and native tree cover representative of Matamata township.
    - Average of one tree per property frontage.



Typical Planting Detail 4

Local Roads (20m)

- Parking bays shall be interspersed with medium scaled canopy street trees at regular intervals to achieve an avenue of tree planting. Species shall reflect the exotic and native tree cover representative of Matamata township.

Building Design Controls

Outcomes: Management of large buildings to visually integrate and remain visually subservient to the character of the SH24. By ensuring buildings limit the use of high-impact and highly reflective colours on *buildings* visible from residential and rural area, the following treatments are sought:

- All sites fronting to State Highway 24 shall ensure building materials and colours have a colour reflectance value of no more than 35% for walls and 50% for roofs.
- Avoidance of flood lighting signage and buildings including facades along SH24. Sensor yard lighting is suitable for security purposes.

Reserve Network

The reserve networks of stormwater swales provide for walking and cycling networks. The outcomes sought are to create safe and inviting spaces with good visibility, passive surveillance and high amenity. The following methods are required for ensuring these outcomes are met:

- Integration of 50% visually permeable fencing along industrial property boundary to enable passive surveillance of pedestrians and cyclists.
- Provision of canopy trees and low shrub and groundcover planting along the linear western and eastern reserves (which move in a north south direction).
- Provision of a landscape plan and accompanying CPTED assessment to confirm the design meets the best practice outcomes of CPTED (Crime Prevention Through Environmental Design) principles.

7.0 Conclusions

Land use change from rural to urban land use requires consideration of a wider scaled assessment approach, looking at the wider landscape values, urban and rural character and the capacity to accommodate change. The site lends itself to extension of the urban limits through its location and landscape values. Critical to achieving successful change to this landscape that reflects the existing values and the character of Matamata are the application of design recommendations set out in Section 5.0.

Integration of these treatments and the management of building design controls, road frontages and boundary interfaces **will minimise the landscape, and visual, effects to a moderate-low degree.** Notably over time the land use change will form part of the urban landscape and in doing so the location and design responses to the underlying landscape are important for its successful integration.

Overall, the degree of potential adverse landscape, including visual amenity, will be moderate-low, equating to a minor adverse effect (Refer to Appendix 1).

Appendix 1: Landscape and Visual Effects Method

Appendix 1: Landscape and Visual Effects Assessment Methodology

11 February 2019

Introduction

The Boffa Miskell Ltd landscape and visual effects assessment (LVA) process provides a framework for assessing and identifying the nature and level of likely effects that may result from a proposed development. Such effects can occur in relation to changes to physical elements, the existing character of the landscape and the experience of it. In addition, the landscape assessment method may include an iterative design development processes, which includes stakeholder involvement. The outcome of any assessment approach should seek to avoid, remedy or mitigate adverse effects (see **Figure 1**). A separate assessment is required to assess changes in natural character in coastal areas and other waterbodies.

This outline of the landscape and visual effects assessment methodology has been undertaken with reference to the **Quality Planning Landscape Guidance Note**[1] and its signposts to examples of best practice, which include the **UK guidelines for landscape and visual impact assessment**[2] and the **New Zealand Landscape Institute Guidelines for Landscape Assessment**[3].

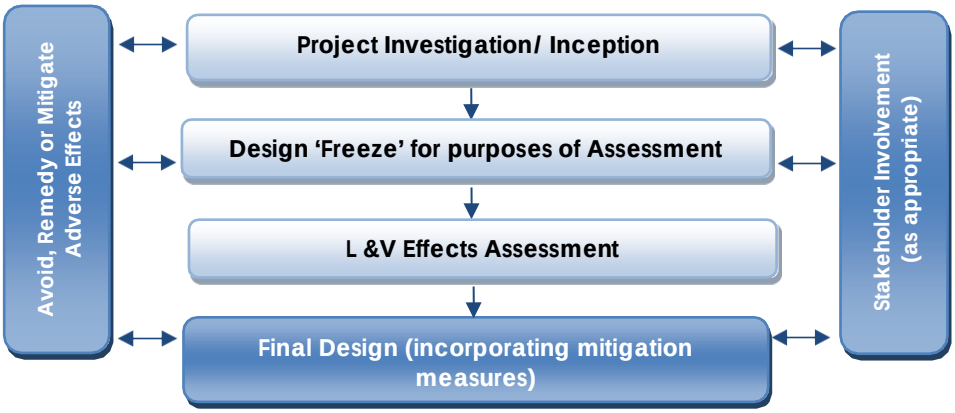


Figure 1: Design feedback loop

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

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

Landscape effects: *Change in the physical landscape, which may affect its characteristics or qualities.*

Visual effects: *Change to views which may affect the visual amenity experienced by people.*

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

[1] http://www.qualityplanning.org.nz/index.php/planning-tools/land/landscape
[2] Landscape Institute and Institute of Environmental Management and Assessment (2013) Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3)
[3] Best Practice Note Landscape Assessment and Sustainable Management 10.1, NZILA

Landscape Effects

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

Landscape Resource

Assessing the sensitivity of the landscape resource considers the key characteristics and qualities. This involves an understanding of both the ability of an area of landscape to absorb change and the value of the landscape.

Ability of an area to absorb change

This will vary upon the following factors:

- Physical elements such as topography / hydrology / soils / vegetation;
- Existing land use;
- The pattern and scale of the landscape;
- Visual enclosure / openness of views and distribution of the viewing audience;
- The zoning of the land and its associated anticipated level of development;
- The scope for mitigation, appropriate to the existing landscape.

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

The value of the Landscape

Landscape value derives from the importance that people and communities, including tangata whenua, attach to particular landscapes and landscape attributes. This may include the classification of Outstanding Natural Feature or Landscape (ONFL) (RMA s.6(b)) based on important biophysical, sensory/ aesthetic and associative landscape attributes, which have potential to be affected by a proposed development. A landscape can have value even if it is not recognised as being an ONFL.

Magnitude of Landscape Change

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

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

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

Table 1: Determining the level of landscape effects

Visual Effects

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

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

The Sensitivity of the viewing audience

The sensitivity of the viewing audience is assessed in terms of assessing the likely response of the viewing audience to change and understanding the value attached to views.

Likely response of the viewing audience to change

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

Value attached to views

The value or importance attached to particular views may be determined with respect to its popularity or numbers of people affected or reference to planning instruments such as viewshafts or view corridors. Important viewpoints are also likely to appear in guide books or tourist maps and may include facilities provided for its enjoyment. There may also be references to this in literature or art, which also acknowledge a level of recognition and importance.

Magnitude of Visual Change

The assessment of visual effects also considers the potential magnitude of change which will result from views of a proposed development. This takes account of the size or scale of the effect, the geographical extent of views and the duration of visual change, which may distinguish between temporary (often associated with construction) and permanent effects where relevant. Preparation of any simulations of visual change to assist this process should be guided by best practice as identified by the NZILA[4].

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

[4] Best Practice Guide: Visual Simulations BPG 10.2, NZILA

[5] Best Practice Guide: Visual Simulations BPG 10.2, NZILA

Contributing Factors		Higher	Lower	Examples
The Viewing Audience (sensitivity)	**Ability to absorb change**	Views from dwellings and recreation areas where attention is typically focussed on the landscape.	Views from places of employment and other places where the focus is typically incidental to its landscape context. Views from transport corridors.	Dwellings, places of work, transport corridors, public tracks
	Value attached to views	Viewpoint is recognised by the community such as an important view shaft, identification on tourist maps or in art and literature. High visitor numbers.	Viewpoint is not typically recognised or valued by the community. Infrequent visitor numbers.	Acknowledged viewshafts, Lookouts
Magnitude of Change	**Size or scale**	Loss or addition of key features in the view. High degree of contrast with existing landscape elements (i.e. in terms of form scale, mass, line, height, colour and texture). Full view of the proposed development.	Most key features of views retained. Low degree of contrast with existing landscape elements (i.e. in terms of form scale, mass, line, height, colour and texture. Glimpse / no view of the proposed development.	- Higher contrast/ Lower contrast. - Open views, Partial views, Glimpse views (or filtered); No views (or obscured)
	Geographical extent	Front on views. Near distance views; Change visible across a wide area.	Oblique views. Long distance views. Small portion of change visible.	- Front or Oblique views. - Near distant, Middle distant and Long distant views
	Duration and reversibility	Permanent. Long term (over 15 years).	Transient / temporary. Short Term (0-5 years).	- Permanent (fixed), Transitory (moving)

Table 2: Determining the level of visual effects

Nature of Effects

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

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

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

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

Table 3: Determining the Nature of Effects

Cumulative Effects

During the scoping of an assessment, where appropriate, agreement should be reached with the relevant local authority as to the nature of cumulative effects to be assessed. This can include effects of the same type of development (e.g. wind farms) or the combined effect of all past, present and approved future development[6] of varying types, taking account of both the permitted baseline and receiving environment. Cumulative effects can also be positive, negative or benign.

Cumulative Landscape Effects

Cumulative landscape effects can include additional or combined changes in components of the landscape and changes in the overall landscape character. The extent within which cumulative landscape effects are assessed can cover the entire landscape character area within which the

[6] The life of the statutory planning document or unimplemented resource consents.

proposal is located, or alternatively, the zone of visual influence from which the proposal can be observed.

Cumulative Visual Effects

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

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

Determining the Overall Level of Effects

The landscape and visual effects assessment concludes with an overall assessment of the likely level of landscape and visual effects. This step also takes account of the nature of effects and the effectiveness of any proposed mitigation. The process can be illustrated in Figure 2:

Figure 2: Assessment process

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

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

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

Determination of "minor"

Decision makers determining whether a resource consent application should be notified must also assess whether the effect on a person is less than minor[7] or an adverse effect on the environment is no more than minor[8]. Likewise, when assessing a non-complying activity, consent can only be granted if the s104D 'gateway test' is satisfied. This test requires the decision maker to be assured that the adverse effects of the activity on the environment will be 'minor' or not be contrary to the objectives and policies of the relevant planning documents.

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

The third row highlights the word 'significant' which has particular reference to the NZCPS and Policy 13 and Policy 15 and where on the effects-spectrum 'a significant' effect would be placed.

Less than Minor		**Minor**	**More than Minor**			
Very Low	**Low**	**Moderate – Low**	**Moderate**	**Moderate-High**	**High**	**Very High**
					Significant[9]	

Table 5: Determining minor effects for notification determination and non-complying activities

[7] RMA, Section 95E

[8] RMA Section 95D

[9] To be used only about Policy 13(1)(b) and Policy 15(b) of the New Zealand Coastal Policy Statement (NZCPS), where the test is 'to avoid significant adverse effects'.

Appendix 2: Graphic Supplement

Boffa Miskell

MATAMATA
CALCUTTA FARMS :: INDUSTRIAL DEVELOPMENT PLAN AREA

GRAPHIC SUPPLEMENT

OCTOBER 2021

Matamata Calcutta Farms

Contents

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0 200 m

1:7,500 @ A3

Data Sources: Eagle Technology, Land Information New Zealand, GEBCO, Community maps contributors

Projection: NZGD 2000 New Zealand Transverse Mercator

LEGEND

Viewpoint

Site

MATAMATA CALCUTTA FARMS - INDUSTRIAL DEVELOPMENT PLAN AREA

Viewpoint Locations

Date: 02 December 2021 | Revision: 0

Plan prepared for Calcutta Farms by Boffa Miskell Limited

Project Manager: Rebecca.Ryder@boffamiskell.co.nz | Drawn: JWa | Checked: RRy

Figure 1

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Date of Photography : 1:00pm 14 September 2021 NZST

MATAMATA CALCUTTA FARMS - INDUSTRIAL DEVELOPMENT PLAN AREA

Viewpoint 1

Date: 19 Oct 2021 Revision: 0

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Project Manager: Rebecca.Ryder@boffamiskell.co.nz | Drawn: AWe | Checked: PMo

Figure 2

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Viewpoint 2

Date: 19 Oct 2021 Revision: 0

Plan prepared for Calcutta Farms by Boffa Miskell Limited

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Figure 3

Date of Photography : 1:04pm 14 September 2021 NZST

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Viewpoint 3

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Figure 4

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Viewpoint 4

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Figure 5

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Viewpoint 5

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Figure 6

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Viewpoint 6

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Figure 7

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Viewpoint 7

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Figure 8

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Viewpoint 8

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Figure 9

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Viewpoint 9

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Figure 10

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Viewpoint 10

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Figure 11

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Viewpoint 11

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Figure 12

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Viewpoint 12

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Figure 13

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Viewpoint 13

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Figure 14

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Viewpoint 14

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Figure 15

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Viewpoint 15

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Figure 16

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Viewpoint 16

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Figure 17

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Viewpoint 17

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Figure 18

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Viewpoint 18

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Figure 19

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Viewpoint 19

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Figure 20

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Viewpoint 20

Date: 19 Oct 2021 Revision: 0

Plan prepared for Calcutta Farms by Boffa Miskell Limited

Project Manager: Rebecca.Ryder@boffamiskell.co.nz | Drawn: AWe | Checked: PMo

Figure 21

Date of Photography : 1:55pm 14 September 2021 NZST

MATAMATA CALCUTTA FARMS - INDUSTRIAL DEVELOPMENT PLAN AREA

Viewpoint 21

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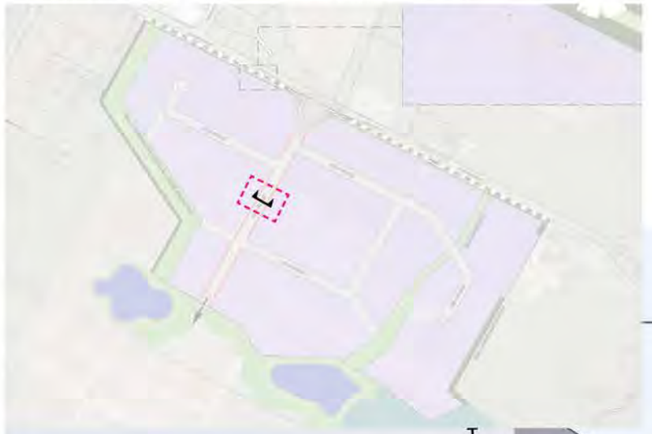
Figure 22

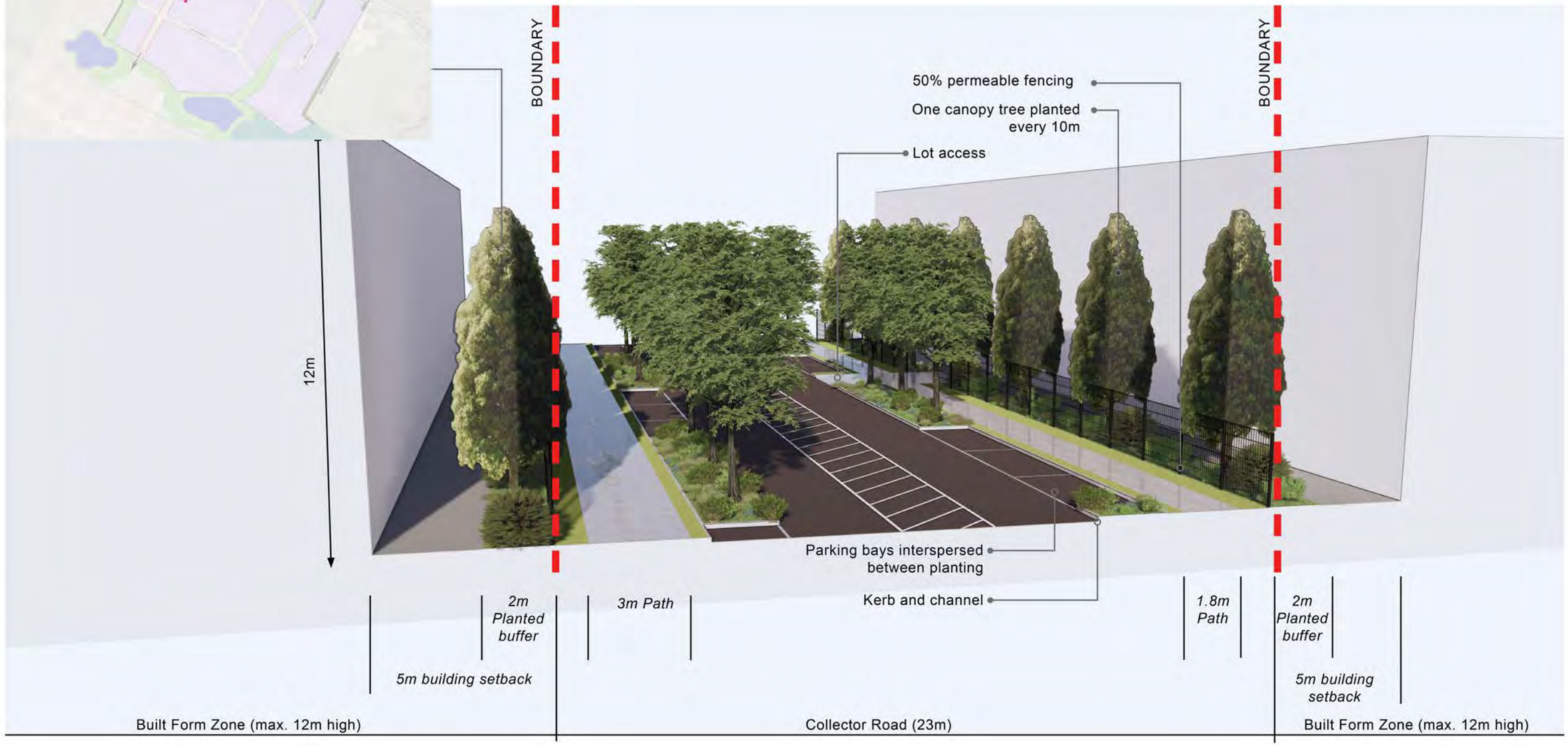
Appendix 3: Landscape Typical Details

STATE HIGHWAY 24 INTERFACE - ABOVE GROUND POWERLINES

STATE HIGHWAY 24 INTERFACE - UNDERGROUND POWER

23M ROAD CORRIDOR





WESTERN BOUNDARY + STORMWATER SWALE

EASTERN BOUNDARY BUFFER

About Boffa Miskell

Boffa Miskell is a leading New Zealand professional services consultancy with offices in Auckland, Hamilton, Tauranga, Wellington, Christchurch, Dunedin and Queenstown. We work with a wide range of local and international private and public sector clients in the areas of planning, urban design, landscape architecture, landscape planning, ecology, biosecurity, cultural heritage, graphics and mapping. Over the past four decades we have built a reputation for professionalism, innovation and excellence. During this time we have been associated with a significant number of projects that have shaped New Zealand's environment.

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