# Tal Tree Wind Farm

# **Preliminary Landscape and Visual Impact Appraisal**

Prepared by Hansen Partnership, June 2025.







# ACKNOWLEDGEMENT OF COUNTRY

Hansen Partnership acknowledges the Traditional Owners of the diverse lands on which we live and work and recognise their deep spiritual connection to land, air and water as Custodians of Country.

We pay our respects to all First Nations people and to their ancient and enduring culture.

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# **ABBREVIATIONS**

Abbreviation	Title	
DCCEEW	Department of Climate Change, Energy, the Environment and Water	
DTP	Department of Transport and Planning	
DEM	Digital Elevation Model	
EES	Environment Effects Statement	
EIS	Environmental Impact Statement	
ESO	Environmental Significance Overlay	
GORRLAS	Great Ocean Road Region Landscape Assessment Study	
LANPHS	Landscape Assessment North of the Princes Highway Study	
LCA	Landscape Character Area	
LVIA	Landscape and Visual Impact Assessment	
REZ	Renewable Energy Zone	
SLO	Significant Landscape Overlay	
SWVLAS	South-West Victoria Landscape Assessment Study	
TLVE	Theoretical Limit of Viewshed Extent	
VPO	Vegetation Protection Overlay	
WTG	Wind Turbine Generator	
ZTV	Zone of Theoretical Visibility	

# GLOSSARY

The following terms and their definitions have been developed by Hansen Partnership with consideration of relevant LVIA guidance documents, primarily by the *Landscape Institute and Institute of Environmental Management & Assessment, Guidelines for Landscape and Visual Impact Assessment, Third Edition, 2013*.

Term	Definition
Baseline assessment	The assessment of existing landscape conditions and statutory framework relevant to the area of landscape within the site study area.
Baseline studies	Work done to determine and describe the environmental conditions against which any future changes can be measured or predicted and assessed.
Digital elevation model	The representation of continuous elevation values over a topographic surface by a regular array of sampled z-values, referenced to a common datum. To be expressed as a grid or raster data set. The DEM is ground only representation and excludes vegetation such as trees and shrubs and human constructed features such as sheds and houses.
EES Scoping Requirements	Environment Effects Statement (EES) Scoping Requirements are prepared by the Department of Transport and Planning (DTP) to set out the matters to be investigated and documented in an EES.
EIS Guidelines	Environmental Statement (EIS) Guidelines are prepared by the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) to set out the matters to be assessed in an EIS.
EIS/EES Terms of Reference	The collective term for the EIS Guidelines and the EES Scoping Requirements specified by DCCEEW and DTP respectively.
Landscape and visual impact assessment (LVIA)	A tool used to identify and assess the likely significance of the effects of change resulting from development both on the terrestrial landscape as an environmental resource in its own right and on people's views and visual amenity.
Landscape	Landscape is an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors.
Landscape character	A distinct, recognisable and consistent pattern of elements that occur in the terrestrial area that make one landscape different from another, rather than better or worse.
Landscape character area	Distinct areas of landscape that are relatively homogeneous in character and share a combination of geological, hydrological, topographical, drainage, vegetative, land use and settlement layout features.
Landscape character assessment	The process of identifying and describing variation in the character of the landscape, and the unique combination of elements and features that make a defined area of land distinctive.
Landscape significance	The importance of a landscape to communities as evident either through statutory controls, preference indicators or other reliable objective data.

Landscape value	The term 'landscape value' is used interchangeably with the term 'landscape significance', and in the context of this LVIA the two terms have the same meaning.
Receptor	Individuals and/or communities who have the potential to be affected by a proposed development.
Statutory landscape significance	Areas of landscape identified as being of importance at international, national or local levels, either defined by statute or identified in applicable planning schemes or other documents. Can be interchangeably referred to within this LVIA as 'statutory significance'.
Theoretical limit of viewshed extent	The distance from proposed project infrastructure at which the vertical height of the proposed project infrastructure occupies a specified percentage of the vertical field of view.
Viewshed	A theoretical calculation based on 3D terrain modelling that determines areas of land that are potentially visible from a proposed project infrastructure, and conversely, determines land from which the proposed project infrastructure would be visible.
Wireframe photomontage	An accurate presentation of the proposed project infrastructure within an existing view photomontage which is represented as a coloured outline. The image represents the location/position of the proposal as seen from the viewpoint, including behind existing landform, landscape or built elements.
Zone of theoretical visibility	The total area of land from which there are potential views of a proposed project infrastructure (i.e. land that is within the assessed Viewshed and Theoretical Extent of Visual Exposure).

# **1 INTRODUCTION**

The purpose of this report is to provide a preliminary appraisal of the potential landscape and visual impact arising from the proposed Tall Tree Wind Farm (the Project), situated within the proposed Central Highlands Renewable Energy Zone (REZ).

The Project involves the construction, operation, maintenance and decommissioning of:

- Up to 53 Wind Turbine Generators (WTG) with:
  - a hub height of up to 169 metres, and a rotor diameter of up to 183 metres;
  - a maximum blade tip height of 250.5 metres (blade length plus hub height); and
  - a total capacity of up to 330 MW
- 220 kV overhead transmission corridor of approximately 11.3km length, on-site substation and switchyard; and
- Other permanent ancillary infrastructure includes (but not limited to) internal access tracks and crossings, road upgrades, meteorological monitoring masts, electrical substation (and adjacent Battery Energy Storage System) and operation and maintenance (O&M) buildings, including carpark and office.

## **1.1 PURPOSE OF THIS REPORT**

The purpose of this report is to undertake a preliminary assessment of the potential landscape and visual impacts associated with the Project for the purposes of informing and supporting an EES/EIS referral to determine the potential for significant environmental effects.

This Preliminary Landscape and Visual Impact Appraisal provides a level of information required for the purposes of an EES referral. The limitations of this appraisal (considered in the context of a full technical assessment) are outlined in Section 4.4 Limitations. A full landscape and visual impact assessment would be prepared for the purposes of an Environmental impact assessment (EIA).

### **1.2 APPROACH**

This report documents the approach to the Preliminary Landscape and Visual Impact Appraisal undertaken by Hansen Partnership Pty. Ltd. for the purposes of an EES Referral.



The report provides a preliminary outline of existing statutory designations relevant to the assessment, and an assessment of landscape and visual impact appraisal at five representative locations.

The report subsequently determines the potential for landscape and visual impacts resulting from the project. The methodology is outlined in Section 2 Methodology.

# 2 METHODOLOGY

## 2.1 Study area

The study area has been determined through Zone of Theoretical Visibility (ZTV) assessment, which includes:

- Viewshed mapping, and
- Determination of the Theoretical Limit of Viewshed Extent (TLVE)

It is important to emphasise that the ZTV assessment process undertaken relies on viewshed mapping informed by topographical data only. As such, the ZTV assessment should not be relied upon as a definitive representation of the visibility (or otherwise) of the proposed project infrastructure, but rather should be used to guide the subsequent identification of representative view locations for the preparation of photomontage images, which can be relied upon as definitive representations of visibility and visual impact.

A map of the study area is provided at Figure 3.

## 2.2 Establishing the study area

#### 2.2.1 Zone of theoretical visibility

#### 2.2.1.1 Viewshed mapping

The following describes the viewshed assessment methodology used to develop the viewshed mapping. This mapping is a digitally-produced graphic representation of areas surrounding the project from which the proposed project infrastructure is potentially visible. This assessment is subsequently used to guide the selection of photomontage view locations.

It is important to emphasise that the viewshed mapping process undertaken is a 'virtual' exercise, which utilises only topographical data to generate viewshed assessment mapping. It does not take into account 'real world' obstacles such as buildings and vegetation, which obstruct or reduce views. In this regard, it presents what can be described as a 'worst case assessment', as the presence of existing buildings and vegetation almost always results in a 'real' viewshed being less extensive than a virtual viewshed, for any given point.

A viewshed is defined as a theoretical calculation based on 3D terrain modelling that determines areas of land that are potentially visible from a proposed project infrastructure, and conversely, determines land from which the proposed project infrastructure would be visible. This is referred to as the 'intervisibility' relationship. The visibility between two points depends on the presence of on-ground obstacles, such as vegetation and buildings along the sight-line which connects the two points. Such obstacles may obstruct or reduce the reciprocal vision of the same two points.

Viewshed mapping involves the use of computer software packages (QGIS, Rhino & 3ds Max) to translate topographical data (i.e. contour lines) into a 3-dimensional digital terrain model. The project was modelled using Digital Elevation Mapping (DEM) data. This information was subsequently used to guide the identification of view locations for which photomontages were generated as a means of demonstrating the visual impact of the project, and the degree to which mitigation of visual impact may be required.

The limitation of this process and resultant assumptions with respect to the geographical extent of DEM data on which this assessment was based is outlined in the section 4.4 Limitations, uncertainties and assumptions.

#### 2.2.1.2 Theoretical limit of viewshed extent

The study area extents are determined by the TLVE. This is a standard measure that determines the distance from proposed project infrastructure at which the vertical height of the proposed project infrastructure occupies a specified percentage of the vertical field of view.

'Human Factors in Design' (Dreyfuss, 1960)<sup>1</sup> provides guidance with respect to the field of view of the human eye, and describes a normal horizontal and vertical field of view as comprising approximately 60 degrees (horizontal) and 20 degrees (vertical).

Noting the ZTV description in the previous section, in the absence of intervening topographical features which would otherwise limit the extent of a particular viewshed, it is theoretically possible for a computer-modelled viewshed to have an infinite extent. To address this, in circumstances where topography does not provide a limit to viewshed extent, a limitation can be applied on the basis of the known characteristics of the human eye field of view.



Field of view diagram Figure 1





view it would occupy.

A 1-degree vertical angle measured from an origin point to a horizontal distance of 1 kilometres yields a height at that distance of 17m above the level of the origin point. Conversely, an object of that height, at a distance of 1 kilometres from an origin point (or viewing point) would occupy a vertical field of view not greater than 1 degree (or 5% of the vertical field of view).

viewshed extent.

Review of the potential cause and effect pathways for visual impacts identified that the key issues and impacts are more likely to result during the project's operation phase because of the introduction of wind farm infrastructure, including views of the infrastructure from potentially sensitive viewpoints. There is also the potential for the presence of transmission infrastructure such as substation, switchyard and overhead transmission lines to result in a potential visual impact, depending on final design and siting of infrastructure.



#### Theoretical limit of viewshed extent diagram

For this LVIA, an assumption has been made that any object which occupies less than 5% of the human eye vertical field of view (equivalent to 1 degree) is unlikely to result in an unacceptably-high visual impact, due to the relatively small proportion of the total field of

Within these extents, potential sensitive receptors are identified as having a range of visual exposure ranging from 'very low' to 'very high'. This relationship can hence be applied to any structure with a vertical height and used to determine an appropriate

<sup>1 &#</sup>x27;Human Factors in Design', Dreyfuss 1960

For the purposes of this LVIA, the TLVE has been calculated for each relevant project component:

- Wind farm infrastructure: based on uppermost blade turbine tip heights at 250.5 metres above ground level, a maximum TLVE would be 14.74 kilometres. Therefore, the study area for this preliminary landscape and visual impact appraisal includes all land within 15 kilometres of any proposed Wind Turbine Generators.
- New 220 kV transmission line: based on towers up to 70 metres above ground level, the maximum TLVE is 4.12 kilometres. The preliminary study extent threshold for the new 220 kV transmission line is substantially less than, and thus included within, the preliminary study extent for the wind farm infrastructure WTG units.

Within these extents, sensitive receptors are identified. Operation phase project components have been considered from the nearest representative sensitive view location which would represent a 'worst-case' parameter. Where sensitive receptors are identified within these extents, the project component is considered to have a 'potential visual impact'.

This visual appraisal focuses on the Wind Turbine Generators layout, with a map of the study area provided in Figure 3.





Study Area Map

Legend

Project Area	
Study Area Extent (15km)	г <sup>,</sup> , -]
Local Government Area Boundary	LGA
River	~
Main Road	
Town/ City/ Locality	
Turbine Locations / Viewshed Points	0
Reserve	///
Transmission Corridor	~

Source:	VIC	DATA
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0	5	10km
	Project Ref:	22.0702
	Dwg No.:	LVIA-1
$\bigcirc$	Scale	1:200,000
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### **2.3 Landscape and visual impact appraisal** method

The landscape and visual impact appraisal methodology is summarised in Figure 4.



### 2.4 Existing conditions assessment

#### 2.4.1 Landscape character assessment

Landscape character assessment is a key tool for understanding the overall character of the landscape in the study extent, including distinctions between Landscape character types based on the particular combinations of elements and perceptual aspects that make each area distinctive.

For the purposes of this Preliminary Landscape and Visual Impact Appraisal, guidance is primarily drawn from the South West Victoria Landscape Assessment Study (SWVLAS) prepared by Planisphere for the Victorian State Government in 2013. Additionally, the Great Ocean Road Region Landscape Assessment Study (GORRLAS) and its extending report, the Landscape Assessment North of the Princes Highway Study (LANPHS), provided guidance for the southern side of the study area. These studies identify and describe landscape character types based on broad areas of common physical, environmental, and cultural characteristics.

#### 2.4.2 Landscape value

This section of the assessment aims to assess the existing landscape value of the study area and surrounding landscapes in an objective manner. Guidance is taken primarily from the SWVLAS, the GORRLAS, which classifies landscapes within the study area as being of either local, regional or state significance.

In addition to designations of significance within the *SWVLAS* and the *GORRLAS*, this Preliminary Landscape and Visual Impact Appraisal also assumes that landscapes of national significance include landscapes and places which are included in Australia's National Heritage List and/or Commonwealth Heritage List.

For the purposes of this Preliminary Landscape and Visual Impact Appraisal, the following assumptions are made:

- Landscapes which are identified as being of national significance are considered to be of very high value;
- Landscapes which are identified as being of state or regional significance are considered to be of high value;
- Landscapes which are identified as being of local significance are considered to be of moderate value, and
- All other landscapes within the study area are considered to be of low value.

Guidance is also taken from the Moorabool, Greater Geelong, Golden Plains, and Surf Coast Planning Schemes. Within the study area, landscapes recognised by a Significant Landscape Overlay (SLO) are considered to be of regional significance and therefore considered to be of high value.

The value of the landscape within the study area is determined on the basis a matrix (refer to Table 1).

#### Table 1 Landscape Value matrix

Landscape Significance	Landscape Value
National	Very High
State	High
Regional	High
Local	Moderate
None	Low

## 2.5 Preliminary landscape and visual impact appraisal

#### 2.5.1 Visual exposure

The visual exposure of landscapes within the study area is determined through viewshed mapping.

Relative levels of visual exposure to proposed project infrastructure are determined by individually mapping the viewshed extent of the proposed project structures and subsequently overlapping the individual viewsheds to develop an appreciation of the cumulative viewshed of project infrastructure.

Landscapes within the study area which fall within the viewshed of a relatively high proportion of the proposed project structures are identified as having high or very high levels of visual exposure to the project, whereas landscapes within the study area which fall within the viewshed of a relatively low proportion of the proposed project structures are identified as having low or very low levels of visual exposure to the project.

Visual exposure mapping is utilised for selecting viewpoints.

#### 2.5.2 Viewpoint selection

For the purpose of a preliminary landscape and visual impact appraisal, five view locations were selected for consideration in the preliminary report on the basis that they:

- comprise public vantage points in locations where higher concentrations of people are anticipated by virtue of their proximity to existing recreational, commercial and civic facilities: and/or
- contain public vantage points in locations with significant statutory landscape significance.

These five locations are detailed in Section 4.6, Appraisal of landscape and visual impact from representative view locations, of this report.

Community consultation would be sought at a future stage in order to identify additional view locations for a full landscape and visual impact assessment.

#### 2.5.3 Preliminary landscape and visual impact appraisal

the basis of 3 variables:

- Landscape value;

#### 2.5.3.1 Magnitude of visibility

In adopting a series of criteria for assessing the magnitude of visibility of project infrastructure visible from representative view locations, as depicted within photomontage imagery, it is important to define a range of terms which provide some indication of the extent to which a view location may be impacted upon visually by the project, and when mitigation measures are considered necessary.

below.

Very High: entailing close proximity in an exposed location incapable of effective mitigation, where the proposed structures occupy a significant proportion of the view and are visually-dominant.

High: where the proposed structures form a major element in the view. There will be a tendency for proposed structures to be more dominant than other landscape elements.

Moderate: where proposed structures will typically be visible, sometimes obviously so. Notwithstanding this, the distance of project infrastructure from the viewpoint and/ or the contribution to visual screening provided by topography or vegetation, results in situations where proposed structures will not be a dominant element in the view.

Low: where proposed structures are visible but form only minor elements in available views as a result of distance and/or screening by vegetation or topography.

Very Low/Negligible: where proposed structures are visible in clear conditions and may be recognisable, but conversely may sometimes not even be noticed.

Nil: where proposed structures are entirely screened from view by topography, vegetation or other existing structures, and hence not visible. In circumstances where the magnitude of visibility is assessed as nil, the overall impact appraisal is also considered to be nil, regardless of the assessed level of landscape value and receptor sensitivity.

The preliminary landscape and visual impact appraisal, determined on the basis of landscape and visual impacts assessed at each representative viewpoint is arrived at on

 Magnitude of visibility of the proposed infrastructure (as depicted within the photomontage views from representative view locations), and

The nature, number and frequency of visual receptors.

In determining this range a grading system of visual magnitude categories is described

#### 2.5.3.2 Visual receptors

Consistent with guidance provided within the *Landscape Institute and Institute of Environmental Management & Assessment, Guidelines for Landscape Visual Impact Assessment, Third Edition, 2013,* consideration of visual receptors is necessary, in order to identify and understand who will be affected by visual amenity impacts resulting from the project. Visual receptors can include:

- People living within the study area;
- People working within the study area;
- People travelling through the study area;
- · People visiting recognised landscapes or attractions within the study area, and
- People engaged in recreational activities within the study area.

It is recognised that people have differing responses to changes in views and visual amenity depending on the context and purpose for being in a particular place. It is generally accepted that changes to views and visual amenity which affect a workplace are typically perceived as being of a lower order of impact than changes which affect a recognised landscape or attraction. It is also generally accepted that changes to views and visual amenity which affect a private residence are typically perceived as being of a higher order of impact by the occupants of that residence, but not necessarily by a broader audience.

The impact appraisal incorporates a weighting in order to ensure an appropriate level of consideration of the perception of the particular receptors who will see and experience the changes to views and visual amenity, outlined as follows:

**Sensitivity of receptor** - private residents are assumed to have a high level of sensitivity to visual impacts regardless of the circumstances, as are visitors within National Parks or other recognised scenic destinations (such as designated lookouts and/ or areas with statutory protection on the basis of landscape value/significance), with other receptors in the public realm assumed to have a moderate level of sensitivity to visual impact. Receptors in their regular place of work, and undertaking regular work activities, are assumed to have a low level of sensitivity to visual impact;

**Number of receptors** - relative visitation numbers are considered, using the rationale that viewpoints which experience higher levels of visitation are assumed to experience higher levels of visual impact;

**Frequency of receptors** - the frequency of visits to a viewpoint by individual receptors is considered, using the rationale that a visual impact which is experienced more frequently is likely to be felt more significantly. For example, a receptor who experiences a view daily is considered to experience a greater level of impact than a receptor who only experiences it once a year or less. This rationale underpins the assumption that private residents are more sensitive to impacts felt at their place of residence where they might spend entire days, because they travel to and from that location more frequently; and

**Duration of receptors** - the period of time which receptors typically spend at a viewpoint is considered, with longer durations assumed to result in higher levels of visual impact. This rationale also underpins the assumption that private residents are more sensitive to impacts felt at their place of residence, and supports an assumption that short-term views - such as those experienced from moving vehicles - would be associated with lower levels of visual impact.

# **3 LANDSCAPE CHARACTER AND VALUES ASSESSMENT**

## 3.1 Introduction

This section of the report focuses on describing the landscape character of the LVIA study area by identifying the main characteristics of the landscape. This assessment adopts the landscape character descriptions from the South West Victoria Landscape Assessment Study (SWVLAS), the Great Ocean Road Region Landscape Assessment Study (GORRLAS), and the Landscape Assessment North of the Princes Highway Study (LANPHS).

## **3.2 Landscape character types**

#### 3.2.1 SWVLAS

This section details the landscape character areas adopted from the SWVLAS, describing each area as follows and as shown on Figure 5, the Landscape Character Area Map.

#### 1. The Western Volcanic Plain

#### Landscape Character Area 1.3: Volcanic Agricultural

The Volcanic Agricultural Character Area is a vast area within an extensive Character Type.

This landscape is dominated by flat to slightly undulating agricultural plains with open views and a lack of outstanding features. Paddocks are separated by post and wire fences and occasional dry stone walls. Exotic and native shelterbelts cut across the land, lining paddock edges, farmsteads and roadsides.

Long range views with 'big skies' terminate at partially wooded backdrops with the Pyrenees and Grampians Ranges occasionally visible on the horizon.

Scattered farm buildings, including old structures related to sheep farming and dairving. tend to be set back from the road with long driveways. In areas with a finer grain of subdivision pattern, buildings are often located closer to the road. This is a sparsely treed landscape, but with some regeneration and new planting in specific locations.

Remnant stands of vegetation are present in patches beside the roadside, alongside creek lines or occasionally within paddocks.

This is the landscape that suited the first European settlers who used the cleared plains for grazing sheep.

#### Landscape Character Area 1.9: Vegetated Volcanic Plains

This Character Area has a more heavily vegetated appearance than the more cleared, expansive parts of the Volcanic Plain. It sits predominantly on the flat to undulating plateaus edged by deeply incised gorges, to the east and south of Ballarat.

The windswept nature of the plateaus has seen historic installation of a large number of Pine and Cypress shelterbelts along property edges, as avenues up driveways and surrounding houses. Many dwellings have formal garden styles. There is also a prevalence of native vegetation scattered throughout paddocks (in stands and as isolated trees), along roadsides and along creek lines and property edges. Roadsides and paddocks may contain a large number of weed species including blackberries and hawthorn, and dense patches of gorse.

The vegetated volcanic rise of Mount Warrenheip forms a distinctive landmark on the outskirts of Ballarat, and the township of Gordon has a volcanic rise creating a scenic backdrop.

This Character Area is also notable for the number of small settlements and individual dwellings which become denser and more numerous in areas close to Ballarat.

#### Landscape Character Area 1.11: Winchelsea & Geelong Western Plains

Character Area 1.11 is characterised by generally flat topography with occasional low, volcanic rises and stony rises. The large, open paddocks are sometimes divided by shelter belts and low, transparent post and wire style fencing, which is occasionally supported by dry stone walls. Closer to Geelong, the southern ends of the gorges that incise the northern landscape create a number of deep drops in the topography.

Stands of remnant vegetation are located throughout the Area, often adjacent to the road corridors and in proximity to waterways. Shelterbelt planting along property frontages and paddock edges is common on the windswept plains. Farm houses and outbuildings are scattered throughout, with a smaller subdivision pattern occurring on the perimeter of the townships. Rocks are often grouped into piles in paddocks in an attempt to clear the land and make it more arable for farming.

Power infrastructure becomes a prominent feature on the landscape near Geelong.

#### 2. The Uplands

#### Landscape Character Area 2.5: Plateaus & Gorges

This Character Area is defined by its dramatic, often surprising topography of flat plateaus incised by deep river valleys and gorges.

This topography is most spectacular around the Werribee Gorge National Park and Lal Lal Gorge where flat, often cleared, plateaus are dissected by deep gorges which appear suddenly as the landscape is crossed.

To the west and south the topography becomes less intense as it joins to the Victorian Volcanic Plain, with river valleys cutting through a more undulating landscape.

#### Landscape Character Area 2.6: Brisbane Ranges

Type.

This is an area of rugged rocky gorges with thick vegetation cover. Much of this is coppiced, as the forest has re-grown from a history of timber cutting. While there are some residential dwellings on the outskirts, overall the area displays an undeveloped character. The area is renowned for its large variety of flora and fauna species, and the National Park was declared in 1973.

buildings.

#### 3.2.2 GORRLAS and LANPHS

This section details the southern part of the landscape character areas within the TLVE study area, adopted from the GORRLAS and LANPHS. The LANPHS characterises landscape character area: 1.1 Western Plains. This area is described as follows and shown on Figure 5, the Landscape Character Area Map.

#### Landscape Character Area 1.1: Western Plains

The background report of the LANPHS states that it is intended to complete the Great Ocean Road Region Landscape Assessment Study (GORRLAS) and has adopted the LCA study from the GORRLAS. The GORRLAS describes character area 1.1 Winchelsea Western Plains as follows:

- Key characteristics
- A sense of vastness and openness
- Long distance views to a low horizon

- The character of farming structures

The Brisbane Ranges National Park forms its own Character Area within the Uplands

To the west this Character Area is undulating and easily accessible, to the east gorges and steep ridges create a more rugged and inaccessible terrain. Steiglitz, an old gold mining town, nestles within the National Park and displays numerous characterful

Within this landscape type, precinct 1.1 is distinctive for its relatively flat topography, larger paddocks, and long-distance views to a low horizon. This is the 'big sky' precinct of the Western Plains, Cones, and Lakes area.

- Shelter belts as a feature between large paddocks - Indigenous vegetation emphasising landscape features



## 3.3 Landscape value

#### 3.3.1 Introduction

This section of the assessment aims to assess the existing relative landscape value of the project site and surrounding landscapes by adopting the assessment work from background documents, primarily the South West Victoria Landscape Assessment Study (SWVLAS) and the Great Ocean Road Region Landscape Assessment Study (GORRLAS). Consideration of relevant controls within the Moorabool, Greater Geelong, Golden Plains and Surf Coast Planning Schemes with landscapes which are recognised by a Significant Landscape Overlay (SLO) within the study area.

Landscape value mapping depicting the study area is included in Section 3.3, Figure 7.

The significance levels are:



Very High = national significance include landscapes and places which are included in Australia's National Heritage List and/or Commonwealth Heritage List or designated wilderness areas



High = state or regional significance designation in South West Victoria Landscape Assessment Study and/ or the presence of relevant SLO



**Moderate = local significance designation in** *South* West Victoria Landscape Assessment Study



Low = other landscapes within the study area

#### 3.3.2 State significance

This section of the assessment has adopted designations of significance from the SWVLAS. The location and extent of the landscapes described below is identified in Figure 6.

#### **Brisbane Ranges and Rowsley Scarp**

The SWVLAS specifies the Brisbane Ranges and Rowsley Scarp as an area of state significance, as described below.

The Brisbane Ranges National Park lies to the south of Bacchus Marsh. The Rowslev Scarp is a long tectonic fault line that sweeps from Bacchus Marsh in the north to near Anakie in the south, where it peters out to join the valleys of the Moorabool River and Sutherland Creek. The Scarp forms the eastern edge of the Brisbane Ranges.

#### Major viewing corridors:

- Ballan Geelong Road
- De Motts Road
- Staughton Vale Road
- Bacchus Marsh Balliang Road
- Brisbane Road
- Steiglitz Durdidwarrah Road
- McCormacks Road
- Briabane Ranges / Reids Road

#### Lal Lal Gorge

The *SWVLAS* specifies the Lal Lal Gorge as an area of state significance, as described below.

Lal Lal Gorge is a steep sided basalt gorge and waterfall to the south east of Ballarat.

The main viewing corridor from which to experience this landscape is the Elaine -Edgerton Road which cuts across the Gorge to the south.

#### 3.3.3 Regional significance

This section of the assessment uses designations of regional significance identified in the Planning Schemes. No landscapes of regional significance identified in SWVLAS are located within the study area. The location and extent of the landscapes described below is identified in Figure 6.

#### 3.3.3.1 Moorabool Planning Scheme Significant Landscapes

#### Significant Landscape Overlay - Schedule 3 - Rivers of the Barwon: Yarrowee River (Yarowee) corridor environs (SLO3)

SLO3 includes the following statement of nature and key elements of landscape:

The Yarrowee River (Yarowee) forms part of the connected system of rivers within the Barwon catchment (Barre Warre Yulluk). The river has intrinsic spiritual connections and living cultural heritage significance to Wadawurrung Traditional Owners and is of high natural and landscape value.

Due to the topography and landscape of the river, bushfire is a present risk in some locations along the corridor.

Ballarat (Ballaarat).

The landscape of the Yarrowee is highly varied, as it flows through the urbanised areas of Ballarat, characterised by engineered channels, including a large underground section between Ligar Street to Eastwood Street. From Eastwood Street to Redan, a bluestone lined channel continues before the river reverts to a natural waterway.

Even in highly modified reaches, the river passes through bush reserves of dry and grassy forest and areas of extensive revegetation and wetlands, providing different experiences along the corridor. In urban areas, riparian vegetation along channelised sections reinforces a natural connection and there are opportunities to repair and enhance the river and its interfaces.

The Yarrowee River Trail located alongside the river between the Gong Gong Reservoir Park and Magpie provides a recreation and open space corridor through Ballarat and varied vantage points to experience the river corridor.

From Ballarat the Yarrowee River winds its way through agricultural and rural landscapes. where the character is varied, including open river flats, steep escarpments, and rocky gorges. The river is generally set as a narrow channel with the riparian corridor forming a green spine and natural habitat through the landscape. At Mt Mercer, the river is characterised by gorges with steep embankments and remnant bushland including examples of River Red Gums (Biyal) and Yarra Gums. The river corridor provides important habitat for threatened species like the Platypus, Great Egret, Hairy and Western Burrowing Crayfish and the Powerful Owl.

River.

SL03 includes the following landscape character objectives:

- waterway corridor.
- waterway corridor.

The Yarrowee River commences at the Gong Gong Reservoir located to the north west of

At Mt Mercer, the Yarrowee River joins and transitions into the Leigh (Waywatcurtan)

To enhance the continuous riparian corridor landscape.

 To retain canopy trees as a dominant landscape feature and vegetation that contributes to landscape character, heritage values and neighbourhood character, ensuring it responds to the bushfire risk of a location.

To ensure buildings and works are not visually dominant when viewed from the

 To encourage buildings and works to be set back from the banks of the river to avoid overshadowing and visual intrusion within the landscape and maintain an open

 To ensure the location and size of earthworks minimises alterations to natural topography and is consistent with the landscape character.



Figure 6 Significance Investigation Areas + Significant Landscapes & Views of South West Victoria Map (not to scale) Source: South West Victoria Landscape Assessment Study (SWVLAS) by Planisphere, June 2013.

#### Significant Landscape Overlay - Schedule 4 - Rivers of the Barwon: Moorabool River (Mooroobull) corridor environs (SLO4)

SLO4 includes the following statement of nature and key elements of landscape:

The Moorabool River (Mooroobull) forms part of the connected system of rivers within the Barwon (Barre Warre Yulluk) catchment. The river has intrinsic spiritual connections and living cultural heritage significance to Wadawurrung Traditional Owners and is of high natural and landscape value.

Due to the topography and landscape of the river, bushfire is a present risk in some locations along the corridor.

The main reach of the Moorabool River commences at the confluence of the river's East and West branches at Morrisons and flows through Meredith, She Oaks, Maude, Lethbridge and Batesford, before joining the Barwon River (Parwan) at Fyansford.

The significant landscape of the Moorabool River is defined by its course which winds through a valley of undulating hills and gorges with steep escarpments. These escarpments protect bands of remnant vegetation, provide important habitat corridors. and reinforce the green spine through the wider landscape.

The landscape of the Moorabool River corridor is generally one of a rural and agricultural environment where most native vegetation has been cleared, leaving visually open and sparsely vegetated vistas. Within this setting, the riparian corridor forms a green spine through the landscape providing important habitat for threatened species like the Platypus, (Wad-dirring), Tussock Skink and Macquarie Perch.

Specific locations such as Bunjil's Lookout at Maude provide open vistas across the valley, while public reserves such as the Meredith Education Area provide a landscape of Grassy Forest and Shrubland set within the river valley.

In the middle reaches of the Moorabool River at Meredith there are examples of Grassy Forest which provide an enclosed and vegetated landscape setting. Dog Rocks Sanctuary at Batesford also provides important Shrubland and Floodplain Riparian Woodland flanking the river corridor.

In Batesford the river is channelled in sections as it is diverted around a guarry. While these sections are highly altered, they still provide a green spine and riparian corridor through the rolling and sparsely vegetated hills, and there are opportunities to repair and enhance the river and its interfaces.

At Fyansford the river is characterised by the contrast of steep escarpments and floodplains. Sections of the Hamilton Highway on the northern escarpment of the river provide significant views across the river.

The confluence of the Moorabool and Barwon rivers at Redgum Island is a culturally significant place to Wadawurrung Traditional Owners.

SLO4 includes the following landscape character objectives:

To enhance the continuous riparian corridor landscape.

- To retain indigenous riparian vegetation and canopy trees as a dominant landscape feature, ensuring it responds to the bushfire risk of a location.
- To ensure buildings and works are not visually dominant when viewed from the waterway corridor.
- To encourage buildings and works to be set back from the banks of the river to avoid overshadowing and visual intrusion within the landscape and maintain an open waterway corridor.
- To ensure the location and size of earthworks minimises alterations to natural drainage and is consistent with the landscape character.

#### **3.3.3.2 Greater Geelong Planning Scheme Significant Landscapes**

#### Significant Landscape Overlay - Schedule 5 - Edges of the Brisbane Ranges and Anakie (SLO5)

SL05 includes the following statement of nature and key elements of landscape:

The eastern edges of the Brisbane Ranges, including the Rowsley Scarp and its foothills, and the granitic and scoria Anakie Hills are visually prominent landscape features affording views of the plains to the east. These locations contain a mix of cleared land contrasted with substantial vegetation cover. The area has a high scenic quality and its visual exposure makes it susceptible to visual intrusion from inappropriate development.

SL05 includes the following landscape character objectives:

- To protect and enhance the visual and natural landscape values of the area.
- To maintain vegetation as an important element of the landscape.
- To protect the landscape from visual intrusion from inappropriate buildings and works and their siting, design and/or materials.
- To maintain the natural skyline of ridge and escarpment areas and avoid obtrusive building silhouettes.
- To encourage the siting, design and landscaping of buildings and works responsive to the landscape values of the area.

#### 3.3.3.3 Golden Plains Planning Scheme Significant Landscapes

#### Significant Landscape Overlay - Schedule 2 - Russell's Bridge landscape (SLO2)

SLO2 includes the following statement of nature and key elements of landscape:

In relation to visual and landscape values, this schedule to the SLO recognises the Russell's Bridge area constitutes a significant landscape. It encompasses noteworthy topographic elements such as the Moorabool River valley, ridgelines, and river plain, all contributing to its prominence.

SLO2 includes the following landscape character objectives:

 To recognise and protect the significant landscape values of the former Russell's Bridge settlement, Moorabool River valley, ridgelines and river plain.

- the landscape.

#### Significant Landscape Overlay - Schedule 3 - Murgheboluc landscape (SLO3)

SLO3 includes the following statement of nature and key elements of landscape:

The Murgheboluc area represents a significant landscape with notable topographic features including the Barwon River Valley, ridgelines and river plain.

SLO3 includes the following landscape character objectives:

- the landscape.

#### Significant Landscape Overlay - Schedule 14 - Brisbane Ranges & Rowsley Scarp Environs (SL014)

SLO14 includes the following statement of nature and key elements of landscape:

The Brisbane Ranges and Rowsley Scarp is a landscape of State significance, which includes the Brisbane Ranges National Park. The Brisbane Ranges comprise a series of low relief rises, dissected by rugged rocky gullies and gorges, and blanketed in thick tree cover. The Rowsley Scarp is a long tectonic fault line that sweeps from Bacchus Marsh in the north to past Anakie in the south, and forms the eastern edge of the Brisbane Ranges. The portion of this landscape that falls within the Golden Plains Shire primarily contains the forested hinterland of the Rowsley Scarp that falls to the south of the Brisbane Ranges National Park boundary. Agriculture and sustainable land management practices are a key element of the landscape and contribute to the character of the Brisbane Ranges and Rowsley Scarp Environs landscape.

The Brisbane Ranges are the traditional Country of the Wadawurrung people to whom it holds social, cultural and spiritual significance. The waterbodies, distinctive natural features and places of ecological value within this area are likely to have high significance for Aboriginal people. The Rowsley fault is one of the most obvious examples of a fault scarp in Victoria, providing an outstanding site for earth science teaching and research. Its escarpment is listed by the National Trust for its unique geological features and the presence of rare species. The Brisbane Ranges National Park is also a popular tourist destination.

SL014 includes the following landscape character objectives:

• To conserve and enhance the significant landscape features of the Brisbane Ranges

 To protect the significant views into and out of the Russell's Bridge landscape area. To minimise the visual impacts of inappropriate development upon the significance of

 To encourage the siting, bulk, form, design and use of materials in buildings and works which respond to the landscape values of the area.

• To recognise and protect the significant landscape values of the Murgheboluc settlement, Barwon River valley, ridgelines and river plain.

To protect the significant views into and out of the Murgheboluc landscape area.

To minimise the visual impacts of inappropriate development upon the significance of

 To encourage the siting, bulk, form, design and use of materials in buildings and works which respond to the landscape values of the area.

and Rowsley Scarp.

- To maintain views from the viewing corridors to the Brisbane Ranges and Rowley Scarp, including the viewing corridors of Steiglitz and De Motts Roads.
- To encourage the siting and design of development that is responsive to the landscape character.
- To conserve and enhance indigenous vegetation corridors throughout the Brisbane Ranges and Rowsley Scarp Environs landscape, including the revegetation of cleared areas of the landscape utilising indigenous species to emphasise natural features such as ridges and watercourses.
- To encourage appropriate siting and design of commercial timber production to ensure the distinctive topographical features of the Brisbane Ranges and Rowsley Scarp Environs is not adversely affected, or the timber production does not contrast with the vegetated edge of the National Park.

#### Significant Landscape Overlay - Schedule 15 - Rivers of the Barwon: Yarrowee River (Yarowee) corridor environs (SL015)

SLO15 includes the following statement of nature and key elements of landscape:

The Yarrowee River (Yarowee) forms part of the connected system of rivers within the Barwon catchment (Barre Warre Yulluk). The river has intrinsic spiritual connections and living cultural heritage significance to Wadawurrung Traditional Owners and is of high natural and landscape value.

Due to the topography and landscape of the river, bushfire is a present risk in some locations along the corridor.

The Yarrowee River commences at the Gong Gong Reservoir located to the north west of Ballarat (Ballaarat).

The landscape of the Yarrowee is highly varied, as it flows through the urbanised areas of Ballarat, characterised by engineered channels, including a large underground section between Ligar Street to Eastwood Street. From Eastwood Street to Redan, a bluestone lined channel continues before the river reverts to a natural waterway.

Even in highly modified reaches, the river passes through bush reserves of dry and grassy forest and areas of extensive revegetation and wetlands, providing different experiences along the corridor. In urban areas, riparian vegetation along channelised sections reinforces a natural connection and there are opportunities to repair and enhance the river and its interfaces.

The Yarrowee River Trail located alongside the river between the Gong Gong Reservoir Park and Magpie provides a recreation and open space corridor through Ballarat and varied vantage points to experience the river corridor.

From Ballarat the Yarrowee River winds its way through agricultural and rural landscapes, where the character is varied, including open river flats, steep escarpments, and rocky gorges. The river is generally set as a narrow channel with the riparian corridor forming a green spine and natural habitat through the landscape. At Mt Mercer, the river is

characterised by gorges with steep embankments and remnant bushland including examples of River Red Gums (Biyal) and Yarra Gums. The river corridor provides important habitat for threatened species like the Platypus, Great Egret, Hairy and Western Burrowing Cravfish and the Powerful Owl.

At Mt Mercer, the Yarrowee River joins and transitions into the Leigh (Waywatcurtan) River.

SL015 includes the following landscape character objectives:

- To enhance the continuous riparian corridor landscape.
- To retain canopy trees as a dominant landscape feature and vegetation that contributes to landscape character, heritage values and neighbourhood character, ensuring it responds to the bushfire risk of a location.
- To ensure buildings and works are not visually dominant when viewed from the waterway corridor.
- To encourage buildings and works to be set back from the banks of the river to avoid overshadowing and visual intrusion within the landscape and maintain an open waterway corridor.

#### Significant Landscape Overlay - Schedule 16 - Rivers of the Barwon: Leigh River (Waywatcurtan) corridor environs (SL016)

SLO16 includes the following statement of nature and key elements of landscape:

The Leigh River (Waywatcurtan) forms part of the connected system of rivers within the Barwon catchment (Barre Warre Yulluk). The river has intrinsic spiritual connections and living cultural heritage significance to Wadawurrung Traditional Owners and is of high natural and landscape value.

Due to the topography and landscape of the river bushfire is a present risk in some locations along the corridor.

The landscape of the Leigh River commences at its junction with the Yarrowee River (Yarowee) at Mount Mercer and flows via Shelford, converging with the Barwon River (Parwan) at Inverleigh. Within this landscape the Leigh River is incised into volcanic plains in a channel of varving depths and widths across a broad valley with undulating hills.

The river corridor is visually open and generally sparsely vegetated; forming a green spine through the landscape with grassy forest and shrubland flanking the river. Riparian vegetation includes examples of River Red Gum (Biyal), Yarra Gum, Blackwood (Burnnaa-look) and Black (Toolain) and Silver Wattle. The river corridor provides important habitat for threatened species like the Platypus (Wad-dirring), Great Egret, Hairy and Western Burrowing Cravfish, and Growling Grass Frog.

Where the river passes through the rural townships of Inverleigh and Shelford, the

riparian corridor narrows, and the landscape character is defined by Floodplain Riparian Woodlands bordered by semi-rural and low-density residential development.

Inverleigh is sited where the Leigh and Barwon rivers meet. The confluence is of high cultural value to Wadawurrung Traditional Owners and is characterised by a deep channel to the north and opening to a wider river where it meets the Barwon. River Red Gums (Biyal), the historic Lawson's Tree, open space, and walking trails make a significant contribution to the river setting

SL016 includes the following landscape character objectives:

- waterway corridor.
- waterway corridor.

#### Significant Landscape Overlay - Schedule 17 - Rivers of the Barwon (Parwan) corridor environs (SL017)

SL017 includes the following statement of nature and key elements of landscape:

The Barwon River (Parwan) forms part of the connected system of rivers within the Barwon catchment (Barre Warre Yulluk). The river has intrinsic spiritual connections and living cultural heritage significance to Traditional Owners and is of high natural and landscape value.

Due to the topography and landscape of the river, bushfire is a present risk in some locations along the corridor.

The landscape of the main reach of the Barwon River commences at the confluence of the river's East and West Branches at Yeodene. The river then flows through Birregurra and Winchelsea and converges with the Leigh River (Waywatcurtan) at Inverleigh. From Inverleigh, it meets the Moorabool River (Mooroobull) at Fyansford.

The river generally flows across an open landscape of gently undulating hills, incised into the volcanic plans, set within channels of varying depths and widths. The agricultural and rural landscape is visually open and generally sparsely vegetated. Within this setting, the riparian corridor forms a green spine through the landscape with Floodplain Riparian Woodland and Shrublands flanking the river. Riparian vegetation includes examples of River Red Gums (Biyal), Blackwood (Burn-naa-look), and Silver Wattles. The riparian corridor provides important habitat for threaten species like the Platypus (Wad-dirring), Australian Grayling, and Yarra Pygmy Perch. In addition to indigenous species there are extensive examples of weeds, such as Willows and Glyceria which, at points, congest the river.

To enhance the continuous riparian corridor landscape.

 To retain indigenous riparian vegetation and canopy trees as a dominant landscape feature, ensuring it responds to the bushfire risk of a location.

• To ensure buildings and works are not visually dominant when viewed from the

 To encourage buildings and works to be set back from the banks of the river to avoid overshadowing and visual intrusion within the landscape and maintain an open

To ensure the location and size of earthworks minimises alterations to natural

topography and is consistent with the landscape character.

At Birregurra, the Barwon River is characterised by pockets of open space abutting the river and with evidence of river rehabilitation. At Winchelsea, the river flows through the centre of the town in a modest, vegetated channel where river restoration works have been undertaken.

At Inverleigh the river converges with the Leigh River. The confluence is of high cultural value to Wadawurrung Traditional Owners, and open space and walking trails characterise the river setting.

From Fyansford to Breakwater the river flows through Geelong (Diilang), with urban development located on both sides of the river. Through Geelong, the river is visually dominant and generally flanked by large open spaces and parklands. In some areas the setback to the corridor is reduced with development backing onto the river and there are opportunities to repair and enhance the river and its interfaces.

The river setting is an important characteristic of Geelong, with the natural riparian corridor forming a strong and distinct green spine through the urban landscape and comprising an important linear park network.

From Breakwater, the river flows into the Lake Connewarre (Connewarre) system, an area of high cultural significance to Wadawurrung Traditional Owners. The system forms a series of Ramsar protected lakes and wetlands, part of the Connewarre Wildlife Reserve. Through this area, the river is characterised by indigenous vegetation which supports the unique ecology of the region.

From the Lake Connewarre system, the river is fringed by mangroves and the beaches of Barwon Heads and Ocean Grove. The final section of the river is characterised by river channelling through sandbars and mudflats, and views of Barwon Bluff, Ingamells Bay and Bass Strait beyond.

SL017 includes the following landscape character objectives:

- To enhance the continuous riparian corridor landscape.
- To retain canopy trees as a dominant landscape feature and vegetation that contributes to landscape character, heritage values and neighbourhood character, ensuring it responds to the bushfire risk of a location.
- To ensure buildings and works are not visually dominant when viewed from the waterway corridor.
- To encourage buildings and works to be set back from the banks of the river to avoid overshadowing and visual intrusion within the landscape and maintain an open waterway corridor.
- To ensure the location and size of earthworks minimises alterations to natural topography and is consistent with the landscape character.

#### Significant Landscape Overlay - Schedule 18 - Moorabool River (Mooroobull) corridor environs (SL018)

SLO18 includes the following statement of nature and key elements of landscape:

The Moorabool River (Mooroobull) forms part of the connected system of rivers within the Barwon (Barre Warre Yulluk) catchment. The river has intrinsic spiritual connections and living cultural heritage significance to Wadawurrung Traditional Owners and is of high natural and landscape value.

Due to the topography and landscape of the river, bushfire is a present risk in some locations along the corridor.

The main reach of the Moorabool River commences at the confluence of the river's East and West branches at Morrisons and flows through Meredith, She Oaks, Maude, Lethbridge and Batesford, before joining the Barwon River (Parwan) at Fyansford.

The significant landscape of the Moorabool River is defined by its course which winds through a valley of undulating hills and gorges with steep escarpments. These escarpments protect bands of remnant vegetation, provide important habitat corridors, and reinforce the green spine through the wider landscape.

The landscape of the Moorabool River corridor is generally one of a rural and agricultural environment where most native vegetation has been cleared, leaving visually open and sparsely vegetated vistas. Within this setting, the riparian corridor forms a green spine through the landscape providing important habitat for threatened species like the Platypus, (Wad-dirring), Tussock Skink and Macquarie Perch.

Specific locations such as Bunjil's Lookout at Maude provide open vistas across the valley, while public reserves such as the Meredith Education Area provide a landscape of Grassy Forest and Shrubland set within the river valley.

In the middle reaches of the Moorabool River at Meredith there are examples of Grassv Forest which provide an enclosed and vegetated landscape setting. Dog Rocks Sanctuary at Batesford also provides important Shrubland and Floodplain Riparian Woodland flanking the river corridor.

In Batesford the river is channelled in sections as it is diverted around a guarry. While these sections are highly altered, they still provide a green spine and riparian corridor through the rolling and sparsely vegetated hills, and there are opportunities to repair and enhance the river and its interfaces.

At Fyansford the river is characterised by the contrast of steep escarpments and floodplains. Sections of the Hamilton Highway on the northern escarpment of the river provide significant views across the river.

The confluence of the Moorabool and Barwon rivers at Redgum Island is a culturally significant place to Wadawurrung Traditional Owners.

SL018 includes the following landscape character objectives:

- To enhance the continuous riparian corridor landscape.
- To retain indigenous riparian vegetation and canopy trees as a dominant landscape feature, ensuring it responds to the bushfire risk of a location.
- To ensure buildings and works are not visually dominant when viewed from the

waterway corridor.

- waterway corridor.

#### **3.3.3.4 Surf Coast Planning Scheme Significant Landscapes**

#### Significant Landscape Overlay - Schedule 8 - Rivers of the Barwon (Parwan) corridor environs (SL08)

SLO8 includes the following statement of nature and key elements of landscape:

The Barwon River (Parwan) forms part of the connected system of rivers within the Barwon catchment (Barre Warre Yulluk). The river has intrinsic spiritual connections and living cultural heritage significance to Traditional Owners and is of high natural and landscape value.

Due to the topography and landscape of the river, bushfire is a present risk in some locations along the corridor.

The landscape of the main reach of the Barwon River commences at the confluence of the river's East and West Branches at Yeodene. The river then flows through Birregurra and Winchelsea and converges with the Leigh River (Waywatcurtan) at Inverleigh. From Inverleigh, it meets the Moorabool River (Mooroobull) at Fyansford.

The river generally flows across an open landscape of gently undulating hills, incised into the volcanic plans, set within channels of varving depths and widths. The agricultural and rural landscape is visually open and generally sparsely vegetated. Within this setting, the riparian corridor forms a green spine through the landscape with Floodplain Riparian Woodland and Shrublands flanking the river. Riparian vegetation includes examples of River Red Gums (Biyal), Blackwood (Burn-naa-look), and Silver Wattles. The riparian corridor provides important habitat for threaten species like the Platypus (Wad-dirring), Australian Grayling, and Yarra Pygmy Perch. In addition to indigenous species there are extensive examples of weeds, such as Willows and Glyceria which, at points, congest the river.

At Birregurra, the Barwon River is characterised by pockets of open space abutting the river and with evidence of river rehabilitation. At Winchelsea, the river flows through the centre of the town in a modest, vegetated channel where river restoration works have been undertaken.

At Inverleigh the river converges with the Leigh River. The confluence is of high cultural value to Wadawurrung Traditional Owners, and open space and walking trails characterise the river setting.

From Fyansford to Breakwater the river flows through Geelong (Diilang), with urban development located on both sides of the river. Through Geelong, the river is visually dominant and generally flanked by large open spaces and parklands. In some areas the

 To encourage buildings and works to be set back from the banks of the river to avoid overshadowing and visual intrusion within the landscape and maintain an open

 To ensure the location and size of earthworks minimises alterations to natural drainage and is consistent with the landscape character.

setback to the corridor is reduced with development backing onto the river and there are opportunities to repair and enhance the river and its interfaces.

The river setting is an important characteristic of Geelong, with the natural riparian corridor forming a strong and distinct green spine through the urban landscape and comprising an important linear park network.

From Breakwater, the river flows into the Lake Connewarre (Connewarre) system, an area of high cultural significance to Wadawurrung Traditional Owners. The system forms a series of Ramsar protected lakes and wetlands, part of the Connewarre Wildlife Reserve. Through this area, the river is characterised by indigenous vegetation which supports the unique ecology of the region.

From the Lake Connewarre system, the river is fringed by mangroves and the beaches of Barwon Heads and Ocean Grove. The final section of the river is characterised by river channelling through sandbars and mudflats, and views of Barwon Bluff, Ingamells Bay and Bass Strait beyond.

SLO8 includes the following landscape character objectives:

- To enhance the continuous riparian corridor landscape.
- To retain indigenous riparian vegetation and canopy trees as a dominant landscape feature, ensuring it responds to the bushfire risk of a location.
- To ensure buildings and works are not visually dominant when viewed from the waterway corridor.
- To encourage buildings and works to be set back from the banks of the river to avoid overshadowing and visual intrusion within the landscape and maintain an open waterway corridor.
- To ensure the location and size of earthworks minimises alterations to natural drainage and is consistent with the landscape character.

#### **3.3.4 Summary of statutory controls**

None of the land identified within the *SWVLAS* and *GORRLAS* as being of state or regional significance is within the proposed project area.

The Brisbane Ranges, Rowsley Scarp, and Lal Lal Gorge, designated as state or regional significance in the *SWVLAS*, fall within the identified TLVE (15km) of the project area.

The project area TLVE includes land affected by SLO3 and SLO4 under the Moorabool Planning Scheme, SLO5 under the Greater Geelong Planning Scheme, and SLO2, SLO3, SLO14, SLO15, SLO16, SLO17 and SLO18 under the Golden Plains Planning Scheme, as well as SLO8 under the Surf Coast Planning Scheme.





Legend

Project Area
Study Area Extent (15km)
Local Government
Area Boundary
River
Main Road
Town/ City/ Locality
Uiewshed Points

Contour (10m interval)

Overlays Legend

Significant Landscape Overlay (SLO) Environmental Significant Overlay (ESO) Vegetation Protection Overlay (VPO)

Overlays Code 🌔	xxo
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	So	ource: VIC DATA
0	5	10km
	Project Re	f: 22.0702
	Dwg No.:	LVIA-2
$\bigcirc$	Scale	1:200,000
	Date:	02/06/2025
	Revision:	P5
	Hansen I	Partnership Pty Ltd
Mel	bourne   By	ron Bay   Vietnam
	Level 10, 15	50 Lonsdale Street
Melbourne VIC 3000		
		<b>T</b> 61 3 9654 8844
E inf	o@hansenp	artnership.com.au
	W hansenp	artnership.com.au





0	5	10km
( )	Project Ref:	22.0702
	Dwg No.:	LVIA-7
$\smile$	Scale	1:200,000
	Date:	02/06/2025
	Revision:	P5
	Hansen Par	tnership Pty Ltd
Me	elbourne   Byror	n Bay   Vietnam
	Level 10, 150	Lonsdale Street
	Melb	ourne VIC 3000
	Т	61 3 9654 8844
E in	lfo@hansenpar	tnership.com.au
	W hansenpart	tnership.com.au

# **4 PRELIMINARY LANDSCAPE AND VISUAL IMPACT APPRAISAL**

## 4.1 Introduction

The following section has been undertaken on the basis of the methodology outlined in the previous section of this report to provide a preliminary appraisal of the potential landscape and visual impact arising from the proposed Tall Tree Wind Farm Project.

## 4.2 Visual exposure

Viewshed mapping - to determine the potential visual exposure of landscapes within the study area to proposed project infrastructure - has been prepared in accordance with the methodology outlined in Section 2.

The elevation map is shown in Figure 9 on the next page. The results of the potential visual exposure mapping are presented in Figures 10 and 11 on the subsequent pages.







#### Elevation Map

Legend



#### **Elevation Legend**



#### Source: VIC DATA

0	5	10km
	Project Ref:	22.0702
	Dwg No.:	LVIA-3
$\smile$	Scale	1:200,000
	Date:	02/06/2025
	Revision:	P5
	Hansen Par	tnership Pty Ltd
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E inf	fo@hansenpart	nership.com.au
	W hansenpart	nership.com.au





Visual Exposure Map - Turbine



#### Number of turbines potentially visible

>42	
33 - 42	
22 - 32	
12 - 21	
0 - 11	
0	

-A total of 53 turbines have been proposed for the project. -Viewshed points have been placed at top of the turbine locations and at a height of 250.5m above existing ground level.

#### Source: VIC DATA

0	5	10km
	Project Ref:	22.0702
	Dwg No.:	LVIA-4
$\bigcirc$	Scale	1:200,000
	Date:	02/06/2025
	Revision:	P5
	Hansen Par	tnership Pty Ltd
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	Melb	ourne VIC 3000
	Т	61 3 9654 8844
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	W hansenpart	tnership.com.au





Visual Exposure Map - Transmission line

Legend



#### Number of towers potentially visible



Viewshed points have been placed at regular intervals (approximately corresponding to typical tower spacing for 220kV lines) along the transmission line route at a height of 70m above existing ground level. They do not necessarily represent likely tower locations - this will be subject to detailed engineering design.

#### Source: VIC DATA

0	2.5	5km
	Project Ref:	22.0702
	Dwg No.:	LVIA-5
$\bigcirc$	Scale	1:100,000
	Date:	02/06/2025
	Revision:	P5
	Hansen Part	tnership Pty Ltd
Me	lbourne   Byron	Bay   Vietnam
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	W hansenpart	nership.com.au

Durdidwarrah Stony Creek (Durdiwarrah) Reference Area De Motts Road GREATER GEELONG

# **4.3 Preliminary landscape and visual impact appraisal**

The preliminary landscape and visual impact appraisal as determined on the basis of impacts assessed at each representative viewpoint is arrived at on the basis of 3 variables:

- Landscape value;
- Magnitude of visibility of the proposed infrastructure (as depicted within the photomontage views from representative view locations); and
- The nature, number and frequency of visual receptors.

For the purposes of the LVIA, all changes to views as a result of the project are assumed to constitute negative impacts.

### 4.4 Limitations

Due to the preliminary nature of this report, the extent of the assessment has been limited to that required for the purposes of an EES referral. Therefore, the following areas of assessment which would typically be included in a full LVIA or LVIA have not formed a part of the processes in determining preliminary landscape and visual impact appraisal:

- Landscape value has been assessed in section 2.7 through desktop review adopted from *South West Victoria Landscape Assessment Study*. Determining the Landscape value informs the extent to which a view location may be impacted upon visually by the proposed development.
- The number of view locations assessed within this report is limited to five representative view locations only. Community consultation would be sought in order to determine a larger number of view locations for assessment in a full LVIA report.
- Recommendations for appropriate measures to assist in ameliorating any resultant landscape and visual impact are not provided within this preliminary appraisal.

### 4.5 Assumptions

#### Project infrastructure assessed

The assessment of potential visibility and associated landscape and visual impact has considered the following proposed project infrastructure:

- Wind farm infrastructure: consists of up to 53 WTG units, with turbine tip heights reaching up to 250.5 metres above ground level.
- New 220 kV transmission line: For the purpose of this assessment, towers have been shown at regular intervals along the proposed 11-kilometre transmission line route, based on typical spacing for 220 kV infrastructure. These tower positions are indicative only and do not represent final locations, which will be confirmed through detailed engineering design.

The transmission line will require an easement of up to 60 metres. A double circuit configuration has been depicted in the photomontages to illustrate a conservative (worst-case) visual impact scenario. However, the final design is expected to consist of a single circuit, which would likely result in a lower visual impact.

# **4.6 Appraisal of landscape and visual impact from representative view locations**

Five representative view locations have been selected, and 'existing view' images have been prepared for each to describe the visibility of the proposed wind farm project. The preliminary landscape and visual impact appraisal includes both wireframe and photomontage views for proposed turbines:

- View location 1 located at Bunjil's Lookout
- View location 2 located at Lethbridge town centre
- View location 3 located at Meredith Recreation Reserve
- View location 4 located at Shelford Recreation Reserve
- View location 5 located at Teesdale town centre

The overall view locations map is provided in Figure 12 on the following pages.

A detailed description of the location, existing visual features, and visibility of the proposed wind farm project within the existing view is provided for each of the above view locations over the subsequent pages.





#### View Location Map

#### Legend

	Project Area
L	Study Area Extent (15km)
LGA	Local Government Area Boundary
2	River
	Main Road
	Town/ City/ Locality
0	Turbine Locations / Viewshed Points
$\langle / \rangle$	Reserve
~	Transmission Corridor

#### View Location Legend

Bunjil's Lookout Lethbridge Town Centre Meredith Recreaion Reserve Shelford Recreation Reserve Meredith Town Centre 5



#### Source: VIC DATA

0	5	10km
	Project Ref:	22.0702
	Dwg No.:	LVIA-6
$\bigcirc$	Scale	1:200,000
	Date:	02/06/2025
	Revision:	P5
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#### 4.6.1 View location 01: Bunjil's Lookout

#### Location

View location 01 is at Bunjil's Lookout at 1795 Steiglitz Road, Maude. The view is oriented to the west towards the proposed project infrastructure, with the closest turbines being approximately 10 kilometres from the view location.

#### **Visual features**

The following description of the existing view is based upon the view shown in Figure 14: View location 01: Existing View

The existing view is a rural context, featuring an open vista of pastures and farmlands, with a few rural buildings partially hidden by tree belts. From a high point, this view overlooks the Moorabool River valley. Open pastures and tree belts are more visually prominent than the visible structures.

#### **Rationale for selection**

The view location is within a landscape of high value, as it is at Bunjil's Lookout, a symbol of Indigenous culture and a significant tourist attraction. It is also situated within a Significant Landscape Overlay and an Environmental Significant Overlay in the Golden Plains planning scheme.

The view location is within the potential viewshed of the proposed project infrastructure (refer to mapping in section 3.2) and is considered representative of public realm views toward the proposed wind farm project from this vantage point.

#### **Anticipated visibility**

The proposed turbines will be visible across most of the horizontal field of view. Transmission towers will be visible in a north-westerly direction. Turbines and transmission towers will appear in silhouette against the sky when seen above the horizon created by the surrounding landforms and vegetation.



Figure 13 Bunjil's Lookout view location map



Camera location

Wind Turbine Generator

Project area

Overhead Transmission Corridor

## **Existing view**

# 



Figure 14 View location 01: Existing view





melbourne | byron bay | vietnam Level 10, 150 Lonsdale st melbourne vic 3000 e info@hansenpartnership.com.au w hansenpartnership.com.au

# 



```
Figure 15 View location 01: Wireframe view of turbines
```





melbourne | byron bay | vietnam Level 10, 150 Lonsdale st melbourne vic 3000 e info@hansenpartnership.com.au w hansenpartnership.com.au

# 



```
Figure 16 View location 01: Photomontage view of turbines
```





#### View location 01 - Impact appraisal

The assessment of landscape and visual impact of the proposed Wind Turbine Generators at view location 01 is summarised in Table 2 below.

Table 2 View location 01 impact assessment

Assessment criteria	Assessment ranking	Rationale
Landscape value	High (regional significance)	The view location is within a landscape of regional significance, as identified by the Significant Landscape Overlay (SLO).
Magnitude of visibility	High	Turbines constitute a major element in the view. Overhead transmission towers are visible, but are of a much smaller magnitude than turbines.
Sensitivity of receptors	High	The view location is at Bunjil's Lookout where receptors are expected to place a priority on the scenic qualities of the landscape.
Number of receptors	Moderate	Bunjil's Lookout is a culturally and community significant location situated in the Moorabool Valley at Maude. The view location is within a recognised scenic destination. The number of receptors is assumed to be moderate.
Frequency	Low	The majority of receptors are assumed to visit weekly or less frequently.
Duration	Moderate	According to Google Maps' popular time data, visitors generally spend about 45 minutes at the site.
Receptor sensitivity	Moderate	
Overall preliminary impact appraisal	HIGH	

#### 4.6.2 View location 02: Lethbridge town centre

#### Location

View location 02 is at Lethbridge town centre. The view is oriented to the west towards the proposed project infrastructure, with the closest turbines being approximately 7 kilometres from the view location.

#### **Visual features**

The following description of the existing view is based upon the view shown in Figure 18: View location 02: Existing View

The existing view is a rural township context, featuring buildings, overhead power lines, a railway crossing, fencing, bollards, signage associated with the railway crossing, gravel pathways and local access roads. Visible structures also include a bicycle rail, bench seating, and various types of vegetation. This vegetation includes native canopy trees, foreground grass and distant vegetation behind and between residential buildings.

#### **Rationale for selection**

Lethbridge is a rural township within the project study area. The view location is adjacent to the General Store, which is anticipated to experience relatively higher levels of community visitation than other parts of the township.

The view location is within the potential viewshed of the proposed project infrastructure (refer to mapping in section 3.2) and is considered representative of public realm views toward the proposed wind farm project.

#### Anticipated visibility

The proposed turbines and transmission towers are unlikely to be visible as a result of the screening provided by existing vegetation and built structures in and around the town centre.



Figure 17 Lethbridge town centre view location map



Camera location

Wind Turbine Generator

Project area

Overhead Transmission Corridor

## **Existing view**

# 



Figure 18 View location 02: Existing view





# 300° 310°

 project ref:
 22.0702

 dwg no.:
 VIA-004

 date:
 04/06/25

 revision:
 P5

# 



```
Figure 19 View location 02: Wireframe view of turbines
```





# 300° 310°

 project ref:
 22.0702

 dwg no.:
 VIA-005

 date:
 04/06/25

 revision:
 P5

## **Tall Trees Wind Farm**

# 



```
Figure 20 View location 02: Photomontage view of turbines
```





# 300° 310°

 project ref:
 22.0702

 dwg no.:
 VIA-006

 date:
 04/06/25

 revision:
 P5

#### View location 02 - Impact appraisal

The assessment of landscape and visual impact of the proposed Wind Turbine Generators at view location 02 is summarised in Table 3 below.

Table 3 View location 02 impact assessment

Assessment criteria	Assessment ranking	Rationale
Landscape value	Low	The view location is not within any areas of state, regional, or local landscape significance, and thus the assessed landscape value is considered to be low.
Magnitude of visibility	Very low	The turbines may be visible but play a minor role in the view due to extensive screening by vegetation, topography, and built structures. In clear conditions, the proposed turbines may be recognizable, though at times they may go unnoticed. Transmission towers will not be visible
Sensitivity of receptors	Moderate	The view location is in the Lethbridge town centre, where receptors are not within National Parks or other recognized scenic destinations, and therefore, are assumed to have a moderate level of sensitivity to visual impact.
Number of receptors	Low	Lethbridge is a rural township. According to the 2021 census, Lethbridge had a population of 1,181 (Australian Bureau of Statistics, QuickStats, accessed 07/06/2024). Additionally, the view location is not on a major road or within a scenic landscape area; therefore, the number of receptors is assumed to be primarily local residents.
Frequency	High	Local residents are assumed to have a high frequency of visitation.
Duration	Very low	The duration of stay at this view location is assumed to be very low, where receptors are primarily local residents traveling through this view location.
Receptor sensitivity	Moderate	
Overall preliminary impact appraisal	LOW	

#### 4.6.3 View location 03: Meredith Recreation Reserve

#### Location

View location 03 is at Meredith Recreation Reserve. The view is oriented to the south west towards the proposed project infrastructure, with the closest turbines being approximately 2.8 kilometres from the view location.

#### **Visual features**

The following description of the existing view is based upon the view shown in Figure 22: View location 03: Existing View

The existing view comprises the Meredith Recreation Reserve and includes the sports field and associated pavilions, other buildings, fencing, sports lighting, scoreboard and informal parking areas.

The backdrop to the view includes extensive established tall trees and other vegetation, with a noticeable break in the vegetation in the central part of the view.

#### **Rationale for selection**

Meredith Recreation Reserve serves as a rural township gathering space, representing the public realm surrounding the project infrastructure area. Meredith is a rural town in Victoria, Australia, located on the Midland Highway between Ballarat and Geelong. According to the 2021 census, Meredith had a population of 821.

The view location is within the potential viewshed of the proposed project infrastructure (refer to mapping in section 3.2) and is considered representative of public realm views toward the proposed wind farm project.

#### Anticipated visibility

The proposed turbines will be visible through a noticeable break in the existing vegetation but will otherwise be screened from view. Where visible, they will appear in silhouette against the sky. Transmission towers will not be visible



Figure 21 Meredith Recreation Reserve view location map



Camera location

Wind Turbine Generator

Project area

Overhead Transmission Corridor

## **Existing view**

# 



Figure 22 View location 03: Existing view





# 250°

project ref: 22.0702 dwg no.: VIA-007 date: revision: P5

04/06/25

# 



Figure 23 View location 03: Wireframe view of turbines





# 250°

project ref: 22.0702 dwg no.: VIA-008 04/06/25 date: revision: P5

# 



```
Figure 24 View location 03: Photomontage view of turbines
```





# 250°

project ref: 22.0702 dwg no.: VIA-009 04/06/25 date: revision: P5

#### View location 03 - Impact appraisal

The assessment of landscape and visual impact of the proposed Wind Turbine Generators at view location 03 is summarised in Table 4 below.

Table 4 View location 03 impact assessment

Assessment criteria	Assessment ranking	Rationale
Landscape value	Low	The view location is not within any areas of state, regional, or local landscape significance, and thus the assessed landscape value is considered to be low.
Magnitude of visibility	Moderate	Turbines will typically be visible but not a dominant element in the view due to screening provided by topography and vegetation. Transmission towers are screened from view by existing vegetation.
Sensitivity of receptors	Moderate	The view location is within the Meredith Recreation Reserve, predominantly visited by local residents engaged in sports activities. Receptors here are not within National Parks or other recognised scenic destinations, hence they are assumed to have a moderate level of sensitivity to visual impact.
Number of receptors	Moderate	Meredith is a rural township located on the Midland Highway between Ballarat and Geelong, Victoria. According to the 2021 census, Meredith had a population of 821 (Australian Bureau of Statistics, QuickStats, accessed 07/06/2024). Additionally, the view location is at Meredith Recreation Reserve; therefore, the number of receptors is assumed to be primarily local residents.
Frequency	Moderate	Private residents are assumed to have a moderate frequency of visitation.
Duration	Moderate	The duration of stay at this view location is assumed to be moderate, where receptors are primarily local residents engaging in sports activities.
Receptor sensitivity	Moderate	
Overall preliminary impact appraisal	MODERATE	

#### 4.6.4 View location 04: Shelford Recreation Reserve

#### Location

View location 04 is at Shelford Recreation Reserve. The view is oriented to the north east towards the proposed project infrastructure, with the closest turbines being approximately 3.5 kilometres from the view location.

#### **Visual features**

The following description of the existing view is based upon the view shown in Figure 26: View location 04: Existing View

The existing view is a rural context, featuring an oval, fencing, pathways and signage being visible structures. The visible vegetation comprises native canopy trees, foreground grass on the oval and distant vegetation behind.

#### **Rationale for selection**

Shelford Recreation Reserve serves as a rural township gathering space, representing the public realm surrounding the project infrastructure area. Shelford is a rural town in Victoria, Australia, located on the Midland Highway between Ballarat and Geelong. According to the 2021 census, Shelford had a population of 263.

The view location is within the potential viewshed of the proposed project infrastructure (refer to mapping in section 3.2) and is considered representative of public realm views toward the proposed wind farm project.

#### Anticipated visibility

The proposed turbines will be visible only in certain areas above the existing vegetation. Where they are visible, they will appear in silhouette against the sky above the vegetation. Proposed transmission towers will not be visible.



Figure 25 Shelford Recreation Reserve view location map



Camera location

Wind Turbine Generator

Project area

Overhead Transmission Corridor

## **Existing view**

# 



Figure 26 View location 04: Existing view







 project ref:
 22.0702

 dwg no.:
 VIA-010

 date:
 04/06/25

 revision:
 P5

# 



Figure 27 View location 04: Wireframe view of turbines







 project ref:
 22.0702

 dwg no.:
 VIA-011

 date:
 04/06/25

 revision:
 P5

# 



Figure 28 View location 04: Photomontage view of turbines







 project ref:
 22.0702

 dwg no.:
 VIA-012

 date:
 04/06/25

 revision:
 P5

#### View location 04 - Impact appraisal

The assessment of landscape and visual impact of the proposed Wind Turbine Generators at view location 04 is summarised in Table 5 below.

Table 5 View location 04 impact assessment

Assessment criteria	Assessment ranking	Rationale
Landscape value	High (regional significance)	The view location is within a landscape of regional significance, as identified by the Significant Landscape Overlay (SLO).
Magnitude of visibility	Low	Turbines are visible are visible but play a minor role in the view due to extensive screening by vegetation and topography. Transmission towers are not visible.
Sensitivity of receptors	Moderate	The view location is within the Shelford Recreation Reserve, predominantly visited by local residents engaged in sports activities. Receptors here are not within National Parks or other recognised scenic destinations, hence they are assumed to have a moderate level of sensitivity to visual impact.
Number of receptors	Low	Shelford is a rural township near Geelong, Victoria. According to the 2021 census, Shelford had a population of 263 (Australian Bureau of Statistics, QuickStats, accessed 07/06/2024). Additionally, the view location is at Shelford Recreation Reserve; therefore, the number of receptors is assumed to be primarily local residents.
Frequency	Moderate	Private residents are assumed to have a moderate frequency of visitation.
Duration	Moderate	The duration of stay at this view location is assumed to be moderate, where receptors are primarily local residents engaging in sports activities.
Receptor sensitivity	Moderate	
Overall preliminary impact appraisal	MODERATE	

#### 4.6.5 View location 05: Teesdale town centre

#### Location

View location 05 is at Teesdale town centre. The view is oriented to the west towards the proposed project infrastructure, with the closest turbines being approximately 6 kilometres from the view location.

#### **Visual features**

The following description of the existing view is based upon the view shown in Figure 30: View location 05: Existing View

The existing view is a rural township context, featuring buildings, overhead power lines, signage, litter bins, fencing and local access roads. The vegetation consists of native street trees, short grass adjacent to the traffic island separating the car parking area, newly planted greenery and vegetation behind and within residential buildings.

#### **Rationale for selection**

Teesdale is a rural township that represents the public realm surrounding the project infrastructure area. According to the 2021 census, Teesdale had a population of 2,244.

The view location is within the potential viewshed of the proposed project infrastructure (refer to mapping in section 3.2) and is considered representative of public realm views toward the proposed wind farm project.

#### **Anticipated visibility**

The proposed turbines will be visible only in certain areas above the existing vegetation. Where they are visible, they will appear in silhouette against the sky above the vegetation. Proposed transmission towers will not be visible.



Figure 29 Teesdale town centre view location map



Camera location

Wind Turbine Generator

Project area

Overhead Transmission Corridor

### **Existing view**

# 



Figure 30 View location 05: Existing view





# 



```
Figure 31 View location 05: Wireframe view of turbines
```





# 



```
Figure 32 View location 05: Photomontage view of turbines
```





#### View location 05 - Impact appraisal

The assessment of landscape and visual impact of the proposed Wind Turbine Generators at view location 05 is summarised in Table 6 below.

Table 6 View location 05 impact assessment

Assessment criteria	Assessment ranking	Rationale
Landscape value	Low	The view location is not within any areas of state, regional, or local landscape significance, and thus the assessed landscape value is considered to be low.
Magnitude of visibility	Very low	Turbines will be visible in clear conditions and may be recognisable, but conversely may sometimes not even be noticed. Transmission towers are not visible.
Sensitivity of receptors	Moderate	The view location is in the Teesdale town centre, where receptors are primarily frequented by local residents and travellers passing through the area. Receptors here are not within National Parks or other recognised scenic destinations, hence they are assumed to have a moderate level of sensitivity to visual impact.
Number of receptors	Moderate	Teesdale is a rural township According to the 2021 census, Lethbridge had a population of 2,244 (Australian Bureau of Statistics, QuickStats, accessed 07/06/2024). Additionally, the view location is at a C-class road <sup>1</sup> ; therefore, the number of receptors is assumed to be both local residents and travellers.
Frequency	High	Local residents and travellers are assumed to have a high frequency of visitation, with a particular emphasis on local residents.
Duration	Low	The duration of stay at this view location is assumed to be low, where receptors are primarily local residents and travellers traveling through this view location.
Receptor sensitivity	Moderate	
Overall preliminary	LOW	

C Class Arterial Road:These roads are generally single carriageway roadways. They tion as important links between population centres and also provide access links to the hary road network.

# **5 CONCLUSION**

# **5.1 Preliminary landscape and visual impact appraisal summary**

Five representative view locations have been assessed to determine whether or not a landscape and visual impact would occur as a result of the proposed wind project. On the basis of a preliminary assessment of landscape and visual impact appraisal at 5 representative view locations within the project study area, the following conclusions are reached:

- View location 1 located at Bunjil's Lookout approximately 10 kilometres from the proposed project infrastructure. All turbines will be visible. Some transmission towers will be visible. The overall preliminary landscape and visual impact appraisal is high.
- View location 2 located at Lethbridge town centre approximately 7 kilometres from the proposed project infrastructure. A limited number of turbines may be visible. Transmission towers are not visible. The overall preliminary landscape and visual impact appraisal is low.
- View location 3 located at Meredith Recreation Reserve approximately 3 kilometres from the proposed project infrastructure. Some turbines will be visible. Transmission towers are not visible. The overall preliminary landscape and visual impact appraisal is moderate.
- View location 4 located at Shelford Recreation Reserve approximately 3.5 kilometres from the proposed project infrastructure. Some turbines will be visible. Transmission towers are not visible. The overall preliminary landscape and visual impact appraisal is moderate.
- View location 5 located at Teesdale town centre approximately 6 kilometres from the proposed project infrastructure. Only a limited number of turbines will be visible. Transmission towers are not visible. The overall preliminary landscape and visual impact appraisal is low.

This Preliminary Landscape and Visual Impact Appraisal concludes that landscape and visual impacts will occur as a result of the Project.

# HANSEN PARTNERSHIP

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