Mount Maunganui Asphalt Plant

RESOURCE CONSENT APPLICATION LANDSCAPE AND VISUAL ASSESSMENT REPORT

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INTRODUCTION

- Allied Asphalt¹ is applying for a resource consent to construct and commission a replacement asphalt plant on its leased site adjacent to the Fulton Hogan yard in Aerodrome Road, Mount Maunganui.
- Isthmus has been engaged by Allied Asphalt to undertake this assessment of landscape and visual amenity effects arising from the proposal on the receiving environment. The key matters discussed within this report relate to the proposal and its effects on **landscape character** and **visual amenity**. The report also discusses the proposal in relation to the relevant² parts, objectives and policies of the Resource Management Act (1991) (RMA) and the Tauranga City Plan.

METHODOLOGY

- The following methodology has been used to assess the site, the broad physical context, the proposal and its landscape and visual effects:
 - A desktop review of the site, relevant documents and a preliminary review of the relevant statutory provisions;
 - Two site visits were undertaken on 13 July 2021 and 12 August 2021 to gain an appreciation of the site and the localised area which included an internal site walkover and visiting the surrounding roads and residential areas from which the site can be viewed. Photographs were taken during the second site visit, illustrated within the Graphic Attachments. The author has also visited the surrounding area on several occasions for familiarisation with the existing environment.
 - A description of the existing landscape context of the site and the surrounding area. This description includes reference to the land uses in the area and the relationship between the site and its surrounding context, including the future land use of the surrounding heavy industry zone.
 - An analysis of the landscape character and values of the site and of the surrounding Mount Maunganui Industrial area;
 - An assessment of the visibility of the proposed asphalt plant from the surrounding area;

¹ A joint venture company owned by Fulton Hogan and Downer.

² From a landscape perspective.

- An assessment of the potential landscape effects of the proposal on the local and wider Mount Manganui context;
- An assessment of the potential visual effects of the proposal on the local and wider context:
- An assessment of effects on landscape character and visual amenity is included within this report, referring to a rating scale for the value. To be consistent with the ratings of the values described, in relation to potential effects, the same seven-point scale (below) is used to achieve a level of standardisation³. Words are used in preference to numbers to reduce the likelihood of using 'scores' in a formulaic way. A comparison on how the value ratings relate to the RMA terminology of 'less than minor', 'minor' and 'more than minor' is also provided.

	Very Low	Low	Moderate – low	Moderate	Moderate – high	High	Very high
Less than Minor		Minor	More than Minor				

- Change in a landscape does not in itself mean that a proposal will result in adverse effects. The nature of effects can be Adverse (negative), Neutral (benign) or Beneficial (positive).
- An assessment of effects combines both value ratings (Very Low Very High) and nature of effects (Adverse, Neutral, Positive). Where a proposal will have no effect, a nature of effect rating of 'neutral' will be provided, without a value rating. Where a proposal has an effect, but that effect is neutral, a nature of effect rating of 'neutral' will be provided with the appropriate value rating (e.g. Very Low, Neutral).
- 7 The assessment methodology is based on and consistent with the Te Tangi A Te Manu Aotearoa New Zealand Landscape Assessment Guidelines (Adopted May 2021).
- The detailed methodology for the preparation of the site photographs and the visual simulations within the **Graphic Attachments** is described and illustrated at the end of the Graphic Attachment booklet and is consistent with **NZILA Tuia Pito Ora Best Practice Guide Visual Simulations 10.2**.
- 9 The methodology section above sets out a series of 'steps' and guidance that have been used to assess the relevant landscape and visual effects of the proposal on the receiving environment. The list is provided for completeness

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The scale is symmetrical around 'moderate'. The scale is based on the recommended NZILA Best Practice Guide and is consistent with the *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].

to set out the key matters that have been taken into consideration. The detailed description of the work undertaken is contained under the relevant headings throughout the report.

DESCRIPTION OF THE EXISTING ENVIRONMENT

10 Isthmus has undertaken two site visits on 13 July 2021 and 12 August 2021 and took a series of photographs from the immediate setting of the site. These are included as Viewpoints 1 – 5 within **Appendix A – Graphic Attachments** and provide visual illustrations of the setting and context of the site.

Mount Maunganui Industrial Area Context

- The Mount Maunganui Industrial area is large industrial and commercial area on the eastern side of the Stella Channel of the Tauranga Harbour and Port complex. The Industrial area is generally bounded by the Tauranga Harbour, Stella Channel and Port complex to the west, the Blake Park sports complex and Mount Maunganui residential area to the north, Maunganui Road and the Mount Maunganui and Arataki residential areas to the east and the Tauranga airport to the south.
- The main collector roads through the Industrial Area are Hewletts Road (eastwest), Totara Street (north south), Maunganui Road (north south) and Hull Road (east west). Railway sidings service Tasman Quay within the Port of Tauranga on the eastern side of the Stella Channel and traverse the Maunganui Road corridor, through the Omanu Golf Course, linking to the East Coast Main Trunk line (ECMT).
- Mount Maunganui (Mauao) is a 231m tall rhyolite dome, approximately 3km to the north of the industrial area. Mount Maunganui marks the southern entrance to the Tauranga harbour and is a popular Council reserve and sight-seeing area, with walking only base and summit tracks and a vibrant and busy entertainment and residential area at its' base. Mauao is mapped as an Outstanding Natural Feature or Landscape in the Tauranga City Plan.
- The southern reaches of the Tauranga Harbour are to the west and the south of the industrial area, approximately 1.2km to the south at the closest point and the Bay of Plenty coastline is approximately 1km to the north east. The Tauranga Harbour and Estuaries⁴ are mapped as an Outstanding Natural Feature or Landscape in the Tauranga City Plan.
- The industrial area supports the Port of Tauranga with tank farms, fuel depots, log yards, container yards, bulk storage areas and warehouses prominent

⁴ Except for the working Port areas.

throughout the industrial area. The Port of Tauranga generally occupies Port Industry Zone land.

- The closest residential zoned land to the site is at Omanu approximately 660m to the northeast. There are live/work units with some ancillary residential uses in hangar buildings approximately 400m to the south of the site at the Tauranga airport. The closest schools to the site are Mount Maunganui College (680m), Mount Maunganui Intermediate (850m) and Omanu Primary School (890m).
- Notable industrial developments in the Mount Maunganui Industrial area include the Port of Tauranga (with 100m+ tall container cranes on the Sulphur Point wharves, large scale log yards, the container terminal and storage yards), tank farms (mainly around Hewletts Road and Totara Street), the rail yard (Totara Street), the Dominion salt works (Totara Street), Balance Agri-nutrients (Tasman Quay), Seeka Huka Pak (Totara Street), NZ Oil Services, Lawter NZ (Totara Street) and NZ Steel and Tube.
- Of relevance to this assessment, the Mount Maunganui industrial area includes a number of developments with tall structures, including the Port of Tauranga container cranes at 100m+ tall, the Lawter chemical processing tower (Totara Street) at 37m tall and the six lighting towers at the Bay Cricket Oval, at 51 metres tall. The Port of Tauranga has recently lodged applications to expand the port operations on both sides of the Stella Channel, including additional container cranes within the container terminal (Sulphur Point Wharves).

Description of the site and it's immediate context

- The site is at 54 Aerodrome Road, Mount Maunganui. The Fulton Hogan Bay of Plenty Regional Offices occupy the front (east) part of the site and face Aerodrome Road. The central part of the site includes a truck and equipment yard. Aggregate storage areas and sheds also occupy the central and rear (west) parts of the site. An existing asphalt plant is located at the rear (west) end of the site, with associated aggregate storage and truck washing areas. The existing asphalt plant has a flue height of 18m.
- 48 Aerodrome Road is also occupied by a Fulton Hogan storage and vehicle yard. Access to the existing asphalt plant at the rear of 54 Aerodrome Road is through 48 Aerodrome Road.
- The site is flat and low lying, with no discernible landform features. A chain link security fence secures the boundaries of 54 and 48 Aerodrome Road which present as a single site to the Aerodrome Road boundary as they are both occupied by Fulton Hogan offices, buildings and vehicles. An Allied Asphalt

- sign marks the entrance to the site through 48 Aerodrome Road. See the site photograph form **Viewpoint 3**.
- To the north, west and east of the site are typical light industrial warehouses, developments and transport logistics. South of the site is the HR Cement site with large scale cement tanks.
- The application site is in the Industry Zone and is surrounded by Industry Zone land.
- The site and the statutory context is illustrated on **Figures 1 to 3** within **Appendix A Graphic Attachments**.

DESCRIPTION OF THE PROPOSAL

- Full details of the proposal are described within the Assessment of Environmental Effects prepared by Cogito Consulting Ltd and are illustrated on the proposed site layout plan included as **Figure 3** in **Appendix A Graphic Attachments**.
- The proposal is to construct and operate a Marini-supplied Top Tower 2500 asphalt plant⁵:
 - a) The construction of a new, low-energy, asphalt plant. The plant will broadly include the following infrastructure:
 - i. A stack to an approximate total height of 27.605m.
 - ii. A hot stone elevator to an approximate total height of 25m.
 - iii. A RAP elevator to an approximate height of 23.778m.
 - iv. A multi-layered screen unit to separate hot aggregates to an approximate height of 20.63m.
 - v. Various other features including hot aggregate bins, silos, tanks and drums between approximately 5m 19m in height.
 - vi. Multiple small-scale buildings and storage areas to facilitate site operations. These will include (at a minimum) a control room, electrical room, lunch room, toilet facilities, manager / supervisor office, workshop, dangerous goods storage, evoflex storage and truck slip shed.
 - vii. Areas for the storage of material and aggregate bays.

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⁵ Key elements from a landscape and visual perspective as opposed to key production elements.

- b) Site access will be gained via the vehicle access through 48 Aerodrome Road.
- c) The site boundaries will be fenced for security.
- A photograph of a typical Marini-supplied Top Tower 2500 plant is illustrated in the photograph in **Figure 1**.



Figure 1: Marini-supplied Top Tower 2500 asphalt plant.

Typical drawings of a Marini-supplied Top Tower 2500 are illustrated in **Figure 2.**

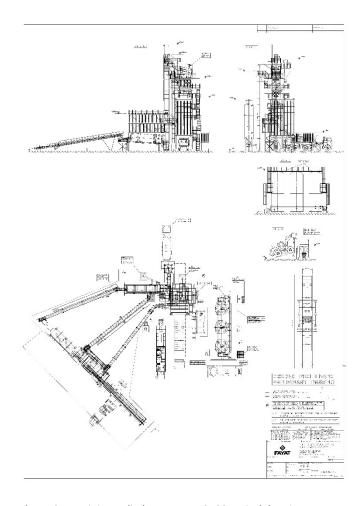


Figure 2: Marini-supplied Top Tower 2500 typical drawings.

The layout of the proposed asphalt plant and associated equipment and storage areas has been designed to fit within the existing site including the Fulton Hogan Bay of Plenty Regional offices and the existing Fulton Hogan and Allied Asphalt operations across 54 and 48 Aerodrome Road.

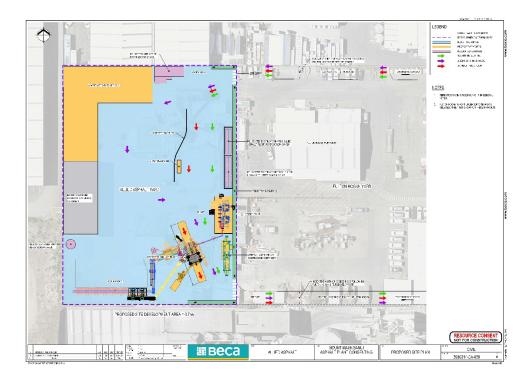


Figure 3: Site and asphalt plant layout at 54 and 48 Aerodrome Road.

PLANNING CONTEXT

- This section of the report highlights, by way of background, the provisions most relevant to landscape and visual matters. A full assessment of the proposal against statutory and non-statutory provisions is provided within the AEE prepared by Cogito Consulting Ltd.
- The proposal has been assessed against the relevant⁶ objectives and policies of Part 2 of the Resource Management Act 1991 (RMA) and the Tauranga City Plan.
- The site is not identified as being subject to any landscape designations or special landscape characteristics within the Tauranga City Plan.

Resource Management Act 1991

With regard to Part 2 of the RMA, the relevant sections are contained within section 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:"

⁶ From a landscape and visual perspective.

- s7(c) the maintenance and enhancement of amenity values.
- S7(f) maintenance and enhancement of the quality of the environment.

Tauranga City Plan

- As discussed above, the site is located within the Industry Zone and is surrounded by Industry Zone land and sites.
- The asphalt plant activity is defined as an "Industrial Activity" and is a permitted activity.

"Buildings or land used for the manufacture, dismantling, processing, assembly, treating, testing, servicing, maintenance, storage or repairing of goods, products, articles, materials or substances and includes premises on the same land used for:

- a. The selling of goods by wholesale;
- b. The provision of amenities for employees;

Which are incidental to any of those industrial operations."

Specific to the assessment of the landscape and visual effects of the proposal, land use consent is required under District Plan rules pursuant to section 9(3) of the RMA as follows:

Discretionary activity for buildings that exceed a maximum of 16m in the Industry Zone.

37 The Tauranga City Plan contains a series of protected viewshafts from marae within the District towards Mauao. The site is within the protected viewshaft of Mauao from the Tahuwhakatiki Marae viewing point. See assessment below.

ASSESSMENT OF EFFECTS

- The following section assesses the proposal and its level of potential effects and appropriateness in this setting. The main **landscape** and **visual amenity** issues considered are:
 - a) Landscape and Character effects:
 - Effects on the Landscape and Character of the immediate setting of Aerodrome Road.
 - b) Visual amenity effects of the proposal in relation to:
 - i. Public viewpoints within the Aerodrome Road area,

- ii. Local residential areas,
- iii. Plume, and
- iv. Lighting and glare

Landscape and Character Effects

Effects on the Landscape and Character of the immediate setting of Aerodrome Road

- The site is within the established and built out Mount Maunganui Industrial area. The industrial area has grown and evolved in particular to support the Port of Tauranga and as an employment and commercial hub. Within the wider industrial area industrial, light industrial and port related activities have grown. The nominal boundary between the industrial area and residential Mount Maunganui is along Maunganui Road.
- Within the areas bounded by the Tauranga airport (south), the Stella Channel (west), Bay Cricket Oval (north) and Maunganui Road (east) the landuse is strongly industrial in character and heavy industrial closer to the port.
- In some area, such as the Hewlett's Road corridor, the industrial character has become so pervasive that normal attempts to provide any roadside amenity, such as street tree or landscape planting have been abandoned. Some landscape planting has been established around the Hewletts Road flyover. However, within typical industrial roads, such as Aerodrome Road, there is no established pattern of landscape planting other than a few remnant trees and shrubs.
- The front face of industrial sites facing Aerodrome Road are generally dominated by vehicles crossing, car parks and security fences. Some more recent industrial developments have provided open spaces and landscape planting within or adjacent to the road, particularly along the Jean Batten Drive entrance and exit to the airport. Aerodrome Road has much more industrial and utilitarian feel and character to it.
- The proposed asphalt plant is set well back into the site at 54 Aerodrome Road approximately 120m from the road edge, with buildings and vehicle and equipment compounds between the road and the location of the proposed plant.
- The Aerodrome Road section of the Mount Maunganui Industrial area has a consistent industrial character with the HR Cement site and tanks, engineering businesses, transport businesses and yards, fuel depots and the existing asphalt plant within the application site. The replacement of the existing asphalt plant with another plant, albeit larger in scale, will be consistent with the character of the area.

- The proposed development will result in **Very Low** (neutral) effects on the landscape character of the Aerodrome Road area for the following reasons:
 - The proposed asphalt plant is located within the Industry Zone, which anticipates the type of development proposed.
 - The site is located within an area of the wider Mount Maunganui Industrial area which is already characterised by primary construction materials and transport businesses.
 - The height of the proposed infrastructure will exceed the height restrictions of the zone, however the proposal will be seen within an industrial context and the character of the site will remain consistent with the surrounding landuses.

Visual Amenity

- The potential visual effects of the proposal have been identified as being limited to:
 - (i) Local residential areas,
 - The closest marae complex at Whareroa on Taiaho Place,
 - Residential areas to the northeast of the site,
 - (ii) Public viewpoints within the immediate and localised setting of the site,
 - Local industrial roads, including Jean Batten Drive and Aerodrome Road.
 - Elevated viewing locations, such as the Hewletts Road Flyover
 - (iii) Plume, and
 - (iv) Lighting and glare.
- As part of this assessment, Isthmus have produced a series of Visual Simulations from the local area which accurately illustrate the proposal within the receiving environment. The Visual Simulations illustrate the proposed asphalt plant from the surrounding industrial roads and are included with Figures 5 to 13 within Appendix A Graphic Attachments.

Views from the Whareroa marae complex

The Whareroa marae on Taiaho Place is approximately 1.4km to the west of the site. A view from the end of Taiaho Place is illustrated in **Figure 5** in the Graphic Attachments. This view is the most open view to the east from this area. Views from within the marae complex are generally screened by foreground panting and development.

- Within the visual simulation in **Figure 6** in the Graphic Attachments, the asphalt plant comes into view just above a foreground stack of logs. The new asphalt plant is barely visible in this view and visibility will be dependent on the ongoing changes to the height of log stacks in the foreground log yard.
- The proposal will result in **Very Low** (neutral) effects on the visual amenity of the residential area around the Whareroa marae for the following reasons:
 - The proposed asphalt tower will be barely visible (if at all) at a distance of 1.4km from the end of Taiaho Place.

Views from the local industrial road network within the Industry Zone

Aerodrome Road

- Views from Aerodrome Road are available from immediately in front of the site, across the top of the Fulton Hogan offices and yard. From locations on either side views into the site are screened by foreground buildings and development.
- A view from Aerodrome Road is illustrated in **Figure 8** in the Graphic Attachments. The view is through a gap in the foreground of light industrial buildings across the top of a Fulton Hogan yard. The HR Cement plant and tanks are visible in the left-hand side of the view. The photograph illustrates the more industrial and utilitarian character of Aerodrome Road.
- The asphalt plant tower will be visible beyond the foreground of the Fulton Hogan yard and offices. The existing asphalt tower is visible in the centre of the view and will be replaced by the taller tower. The existing tower is 18m tall and the replacement tower will be 27m tall at the top of the flue. The proposed asphalt tower is set back into the site approximately 120m and will not create any dominance or shading effects as a result of the additional height.

Jean Batten Drive

As described above, Jean Batten Drive generally has a higher level of amenity than other local Industry Zone Roads as it is the main entrance and exit to the Tauranga Airport. Jean Batten Drive has wide grassed verges with street trees planted on both sides of the road. Development on Jean Batten Drive tends to be higher amenity light industry, storage, hospitality (Classic Flyers) and retail (Bunnings Warehouse, car yards) at the north end close to Hewletts Road.

-

Generally the trees are Pohutukawa.

- A view from Jean Batten Drive is illustrated in **Figure 12** in the Graphic Attachments. The view is through a gap in the foreground of light industrial buildings across the top of a storage area. The Fertco building in the right-hand side of the photograph illustrates the potential screening effect of foreground buildings. The photograph illustrates the wide grass verge and the Pohutukawa plantings in the road reserve.
- As illustrated in **Figure 13**, the asphalt plant tower will be visible beyond the foreground of plantings and light industrial development. The existing asphalt tower is visible in the centre of the view and will be replaced by the taller tower.

Hewletts Road Flyover

The Hewletts Road Flyover was assessed as a location where elevated views of the proposed asphalt plant could be gained. Neither a site photograph or a visual simulation were prepared from this location as it is unsafe to stop and take photographs in this location. Instead a view from GoogleEarth Streetview was extracted and is included as **Figure 4**.



Figure 4: GoogleEarth Streetview photograph from the Hewletts Road flyover.

- The existing asphalt plant is visible with a white plume to the left of the three Norfolk Island Pines in the centre of the photograph. The Norfolk Island Pines are located in a grassed area at 29 Hewletts Road. The HR Cement site and tanks are visible to the left of the existing asphalt plant. A communication tower is the visible in the foreground (left) and the Lawter tower (37m tall) and several of the Port of Tauranga container cranes (100m+ tall) are visible in the right-hand side of the view.
- As described above, it is not safe to stop on the flyover and to analyse a static view over the industrial area. This view is available fleetingly to motorists as they descend to Hewletts Road on the western side of the flyover.

- The proposal will result in **Very Low** (neutral) effects on the visual amenity of users of the Industry Zone and local motorists for the following reasons:
 - The proposal will be seen within an industrial context and will not introduce components into the receiving visual environment that are out of character or unexpected. Tall utilitarian towers and structures are not uncommon in the area.
 - The asphalt plant will be set back from the Aerodrome Road boundary
 of the site by 120m with a foreground of offices and vehicles yards.
 - The proposal will not appear out-of-place and will not be a prominent feature within the visual environment.

Views from the residential areas northeast of the site

- The closest residential area is approximately 660m to the northeast of the site on Maunganui Road, in the area around Mount Maunganui College. The residential area is beyond the Maunganui Road corridor and the Hewletts Road flyover.
- A view from the Maunganui Road corridor outside of Mount Maunganui College is illustrated in Figure 10 in the Graphic Attachments. Views towards the site are not available further to the south on Maunganui Road as they are screened by the Hewletts Road flyover structure.
- The asphalt tower will not be visible from this location or from most of the residential areas to the northeast of the site due to the distance and the screening effects of foreground development, including the Hewletts Road flyover.
- The proposal will result in **Very Low** (neutral) effects on the visual amenity of the closest residential areas to the northeast for the following reasons:
 - The asphalt tower structure will not generally be visible and where it is, it will be at a distance of at least 660m and integrated by foreground development.

Marae Viewshaft Protection

The Tauranga City Plan contains a series of protected viewshafts from marae within the District towards Mauao. The site is within the protected viewshaft of Mauao from the Tahuwhakatiki Marae viewing point. Map 16 from the view shaft protection areas is included as **Figure 5**.

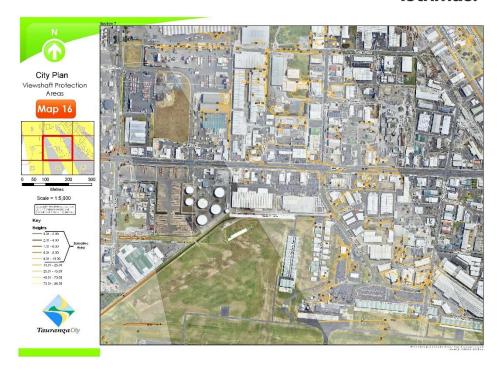


Figure 5: Map 16 Viewshaft Protection Areas.

The View shaft protection map indicates that the floor of the viewshaft protection shaft is 16 metres above the permitted height limit for the Industry Zone on the site. The permitted height limit is 16 metres, leading to a view shaft protection floor of 32 metres above the site. The tallest part of the asphalt plant is 27.6 metres at the top of the flue, within the 32 metre viewshaft protection limit.

Plume

- The flue will emit an elevated and visible⁸ steam plume when operational which will consist of a mixture of water (vapour) and air.
- The length of the plume will depend on the weather conditions, with its visibility being affected by daylight and meteorological conditions. Plumes are most visible during cold weather, with high humidity and light or no wind. During warm weather, and low humidity, the plume will be close to invisible, having dispersed at the top of the stack.
- When viewed from the surrounding area the plume will be viewed predominantly against a backdrop of sky. Under cool, high humidity conditions, when vapour and air plumes are at their most visible, the sky backdrop is likely to be cloud or natural fog. Under these conditions, the plume will have a low level of visual contrast with the backdrop sky colour.

⁸ Albeit relatively dispersed.

- The plume will be most prominent when viewed against a clear blue sky, under cool conditions. These conditions are likely to occur in early morning in the winter and the spring.
- The plume will create a shadow which will intermittently affect the industrial site surrounding the plant. The scale and density of the plume, and the distance between the site and any residential buildings will ensure that shading from the proposed stack plume will not affect surrounding residential areas.
- Visible plumes are generated by other large flues within the Mount Maunganui Industrial area, including at the Lawter chemical site on Totara Street and the Ballance Agri-nutrients site on Tasman Quay. Small flues emit visible smaller plumes from a number of sites throughout the local area.
- 73 The plume will be visible from the Mount Maunganui Industrial area seen as a faint element against the sky. When the plant is not running there will be no plume present.
- The plume will result in **Very Low** adverse effects on the visual amenity of the immediate and localised setting for the following reasons:
 - The plume will only be visible at times when the plant is operational and when lighting and meteorological conditions allow views.
 - The plume shadow will only intermittently affect the land surrounding the plant.
 - Visible water vapour and air plumes re common in the local area

Lighting and Glare

- The proposed asphalt plant includes a lighting strategy to ensure the safe operation and use of the site during night-time hours. The proposed lighting includes a series of pole and wall mounted lights positioned at key locations within the site.
- Pole lighting will largely be located along the boundaries of the site and at the plant at the western end of the site.
- Single wall mounted flood lights will be positioned around the plant tower and at the top of the loader ramp between the aggregate stores and the main operational area. Wall mounted lights will be positioned at between 12m to 14m high.
- The proposed lighting has been positioned to be focussed inward, internally into the site, and will avoid the use of 'up lighting' sources. The landscape

recommendations outlined towards the end of this report includes the provision of back screens for the flood lighting, ensuring that lighting is restricted to within the site, avoiding light spill beyond the site boundaries.

- The orientation and type of lighting, alongside the landscape recommendations, will ensure that lighting is not focused or oriented outside of the site. Flood lighting will be fixed to poles and infrastructure at between 10m to 14m above ground level, ensuring that the upper elevations of the plant remain unlit. Where indirect views of the lighting are available from the wider residential areas, they will be within the context of (and partially screened by) the surrounding industrial and transport developments, including the local network of streetlights.
- The proposed lighting will result in **Very Low** (adverse) effects on the visual amenity of the immediate area for the following reasons:
 - The design and orientation of the lighting, in combination with the landscape recommendations will ensure that light spill beyond the site boundaries is avoided.
 - Views of the proposed lighting will likely be partially obscured by the surrounding industrial and transport developments.
 - Lighting is common in the Mount Maunganui Industrial area and includes both operational lighting for night-time work and local street lighting.

Table 1: Summary of Effects⁹

	Potential Effect
Landscape Character Effects on the Aerodrome Road Industrial area.	Very Low neutral
Visual Amenity Effects on users of the local industrial area and motorists.	Very Low neutral
Visual Amenity Effects on residential areas northeast of the site.	Very Low neutral
Visual Amenity Effects on the Whareroa marae complex area.	Very Low neutral
Plume	Very Low adverse
Lighting and Glare	Very Low adverse

A comparison on how value ratings relate to the RMA scales of 'less than minor', 'minor' and 'more than minor' is provided within the assessment methodology in the forefront of this report.

LANDSCAPE RECOMMENDATIONS

Lighting

- A lighting strategy has been prepared to ensure the safe operation and use of the site during night-time hours. The proposed lighting includes a series of wall and pole mounted flood lights located around the plant and aggregate stores.
- 82 It is recommended that the flood lights are installed with back screens which restrict lighting to within the site boundaries, reducing light spill outside of the site.

Colour

It is recommended that the proposed plant infrastructure be coloured in a recessive grey colour, ensuring that it is seen as a visually recessive feature within the environment. Resene Jumbo Grey is often used as a mid-grey colour for tall structures, such as communication towers and is similar in colour to weathered concrete or galvanised steel.



Figure 6: Jumbo Grey colour swatch.

CONCLUSIONS

- The site is located in the Mount Maunganui Industry Zone and is surrounded by Industry Zone land. The Mount Maunganui Industrial area is established and built out.
- The proposal includes the construction and operation of an asphalt plant, which includes a large-scale tower up to a height of approximately 27.605m. The height limit in the Industry Zone is 16m.
- The site layout includes the storage of materials, with production and operations including all the large-scale tower within an existing asphalt plant and vehicle compound.
- The site is not located within any specific landscape overlay and there are no known landscape values that require protection.

- The closest Outstanding Natural Features and Landscapes are Mauao, 3km to the north and the southern reaches of the Tauranga Harbour, 1.2km to the south.
- The height of the proposal is within the 32m high floor of the protected viewshaft of Mauao from the Tahuwhakatiki Marae viewing point.
- The site and its setting are characterised by established industrial activities, uses and structures, including some large-scale infrastructure and towers supporting the wider Mount Maunganui Industrial area and the Port of Tauranga.
- 91 The overall effects of the proposal on the landscape character of the site and the Aerodrome Road area are **Very Low** *neutral*.
- The overall effects of the proposal on the visual amenity values of the local industrial area and motorists are **Very Low** *neutral*.
- The overall effects of the proposal on the visual amenity values of the closest residential area are **Very Low** *neutral*.
- The overall effects of the proposal on the visual amenity values of the Whareroa marae area are **Very Low** *neutral*.
- The overall visual and shading effects of the plume are **Very Low** adverse.
- The overall effects of the lighting and glare are **Very Low** *adverse*.
- 97 The exceedance of the 18m height standard of the Industry Zone will not be a prominent feature within the environment. Where visible, the proposal will be seen within the context of the surrounding industrial landuses and structures, including the wider Mount Maunganui Industrial area and the Port of Tauranga.
- The site is well suited for the proposal and any landscape and visual amenity effects arising from the proposal on the receiving environment are acceptable.

Isthmus

December 2022

Appendix A

GRAPHIC ATTACHMENTS (refer separate document)

Mount Maunganui Asphalt Plant. Allied Asphalt. Appendix B Graphic Attachments.



Document record						
Issue	Revision	Author	QA	Date		
Draft	А	AE	ВС	08.02.22		
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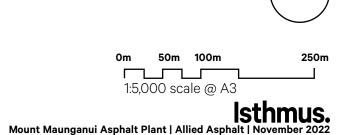
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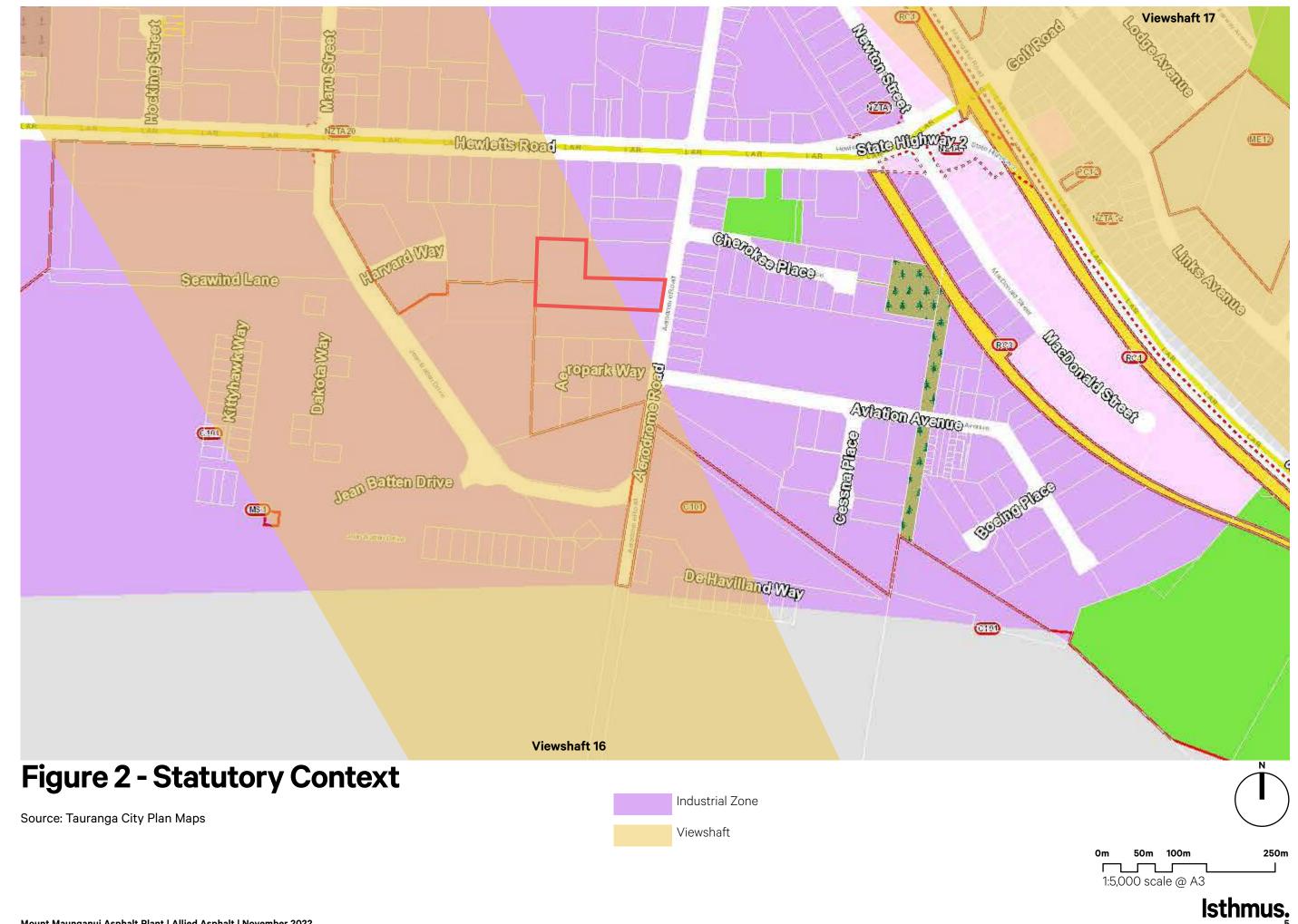
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Figure 1 - Site Location





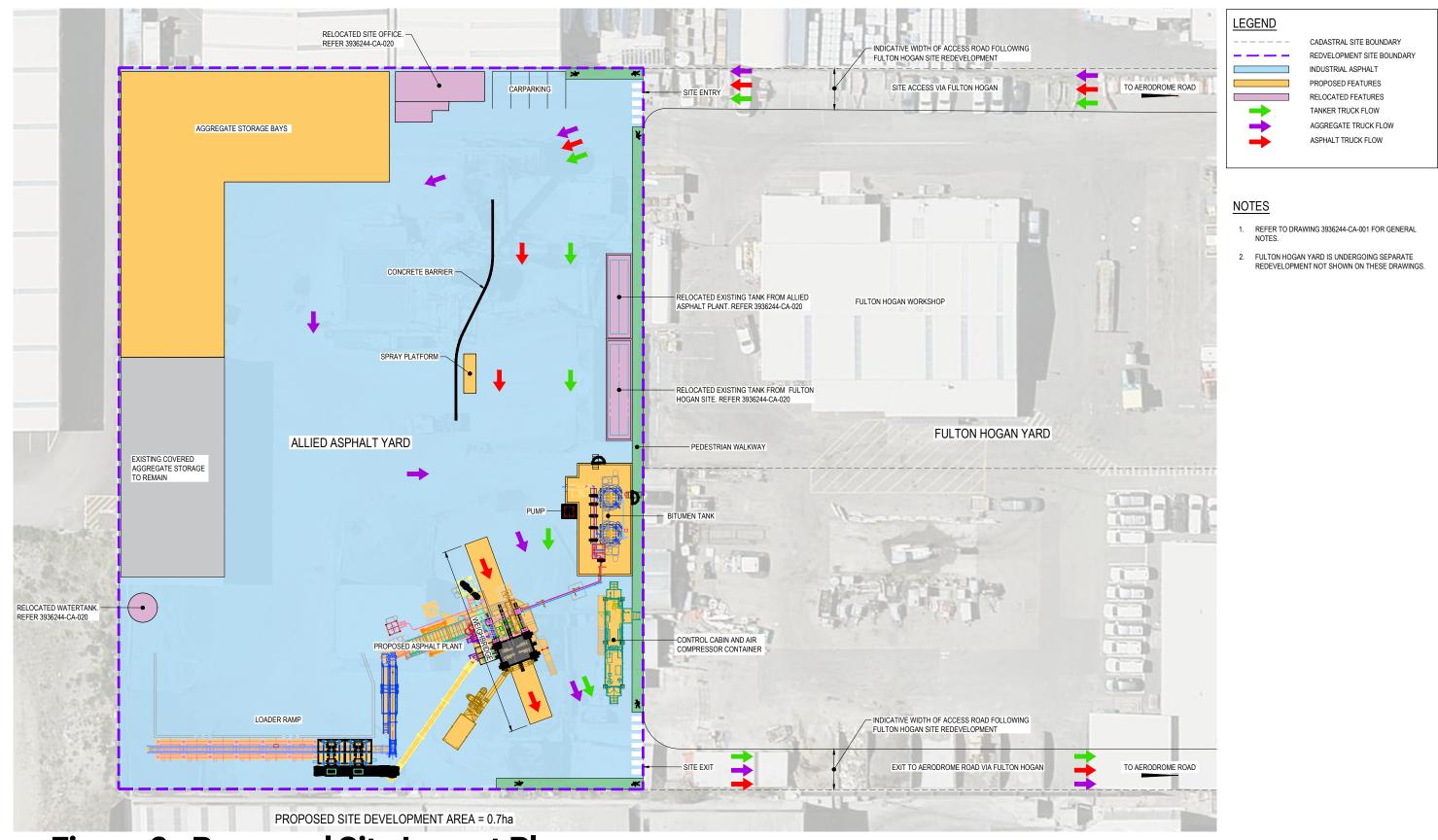


Figure 3 - Proposed Site Layout Plan

RESOURCE CONSENT NOT FOR CONSTRUCTION

| FOR RESOURCE CONSENT | Approved For Construction | Section | Sect

Figure 4 - Viewpoint Location Plan

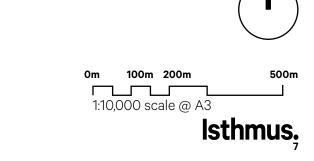




Figure 5 - Viewpoint 1 - Existing

Cnr of Taiaho Place and Totara Street





Original Photo AE | 50mm | DSLR Nikon D700 | 11:48 am 12 August 2021 | 1881098 E 5826161 N (NZTM) Reading distance for correct scale: 400mm | Viewpoint Elevation: 8m Field of View Approximately 110° horizontal (across 2 x A3 pages) & 34° vertical

Isthmus.



Figure 6 - Viewpoint 1 - Proposed

Cnr of Taiaho Place and Totara Street





Original Photo AE | 50mm | DSLR Nikon D700 | 11:48 am 12 August 2021 | 1881098 E 5826161 N (NZTM) Reading distance for correct scale: 400mm | Viewpoint Elevation: 8m Field of View Approximately 110° horizontal (across 2 x A3 pages) & 34° vertical



Figure 7 - Viewpoint 2 - Existing

From Tauranga Airport





Original Photo AE | 50mm | DSLR Nikon D700 | 4:39 pm 11 August 2021 | 1882314 E 5825885 N (NZTM) Reading distance for correct scale: 400mm | Viewpoint Elevation: 7m Field of View Approximately 110° horizontal (across 2 x A3 pages) & 34° vertical



Figure 8 - Viewpoint 3 - Existing

From Aerodrome Road





Original Photo AE | 50mm | DSLR Nikon D700 | 4:39 pm 11 August 2021 | 1882531 E 5826315 N (NZTM) Reading distance for correct scale: 400mm | Viewpoint Elevation: 8m Field of View Approximately 110° horizontal (across 2 x A3 pages) & 34° vertical



Figure 9 - Viewpoint 3 - Proposed

From Aerodrome Road





Original Photo AE | 50mm | DSLR Nikon D700 | 4:39 pm 11 August 2021 | 1882531 E 5826315 N (NZTM) Reading distance for correct scale: 400mm | Viewpoint Elevation: 8m Field of View Approximately 110° horizontal (across 2 x A3 pages) & 34° vertical



Figure 10 - Viewpoint 4 - Existing

From Maunganui Road





Original Photo AE | 50mm | DSLR Nikon D700 | 4:39 pm 11 August 2021 | 1882921 E 5826651 N (NZTM)
Reading distance for correct scale: 400mm | Viewpoint Elevation: 10m
Field of View Approximately 110° horizontal (across 2 x A3 pages) & 34° vertical



Figure 12 - Viewpoint 5 - Existing

From Jean Batten Drive





Original Photo AE | 50mm | DSLR Nikon D700 | 4:39 pm 11 August 2021 | 1882086 E 5826215 N (NZTM) Reading distance for correct scale: 400mm | Viewpoint Elevation: 9m Field of View Approximately 110° horizontal (across 2 x A3 pages) & 34° vertical

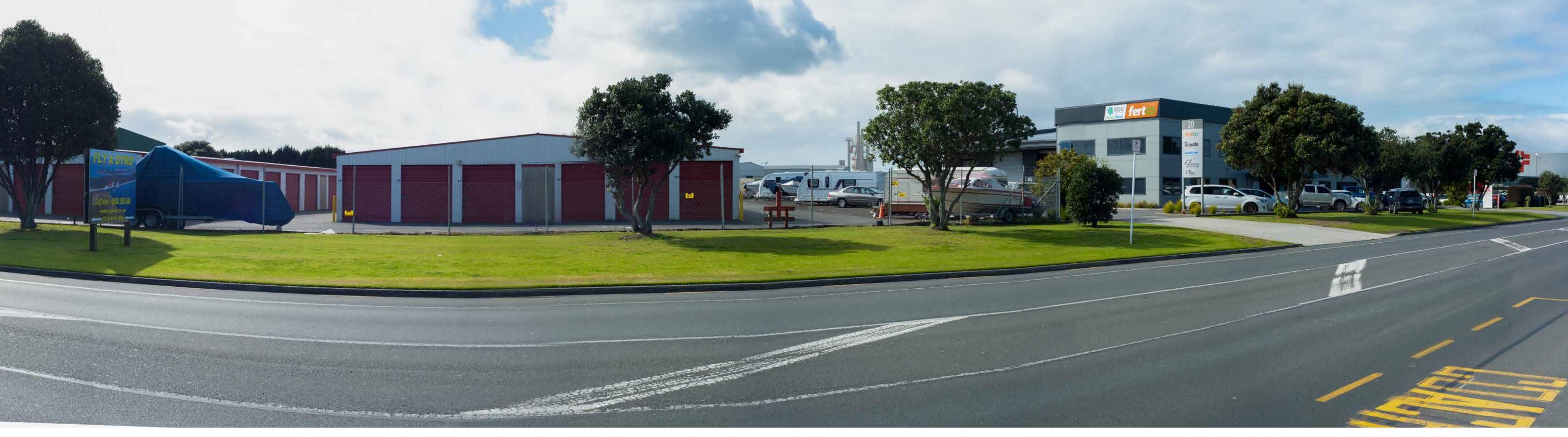


Figure 13 - Viewpoint 5 - Proposed

From Jean Batten Drive





Original Photo AE | 50mm | DSLR Nikon D700 | 4:39 pm 11 August 2021 | 1882086 E 5826215 N (NZTM) Reading distance for correct scale: 400mm | Viewpoint Elevation: 9m Field of View Approximately 110° horizontal (across 2 x A3 pages) & 34° vertical

Panorama Methodology Statement

- Photos were taken with a fixed lens on DSLR camera. Locations were fixed using a handheld GPS unit with accuracy of 5m. Reference points in the landscape were also located to assist referencing of photo to digital terrain model.
- A sequence of photos was taken from each viewpoint and stitched to form panoramas. Photos were overlapped by approximately 30% and edges cropped prior to stitching to eliminate edge distortion.
- The time and weather when the photo was taken was noted.
- The completed panoramas are presented over two pages:
 - The photos are produced to replicate correct scale at the nominated reading distance (in this case 400mm).
 - Each panorama is printed across two facing pages to illustrate a field of view of approximately 110° at a reading distance of 400mm. This approximates the field of human binocular vision. (But not peripheral vision which extends to approximately 200°)

Notes on use of Panorama:

- The Photosimulations are a useful tool but they cannot not precisely reproduce real life for the following reasons:
 - 2D Photography flattens an image compared to binocular vision.
 - Photography is static, whereas the human vision can scan and remember information.
 - Photographs are passive, whereas the eye seeks out detail.
 - The human eye can see more contrast than can be reproduced through photography.
 - Physical resolution of photography and printing is less than that of the human eye.

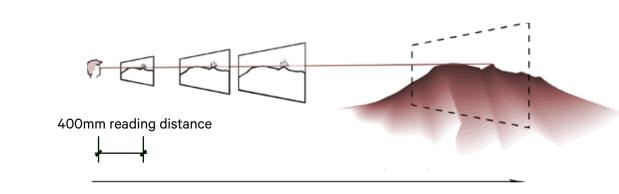


Figure 01: The relationship between reading distance and real life scale.

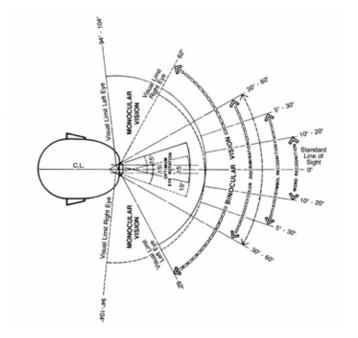


Figure 02: Binocular vision is approximately 124°. Field of view is approximately 110° across 2 x A3 pages at correct scale image for 400mm reading distance (vertical field of view is approximately 33°)

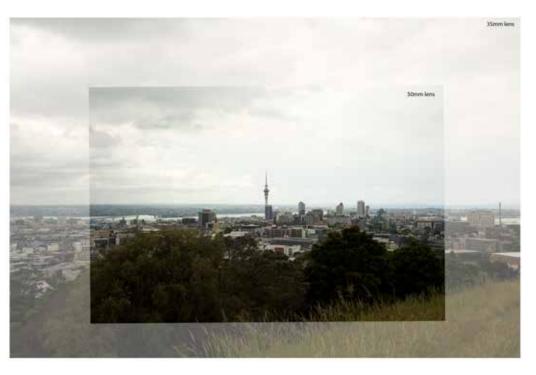


Figure 03: Comparison of 35mm lens and 50mm lens

Two images from the same location. With 35mm and 50mm lenses perspective is influenced by field of view, not by lens focal length. The overlaid portion is identical.



