Tarrone Battery Energy Storage System Project

Landscape and Visual Impact Assessment

15 August 2024

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Contents

1. Introduction

Umwelt (Australia) Pty Ltd, on behalf of Global Power Generation Australia Pty Ltd (GPG) has engaged Alexandra Elliott Landscape Architecture (AELA) to undertake a Landscape and Visual Impact Assessment (LVIA) of the Tarrone Battery Energy Storage System (BESS) (The Project). The Project is located within the Moyne Shire on land adjacent to the existing Tarrone Terminal Station at 574 Tarrone North Road, Tarrone.

The Project is anticipated to have a storage capacity of 200-megawatt AC (MWac) / megawatt hour (MWh), which will utilise the latest in grid forming inverter and Lithium Ion (Li-Ion) battery storage technologies.

The Project is approximately 7.5 kilometres east of the township of Orford, 14.5 kilometres west of Hawkesdale, 23 kilometres north of Port Fairy and 250 kilometres west of Melbourne.

The Project will include up to 130 individual battery energy storage system modules, electrical inverters, one 132/33kV transformer, site office and control room and a new 132kV bay to connect the proposed Tarrone BESS to the grid via an underground cable to the Tarrone Terminal Station.

The estimated lifecycle of the Project is 20 years.

1.1 Purpose of this report

The purpose of this report is to assess the landscape and visual impacts of the Project to be provided as part of the planning permit application to be submitted to the Department of Transport and Planning for assessment.

2. Methodology

The methodology used within this LVIA of the Project includes the following steps.

2.1 Project Description

Describing the key visual components of the Project. These include, but are not limited to the battery modules, inverters, site facilities and fire water supply.

2.2 Policy review

The review examined relevant legislation and policy to identify significant landscapes and landforms that are recognised by policy, residential areas and communities, prominent lookouts, roads, and tourist attractions. This review has assisted in developing an objective understanding of landscape character, features and values through schedules to planning overlays that recognise landscapes and areas for the contributions to the environment, landscape and heritage values that are added to local planning schemes.

2.3 Landscape character units and sensitivity

Landscape Character Units are based on physical and natural attributes within the study area. Characteristics that assist in defining the landscape units include geology, topography, vegetation, and drainage patterns as well as modifications to areas from a natural setting, land-use, and policy considerations.

Landscape sensitivity for each landscape unit is determined through consideration of the existing use of the area and the degree to which the particular landscape can accommodate change.

Typically, the greater the extent of modifications the lesser the landscape's sensitivity to further change.

2.4 Viewpoint selection and assessment of publicly accessible viewpoints

Assessing the potential visual impact of the Project from representative and key viewing locations within the public domain assists to consider the range of views and likely visual impacts of the Project.

The assessment considers key criteria for each location: visibility, distance, landscape character, sensitivity and viewer numbers to arrive at an overall visual impact from each location. Time or likely duration to stop and dwell at the viewpoint is also considered. This last consideration is not always easily quantified as it may vary from fleeting or transitory views to stationary views of varying duration depending on the individual, purpose of the stop, and the setting. The scale of visual effect ranges from Negligible to High and recognises that a visual change may have a Nil impact.

A more detailed description of the criteria and their influence in determining the assessment of the overall visual impact from the public domain are set out below.

- **Visibility:** The visibility of the Project elements can be affected by topography, vegetation, built form and infrastructure.
- **Distance:** Infrastructure visibility and dominance will decrease with distance.
- **Landscape character and sensitivity:** Landscape character of an area is based upon visual features such as topography, vegetation and the use of the land, the naturalness of the area and planning provisions. Sensitivity may also be influenced by specific landscape studies and assessments within the study area. Typically, a modified landscape that is prevalent within the study area or the region is less sensitive than one that is ostensibly natural.
- **Viewer numbers:** The overall visual impact level will decrease when there are fewer people who can view the Project. Conversely, the level of visual impact may also increase where the viewing location is a recognised key vantage point or tourist route where a greater number of people may view the change.
- **Duration:** The duration of a view is also relevant and must be considered in the overall analysis of views. The impact of a static viewing location, where people may see the Project for an extended period, such as a reserve, roadside stop or patio will be; as opposed to a momentary view such as a roadway or between uses, then this duration needs to be considered in the overall examination.

The overall visual impact is not numerically based alone, rather it is the outcome of the above quantitative criteria (that can be measured) balanced by a discussion of the qualitative aspects from each viewpoint. Qualitative considerations are discussed at each viewpoint. This approach, which is the basis of the qualitative discussion rather than the quantitative metric-based approach and table, is considered to be a more meaningful and useful assessment.

The key considerations are discussed and described within the qualitative assessment at each viewpoint which are partly supported by quantitative criteria to arrive at an overall visual impact. The overall visual effect will range from Nil to High. The definition for each ranking is discussed below.

2.5 Scale of effects

The following scale of effects provides a ranking system for the magnitude of change:

- **Nil –** The Project will be screened by topography, vegetation, or buildings and structures.
- **Negligible Visual Impact –** A minute level of effect that is barely discernible over ordinary day-to-day effects. The assessment of a negligible level of visual impact is usually based on distance. That is, the Project will be at such a distance that, when visible in good weather, it would be a minute element in the view within a modified landscape or will be predominantly screened by intervening topography, vegetation, or buildings and structures.
- **Low Visual Impact –** The visual impacts are noticeable but that will not cause any significant adverse impacts. The assessment of a low level of visual impact can be derived where several of the four criteria, which includes visibility, distance, viewer numbers, and landscape sensitivity, are classified as Low.
- **Medium Visual Impact –** A medium visual impact occurs when several of the four assessment criteria are considered as higher than low or the visual effects can be mitigated/remedied from an initial rating of High. This will be moderated by the context of the existing view and the modifications to the landscape.
- **High Visual Impact –** Significant adverse effects that cannot be avoided, remedied, or mitigated. The assessment of a high effect from a publicly accessible viewpoint requires the assessment of all criteria to be high. For example, a highly sensitive landscape viewed by many people, with the Project in close proximity and visible to those people, would lead to an assessment of a high adverse effect.

2.6 Wireframe view

Wireframes and photomontages can assist in the assessment by illustrating the scale of the Project.

The change in views is based upon a 60° horizontal field of view, which provides a consistent reference for Project visibility and prominence over varying distances. The horizontal field of view also represents the central cone of view in which symbol recognition and colour discrimination can occur. The vertical field of view is between 10 to 15°.

The wireframe view illustrates the technical proposed project and registration of the model in views. In these views, registration markers such as poles, cylinders, boxes, or fences align points of reference in the landscape, such as a group of trees, existing structures, or edges of features such as planted hedgerows. The wireline showing topography demonstrates the vertical alignment of the model in view. These reference points allow the computer model and the photograph to be accurately aligned and ensure that Project features are accurately located within the photograph prior to compositing the Project into the image.

One wireframe view has been prepared to assist in the assessment of the visual impact of the Project. This is discussed later in Section 7 of this report and is appended to this report (Refer to Annex B for A3 size wireframe).

2.7 Cumulative considerations

The visual assessment of the Project also considers the potential cumulative visual impacts of the Project in addition to other similar projects that are approved or constructed in the area.

2.8 Landscape Mitigation

This LVIA will consider the ability for landscape screening to be effective at filtering or screening views towards the Project.

3. Project Description

This section will describe and locate the Project relative to nearby features and identify key elements of the Project relevant to landscape and visual impacts.

3.1 Site location

The Project is located within Moyne Shire Council local government area, approximately 7.5 kilometres east of the township of Orford, 14.5 kilometres west of Hawkesdale, 23 kilometres north of Port Fairy and 250 kilometres west of Melbourne. Figure 3-1 shows the Project location in a regional context, including nearby townships.

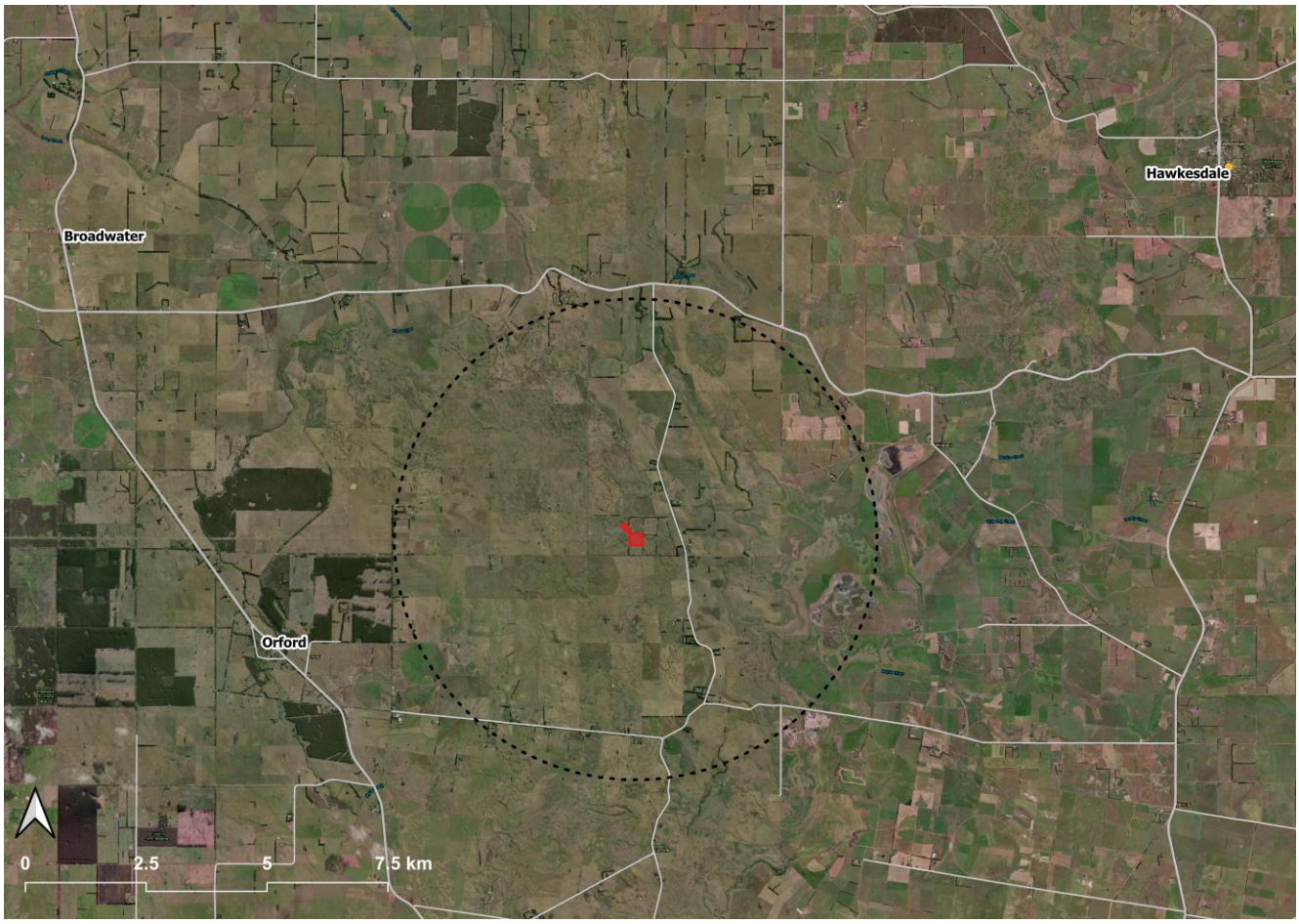


Figure 3-1 Project Location – Regional context

3.2 Project site and layout

The Project is located to the south-east of the existing Tarrone Terminal Station. The site covers approximately 6 Hectares (Ha), this is inclusive of the transmission connection to the existing Tarrone Terminal Station. The Project site is generally bounded by Riordans Road to the south, Tarrone Terminal Station to the west, a private road to the north (utilised to access the Tarrone Terminal Station) and Tarrone North Road to the east.

The existing 500 kV Moorabool to Heywood, 132 kV Macarthur Wind Farm to Tarrone and Ryan Corner and Hawkesdale Wind Farm transmission lines exist beyond the Project site. Figure 3-2 shows the site location and proposed access.

Figure 3-2 Project Location and Site Access Plan (Source: GPG Plan BESS_GPG_AU_TAR_001 Rev 4)

The main access to the Project site will be via an access road from Tarrone North Road. A secondary emergency access road will be to Riordans Road to the south. Both access corridors have a proposed corridor of 25 metres.

The Project comprises:

- Up to 64 separate battery energy storage system (BESS) module arrays consisting of one electrical inverter and three or four BESS modules installed in groups.
- Individual BESS modules are fully enclosed in pre-fabricated shipping container sized containers. The current site layout allows for up to 130 of the individual BESS modules.
- Each module will be approximately 6m long, 2.5m wide and 2.9m high. Each module will be elevated approximately 0.7m of the ground.
- The electrical inverters will be installed outside of the BESS module groups, mainly located towards the centre of the Project.
- One 132/33kV transformer (and supporting auxiliary systems).
- Site facility containers.
- Back-up diesel generator.
- Site office and control room.
- Access to the Project site via access roads from Tarrone North Road and Riordans Road.
- Security fencing of up to 2.1 metres high around the Project infrastructure.

- Fire water supply storage tanks.
- A new 132kV bay to connect the proposed Tarrone BESS to the grid.
- The project will be connected to the Tarrone Terminal Station via an underground 132kV transmission line of approximately 200 metres in length.

Figure 3-3 shows the proposed site layout.

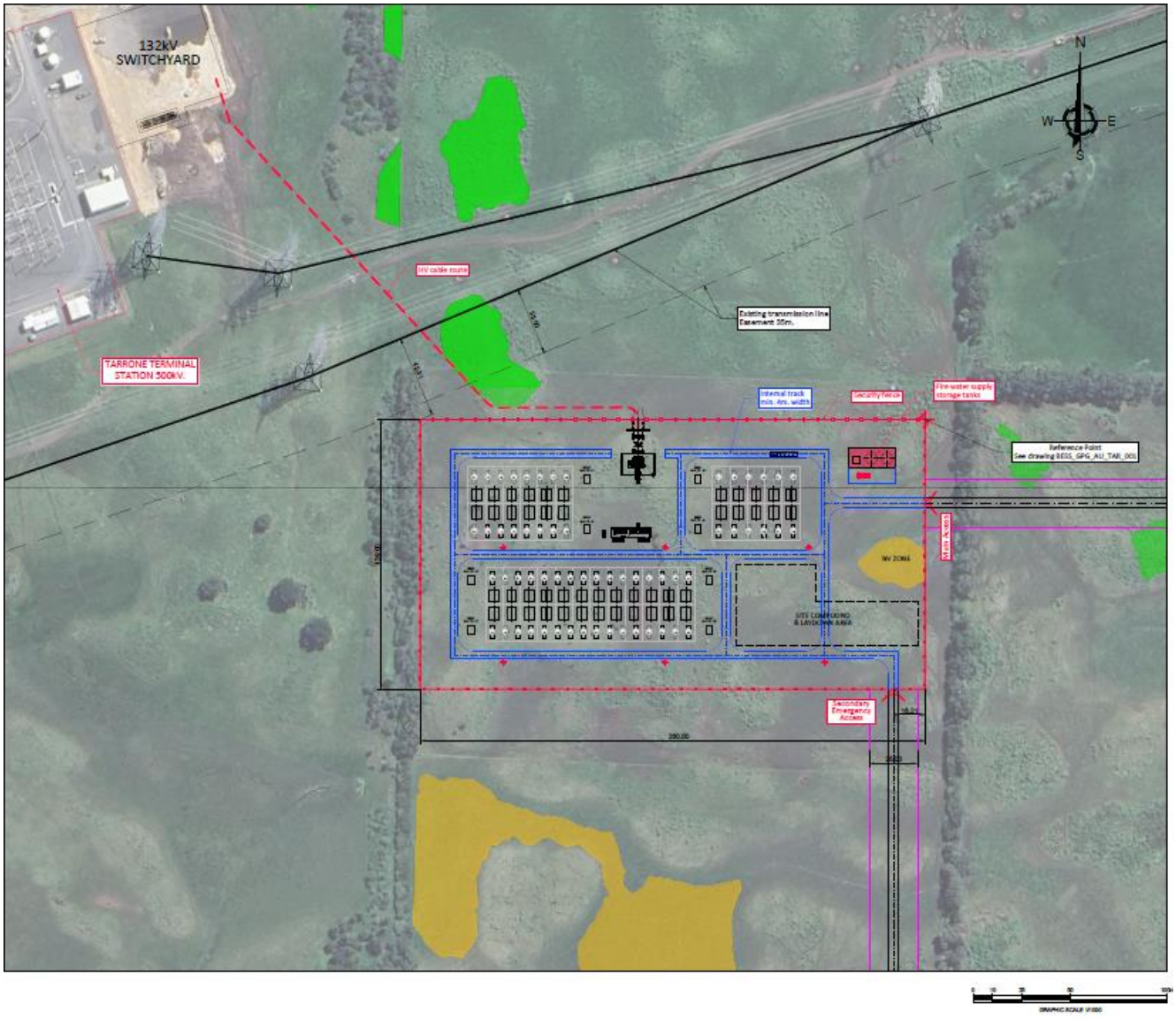


Figure 3-3 General Arrangement Plan (Source: GPG Plan BESS_GPG_AU_TAR_002 Rev 4)

Figure 3-4 shows the indicative BESS module plan.

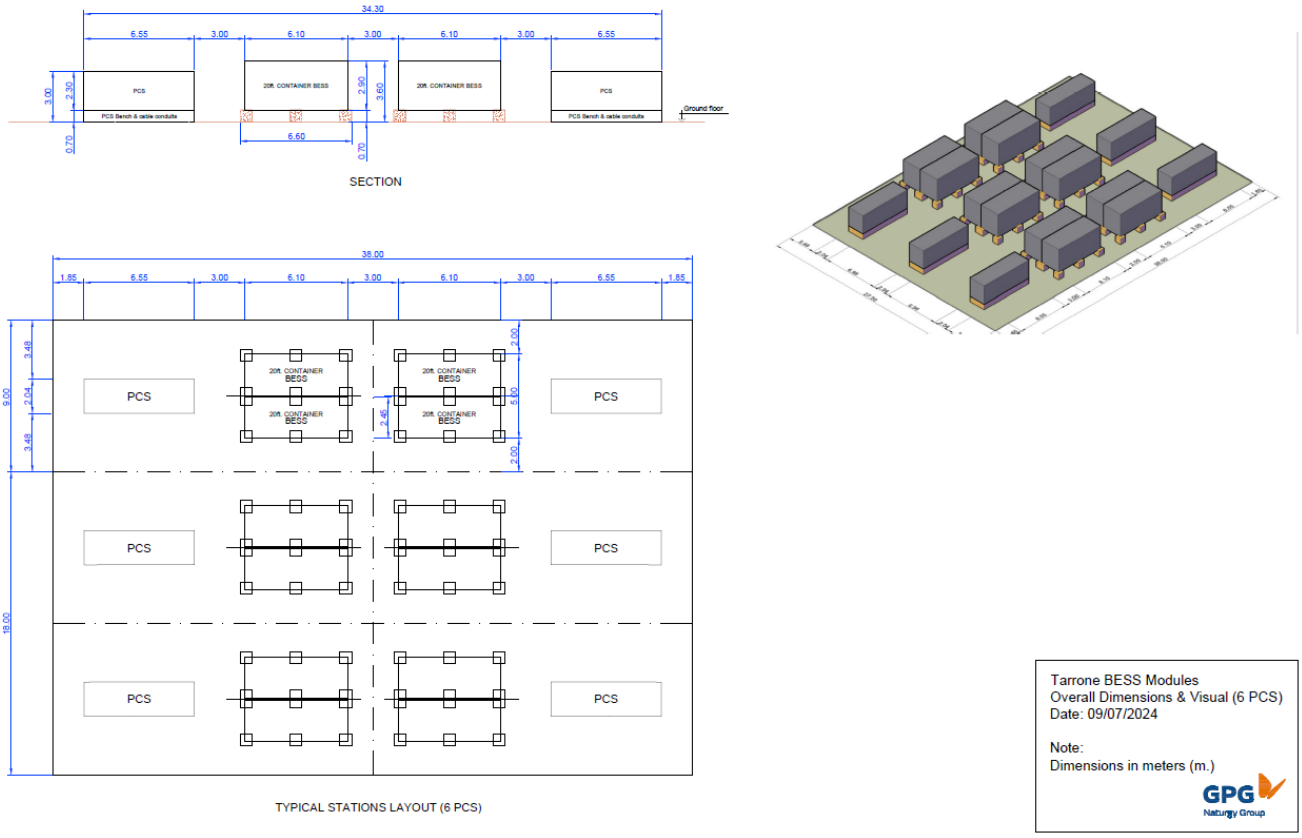


Figure 3-4 BESS Module Plan (Source: GPG BESS Modules – Overall Dimensions & Visual 09.07.2024)

The tallest element within the proposed Project would be the module batteries at approximately 3.6m in height.

3.3 Construction

Construction activities will comprise of three phases:

- Early works and site preparation (approximately three months duration).
- Full site construction (approximately nine months duration).
- Commissioning.

Construction activities will include:

- Clearing of site including removal of select vegetation.
- Bulk earthworks, filling, compaction, and drainage.
- Temporary construction compounds and facilities.
- Installation of foundations for battery modules, inverters, and transformer.
- Delivery of modular infrastructure and construction of materials.
- Installation of foundations for battery modules, inverters, and transformer.
- Construction of underground 132kV transmission line to Tarrone Terminal Station.

4. Legislation, guidelines, policy, and planning review

The Moyne Planning Scheme provides guidance and support for determining the landscape character within the study area, particularly with regards to identifying landscapes and places of significance, land use within the study area, and statutory protections relevant to landscapes and views. The characterisation of the existing landscape conditions will consider these planning and strategic documents alongside landscape features described in Section 5 to determine the landscape character units.

It is not the intention of this section to undertake a full and thorough review of the Moyne Planning Scheme. Rather, this review seeks to consider those sections that are relevant to landscape and visual impacts arising from the Project.

4.1 Planning Policy Framework (PPF)

The PPF is the policy content of the Planning Scheme and is supported by the Municipal Planning Strategy. The PPF is present in a three-tiered integrated policy structure; state-wide, regional and local. The following identified the PPF clauses of relevance to this LVIA.

4.1.1 Clause 12.05-2S Landscapes

The objective of Clause 12.05-2S (Landscapes) is *to protect and enhance significant landscapes and open spaces that contribute to the character, identity, and sustainable environments*. Key strategies include:

- *Ensure significant landscape areas such as (native) forests, the bays and coastlines are protected.*
- *Ensure development does not detract from the natural qualities of significant landscape areas.*
- *Improve the landscape qualities, open space linkages and environmental performance in significant landscapes and open spaces, including green wedges, coastal areas and non-urban areas.*
- *Recognise the natural landscape for its aesthetic value and as a fully functioning system; and*
- *Ensure important natural features are protected and enhanced.*

4.2 Municipal Planning Strategy (MPS)

The following clauses of the MPS are described within the Moyne Planning Scheme and are of relevance to this LVIA of the Project.

4.2.1 Clause 02.03-2 Environmental and landscape values

Significant environments and landscapes

The natural landscape of the municipality is an important asset that requires protection from inappropriate use and development. The visual and environmental implications of development on the municipality's natural features can destroy the attractiveness and environmental qualities of the area.

Volcanic eruptions formed a series of craters in the region, including the volcanic crater in the Tower Hill State Game Reserve, the volcanic crater and lava landscapes in the Budj Bim National Park, Mount Shadwell, and the Peak volcanic crater. The Tower Hill volcanic crater and environs are major natural features of geological, ecological and landscape significance.

The World Heritage listed Budj Bim Cultural Landscape contains one of the world's most extensive and oldest aquaculture systems, developed by the Gunditjmara people. The Budj Bim lava flows provide the basis for this complex aquaculture system, based on deliberate redirection, modification and management of waterways and wetlands.

Other significant natural features include the hilltops and ridgelines, areas of native forest, and various water bodies, wetlands, and grasslands.

Development pressures affecting the landscape include wind farms, natural gas pipelines and processing plants, and telecommunication and electricity towers.

Rural residential and small lot development beyond settlements and close to scenic locations such as Tower Hill is causing impacts on landscape quality.

Strategic Directions of relevance the landscape and visual include:

- *Protect significant landscapes and natural environments, including the World Heritage listed Budj Bim Cultural Landscape.*
- *Protect and enhance land that supports ecological communities hosting native flora and fauna.*
- *Promote greater revegetation and the management of pest plants and animals to address areas of degraded land.*
- *Protect volcanic features, prominent hilltops, and ridgelines from inappropriate development.*

4.3 Zones and overlays

Planning zones and overlays describe permissible uses and permit triggers, identify areas of sensitivity, and protection of features that are special or unique to an area.

Landscapes that exhibit special or unique features are typically found within a Significant Landscape Overlays (SLOs) or Environmental Significance Overlay (ESO) and include guidance on how these areas might be protected. Sensitive uses, such as residential areas or National Parks are often protected against adverse impacts that may be detrimental to the use and enjoyment of these areas from incompatible uses.

Figure 4-1 shows the zoning of the subject site and surrounding study area.

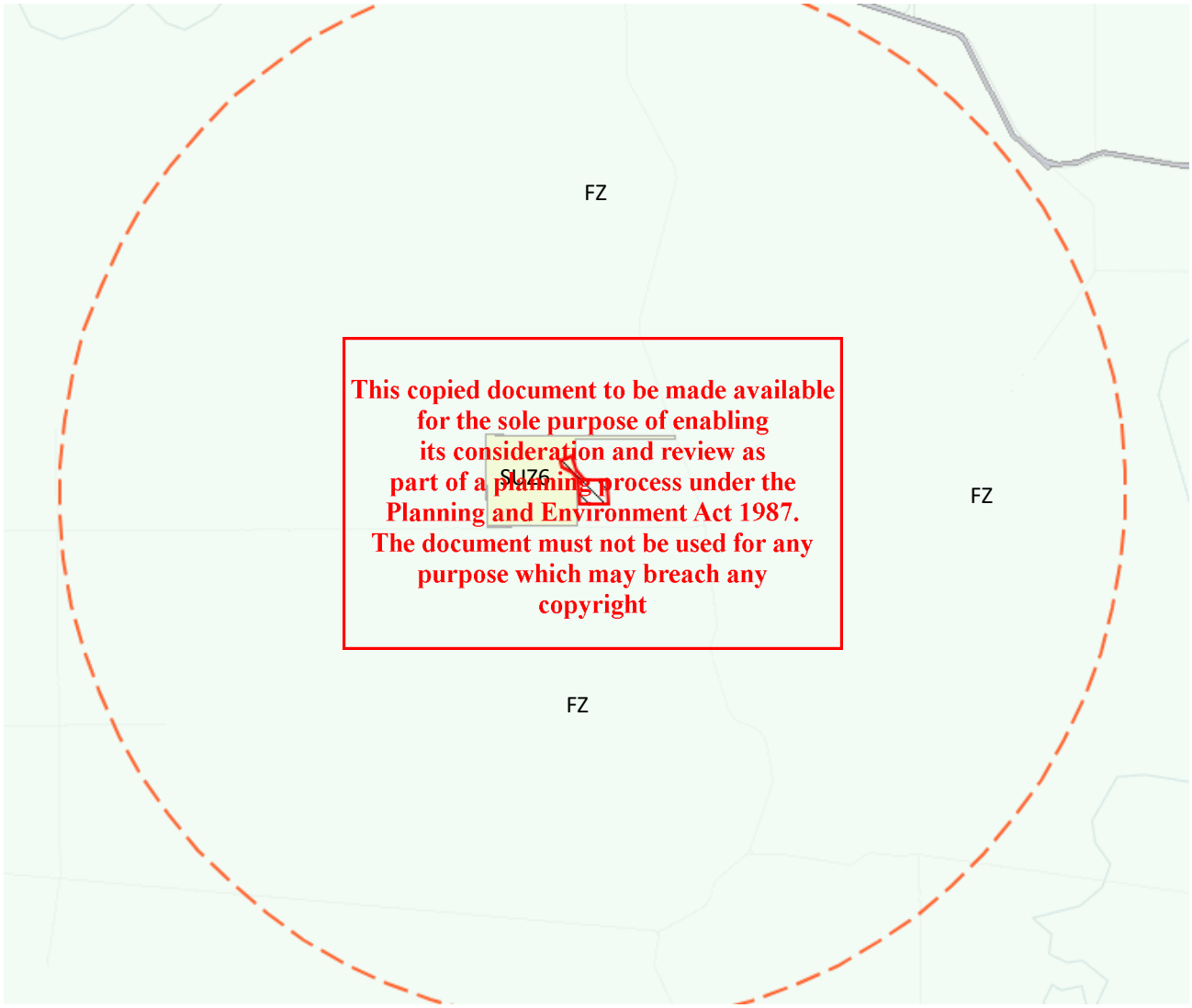


Figure 4-1 Zoning (PLACEHOLDER)

The majority of the subject site and surrounding study area are within the Farming Zone. A small section of the subject site which includes the connection to Tarrone Terminal Station is located within the Special Use Zone (SUZ6).

4.3.1 Clause 35.07 - Farming Zone

The purpose of the Farming Zone is:

- *To implement the Municipal Planning Strategy and the Planning Policy Framework.*
- *To provide for the use of land for agriculture.*
- *To encourage the retention of productive agricultural land.*
- *To ensure that non-agricultural uses, including dwellings, do not adversely affect the use of land for agriculture.*

- *To encourage the retention of employment and population to support rural communities.*
- *To encourage use and development of land based on comprehensive and sustainable land management practices and infrastructure provision.*
- *To provide for the use and development of land for the specific purposes identified in a schedule to this zone.*

Decision Guidelines

- *The Municipal Planning Strategy and the Planning Policy Framework.*
- *Whether the site is suitable for the use or development and whether the proposal is compatible with adjoining and nearby land uses.*
- *The need to protect and enhance the biodiversity of the area, including the retention of vegetation and faunal habitat and the need to revegetate land including riparian buffers along waterways, gullies, ridgelines, property boundaries and saline discharge and recharge area.*
- *The need to locate buildings in one area to avoid any adverse impacts on surrounding agricultural uses and to minimise the loss of productive agricultural land.*
- *The impact of the siting, design, height, bulk, colours, and materials to be used, on the natural environment, major roads, vistas and water features and the measures to be undertaken to minimise any adverse impacts.*
- *The impact on the character and appearance of the area or features of architectural, historic, or scientific significance or of natural scenic beauty or importance.*
- *The location and design of existing and proposed infrastructure including roads, gas, water, drainage, telecommunications, and sewerage facilities.*

4.3.2 Clause 37.01 - Special Use Zone (Schedule 6 – Tarrone Power Station)

The purpose of the Special Use Zone (SUZ6) is:

- *To facilitate the development and use of a gas-fired power station.*
- *To provide for electricity generation using natural gas as the energy source.*
- *To provide for the transmission, distribution, and storage of power.*

Buildings and works

All buildings and works must be consistent with the Environmental Management Plans and the Development Plan required by this clause as approved by the responsible authority. This does not apply to buildings and works associated with the use of land for a Utility Installation to transmit, distribute or store power.

4.3.3 Clause 42.01 - Environmental Significance Overlay (Schedule 5 – Tarrone Power Station Environs)

The subject site is affected by Clause 42.01 - Environmental Significance Overlay (Schedule 5 – Tarrone Power Station Environs).

Figure 4-2 shows the location of the subject site with relation to the ESO5.

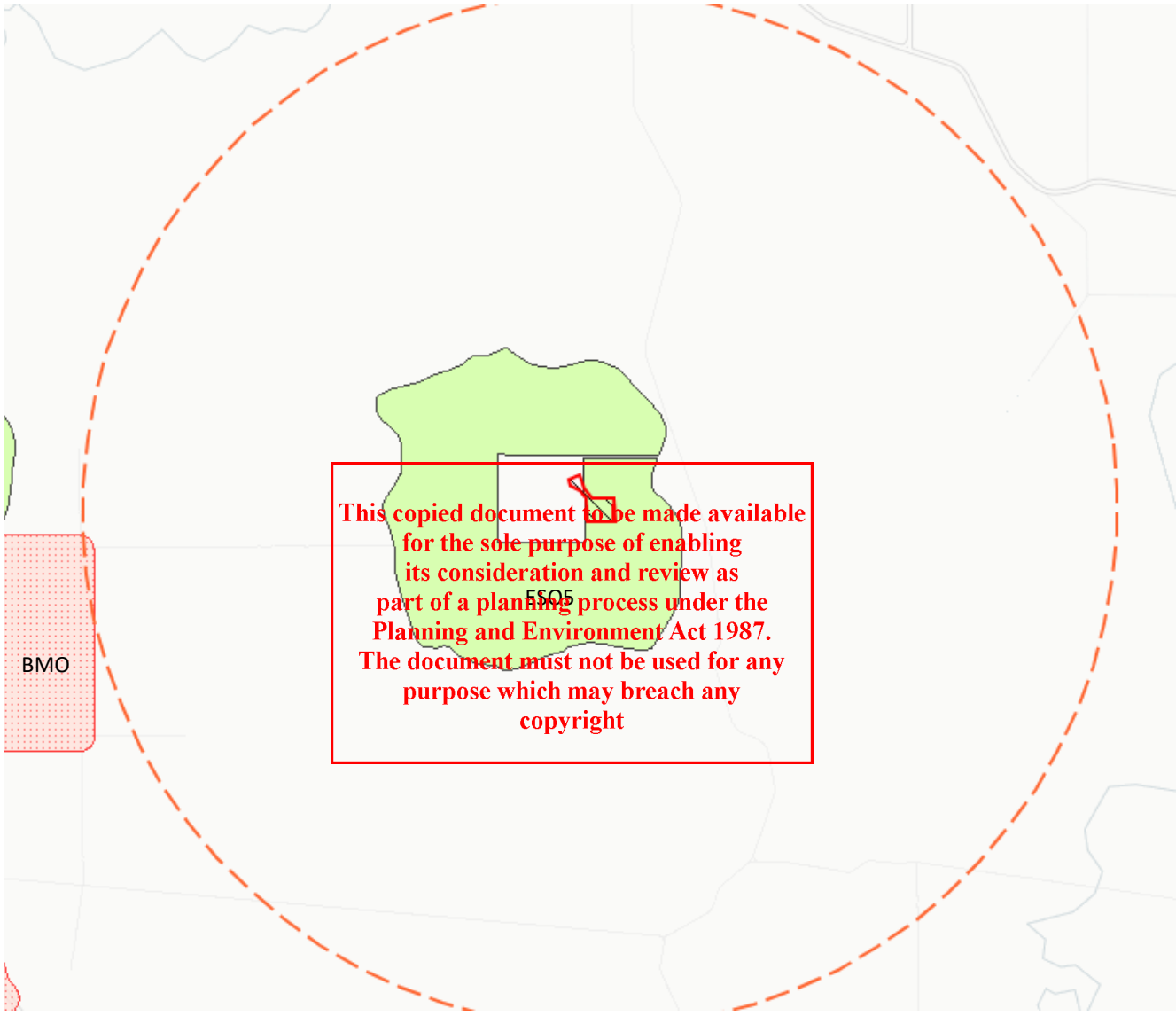


Figure 4-2 Overlays (PLACEHOLDER)

Statement of Environmental Significance

The Tarrone Power Station will provide gas-fired power to contribute to meeting the demand for electricity in Australia. The development and use of the power station will be in accordance with the approved Development Plan and Environmental Management Plans.

There is potential for noise generated by the power station to impact on any proposed sensitive uses and developments of land surrounding the power station site, particularly accommodation uses and developments.

If accommodation land uses and developments which are sensitive to potential noise emissions from the power station are permitted to be located in proximity to the facility this may result in real or perceived impacts and land use conflicts.

Accommodation land uses and developments should not be permitted within the 32 dB(A) contour for adverse meteorological conditions without consideration of the potential noise impacts from the facility.

Objective to be achieved by the overlay include:

- *To ensure that the development and use of the Tarrone Power Station is not constrained by the establishment of potentially conflicting accommodation uses and developments nearby.*
- *To ensure that potential noise impacts are considered in any decision regarding accommodation land use and development.*
- *To apply acoustic measures in the design of any accommodation developments in proximity to the Tarrone Power Station.*

Decision Guidelines

The following decision guidelines apply to an application for a permit under Clause 42.01, in addition to those specified in Clause 42.01 and elsewhere in the scheme which must be considered, as appropriate, by the responsible authority:

- *The comments of the Environment Protection Authority.*
- *The comments of the manager of the Tarrone Power Station in relation to the likely acoustic impact of the power station on the development.*
- *Proposed sound attenuation measures to be used in construction of the development, and the effectiveness of such measures.*
- *The likely amenity of the proposed development.*
- *The potential impact of the development upon the continued use of the Tarrone Power Station, corner Landers Lane and Riordans Road, Tarrone.*

4.4 Planning implications

The majority of the site and surrounding study area are located within the Farming Zone.

There are no significant landscapes within the study area.

5. Landscape Character and Sensitivity

This section examines the existing landscape and visual conditions within the visual study that are relevant to landscape and visual impacts. This review adds to the findings of the policy review undertaken in the preceding chapter, which has identified sensitive areas and landscapes through policy to help inform the definition of landscape character areas and sensitivity, which is supported by physical and natural attributes of areas.

People's perceptions of landscape character and values vary significantly for local community members and individuals. The weights that have been assigned based upon protections in the planning scheme, land use and the commensurate expectations on amenity and projects in similar landscapes. Impacts on local values have been considered and assessed by viewing locations selected within the study area from sensitive locations, key features or landmarks identified through community consultation and stakeholder engagement or views representative of the landscape characters areas defined in this report chapter.

Landscape Character Units can be defined partly through areas with similar visual characteristics, land use and planning provisions. Geophysical features include topography, which can influence views, creeks and drainage lines that may define a character or support recreational activities. Soils influence vegetation types, land use, and vegetation that may screen or filter views or contribute to seasonal change.

Features that have informed landscape character and sensitivity include geology, topography, vegetation, waterways and drainage patterns, and land use.

5.1 Geology

Geological units assist in defining topographical features, soils, native vegetation, and resultant land uses at a landscape or regional scale.

Figure 5-1 shows the broad geological areas within the study area.

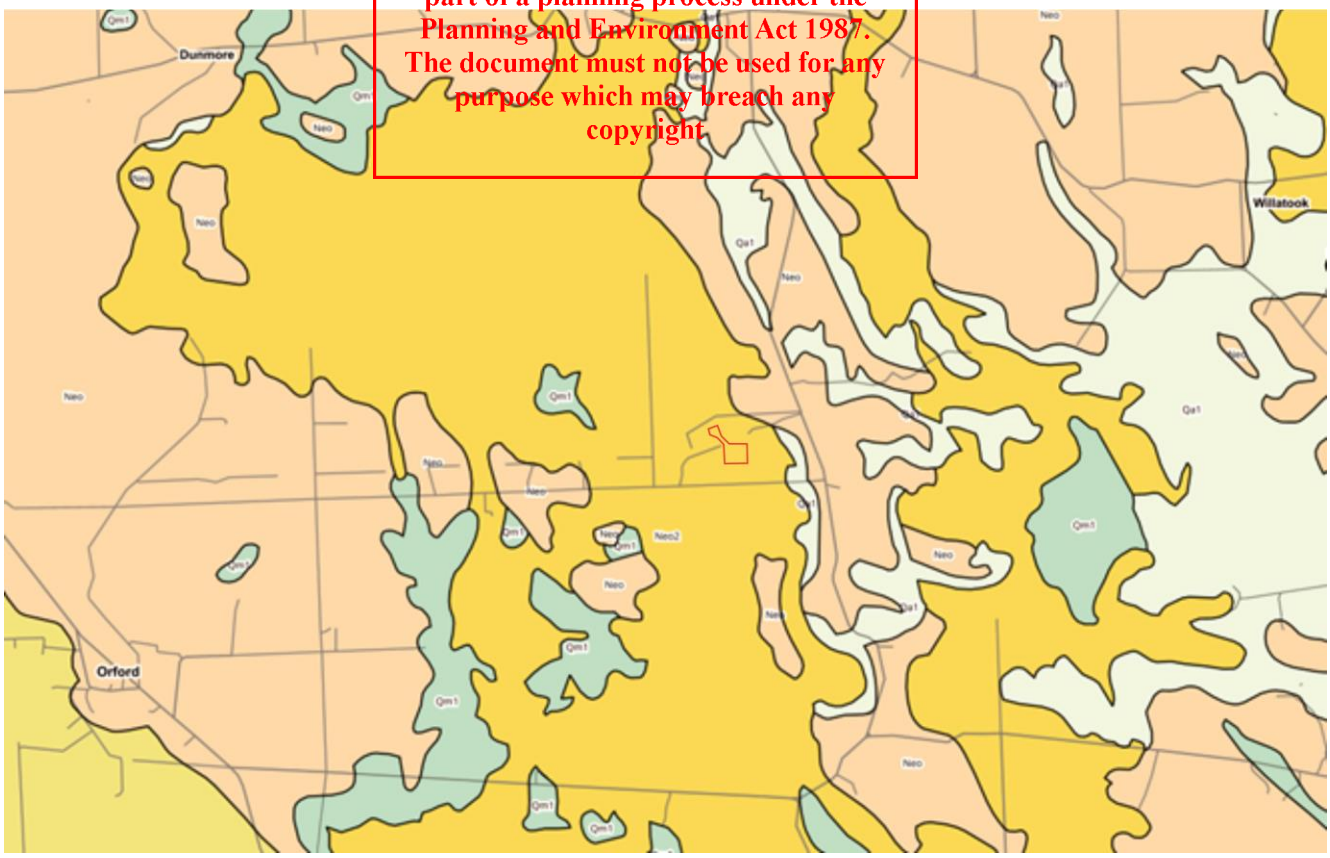


Figure 5-1 Geology

The lava flows from the Mount Rouse eruption extend approximately 60 km from Mount Rouse to the coast near Port Fairy and pass through the project site and study area. These lava flows have created areas of rises and areas of depressions along the path of the lava flow.

5.2 Topography

The topography within the study area is varied and ranges from vast flat open plains in the west to rolling undulating hills and the Moyne River in the east.

The lava flows from the Mount Rouse eruption run through the study area and provide smaller variations of topography that are not as defined in the map below.

Figure 5-2 shows the topography at a regional scale within the study area.

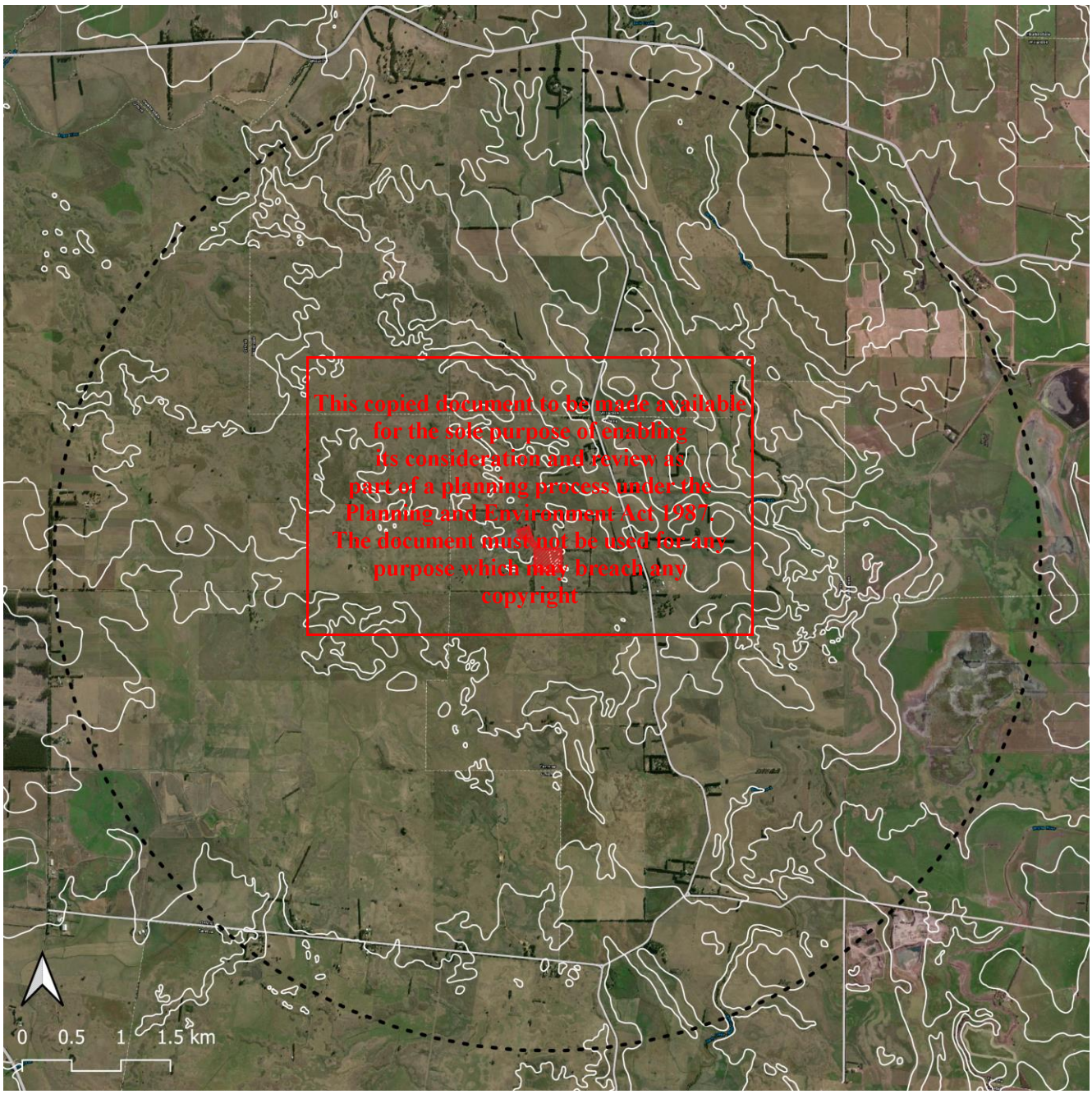


Figure 5-2 Topography

The larger volcanic cones are further removed from the study area. These are Mount Rouse approximately 34.5km north-east, Mount Eccles approximately 34km north-east and Tower Hill approximately 22km south-east.

5.3 Vegetation

Vegetation within the study area is limited. Cleared farmland is the most extensive landscape type within the study area. This landscape has been cleared of native vegetation for grazing or cropping agriculture. Vegetation is limited to shelterbelt plantings around dwellings, along roadsides and creek lines.

Shelterbelt species within the study area are primarily exotic species, such as conifers. Roadside vegetation includes a mix of exotic and native species.

Figure 5-3 shows the vegetation patterns within the study area.

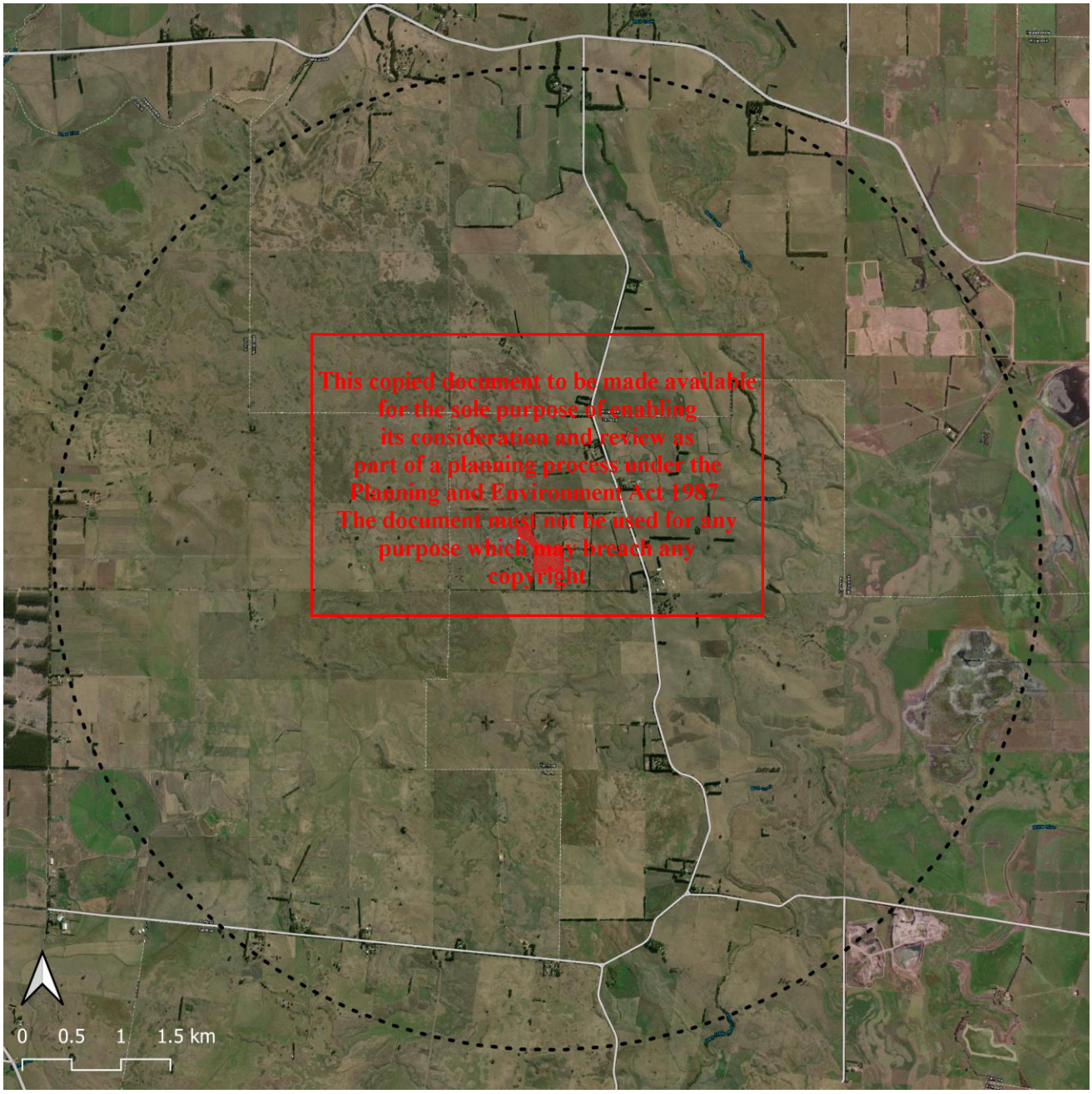


Figure 5-3 Vegetation within the study area

There is also a plantation forest located on the western edge of the study area. The plantation forests on the edge of the study area are typically native hardwood, eucalypt species.

These plantations have an ordered, monocultural appearance, and do not represent natural or wild appearing forests.

5.4 Watercourse and waterbodies

Watercourses and waterbodies within the study area are limited to the Moyne River runs through the eastern portion of the study area and smaller unnamed creek lines.

Figure 5-4 shows the location of the Moyne River and smaller creek lines within the study area.

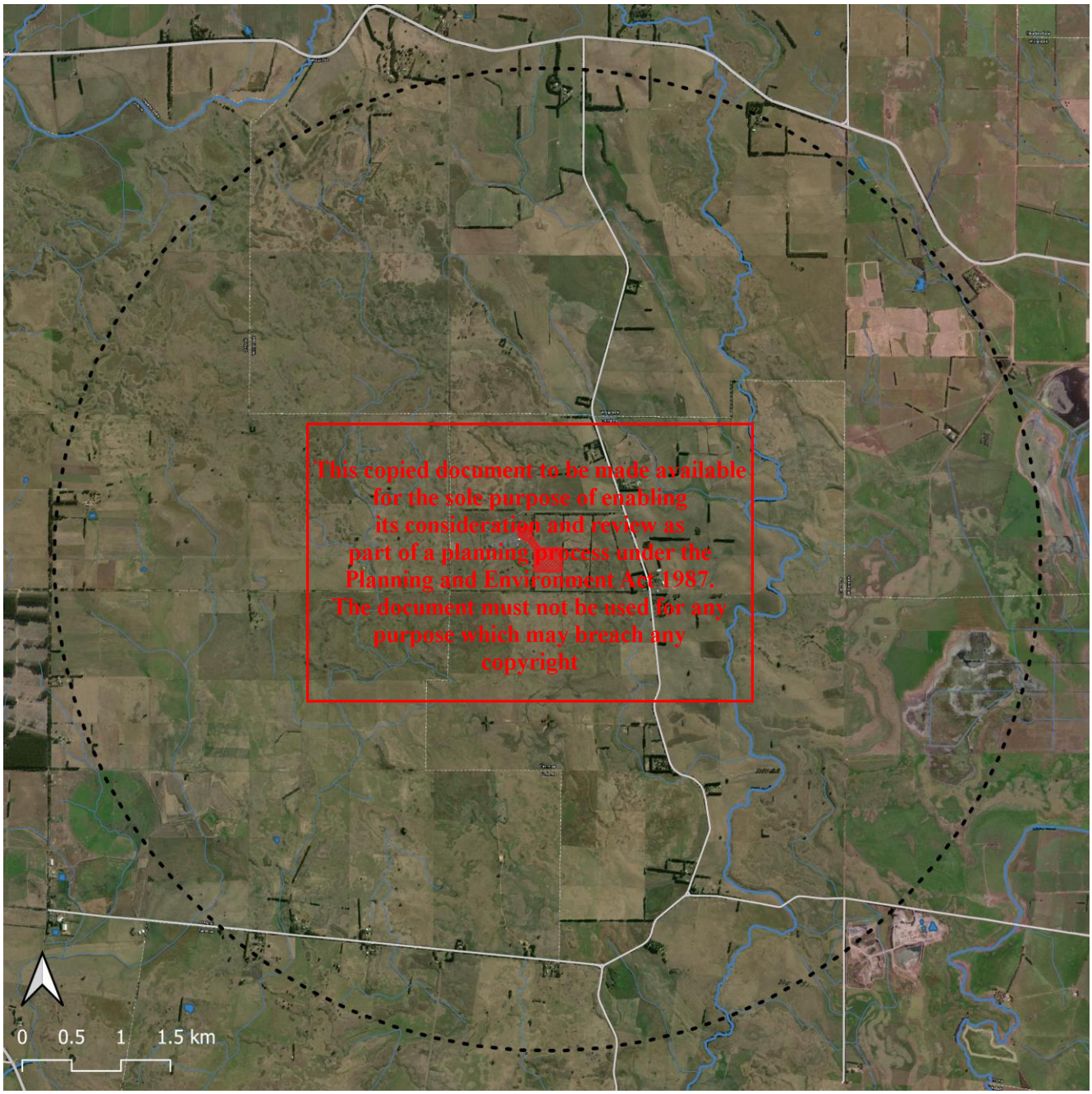


Figure 5-4 Watercourses and waterbodies within the study area

5.5 Land Use

The primary use of the study area is grazing and cropping. The majority of the study area is within the Farming Zone. The preference of protections afforded to land withing the Farming Zone is for the ongoing use and operation of these areas for farming and protecting these areas from encroachment brought about by incompatible or sensitive uses.

5.6 Landscape Character and viewer sensitivity

Landscape sensitivity is in part a measure of the ability of a landscape to absorb visual change based on attributes of a particular landscape. The sensitivity of the previously described landscape units will depend upon several attributes, such as:

- **Location.** The sensitivity of a potential viewer varies according to location. For example, visitors to a National Park where the landscape appears untouched or pristine will be more sensitive to the imposition of new or artificial elements within that landscape. The same viewer travelling along a rural highway, which contains existing examples of modifications and artificial elements, will be less sensitive to the presence of new elements. Modifications or artificial elements are not confined to vertical structures or built form, they also include removal of native vegetation; and visibility of roads, tracks, fences, and other rural infrastructure, all of which decrease the sensitivity of a landscape to further change.
- **The rarity of a particular landscape.** Landscapes that are considered rare or threatened are valued more highly by viewers.
- **The scenic qualities of a particular landscape.** Landscapes that are considered scenic are also those that are considered sensitive. They often contain dramatic topographical changes, the presence of water, coastlines, and other comparable features. The presence of modifications or artificial elements (including built form, roads, tracks, fences, and silos), as well as farming practices including land clearing, cropping, and burning, can decrease the sensitivity of a landscape's scenic qualities.

The following six landscape units have been derived following the study of landscape features, character, and land use in the study area:

- Landscape Character Unit 1 – Plains Farmland
- Landscape Character Unit 2 – Undulating Farmland
- Landscape Character Unit 3 – Lava Flows: Farmland, swamps, and wetlands, stony-rises
- Landscape Character Unit 4– Waterways
- Landscape Character Unit 5 – Plantation Forests
- Landscape Character Unit 6 – Infrastructure

The following section describes the key characteristics and sensitivity of the six landscape character types within the study area.

5.6.1 Landscape Character Unit 1 – Cleared flat farmland

Landscape Character Unit 1 – Cleared flat farmland comprises large areas of cleared land within the Farming Zone. The primary purpose and use of these areas are cropping and grazing. The vegetation comprises broad areas of low-level crops, with taller vegetation located along property boundaries, fence lines, road reserves and water courses. Views across these landscapes are often expansive and take in a considerable distance.

There are many instances of constructed elements within this landscape type machinery, hay sheds, irrigation plant and equipment, and attached dwellings.

This landscape differs from the agricultural areas within lava flows in that the terrain is flatter and more regular, generally contains fewer wetlands and swamps, and contains greater instances of shelterbelt plantings.

Figure 5-5 shows a view of cleared flat farmland within the study area.

Figure 5-5 Landscape Character Unit 1 – Cleared Flat Farmland example

5.6.2 Landscape Character Unit 2 – Cleared Undulating Farmland

Cleared Undulating Farmland is highly modified, by way of clearing of native vegetation. The intersection of rolling hills and valleys provides for a diversity of framing of views that are either closed and confined or reveal longer views across the landscape to the features in the distance.

Similar to Landscape Character Unit 1, this landscape unit is also subject to seasonal change. Constructed elements include machinery and hay sheds, irrigation plant and equipment and attached dwellings.

Figure 5-6 shows an example of cleared undulating farmland within the study area.

Figure 5-6 Landscape Character Unit 2 – Cleared Undulating Farmland example

5.6.3 Landscape Character Unit 3 – Lava Flows: Farmland and stony-rises

Lava flows have resulted in extensive mosaics of ephemeral wetlands and swamps across the study area. Stony rises are scattered within the study area, and a remnant feature of historic volcanic activity.

There is very limited vegetation and a lack of shelterbelt plantings within the lava flows landscape character area.

Figure 5-7 shows an example of stony-rises in the lava flows landscape character unit.

Figure 5-7 Landscape Character Unit 3 – Lava flows: Farmland and stony-rises example

5.6.4 Landscape Character Unit 4– Waterways

Waterways within the study area include the Moyne River running through the eastern section of the study area. There are smaller unnamed creek lines and depressions subject to inundation throughout the study area.

Figure 5-8 shows an example of the Moyne River within the study area.

Figure 5-8 Landscape Character Unit 4 – Waterways example

5.6.5 Landscape Character Unit 5 – Plantation Forests

Landscape Character Unit 5 – Plantation forests, describes areas of managed timber plantations and forests. These areas are typically located within the Farming Zone. Vegetation is usually a single species comprising exotic species such as radiata pine or native eucalypts.

Plantation forests on the edge of the study area are typically native hardwood, eucalypt species such as blue gums. These plantations have an ordered, monocultural appearance, and do not represent natural or wild appearing forests.

Nonetheless, these landscapes may be valued for their appearance in the otherwise cleared landscape. These plantation forests often undergo modification by way of timber harvesting as seen in the figure below a section of the forest has recently been harvested.

Figure 5-9 shows an example of plantation forests on the edge of the study area.

Figure 5-9 Landscape Character Unit 5 – Plantation Forests example

5.6.6 Landscape Character Unit 6 – Infrastructure

The study area includes several pieces of infrastructure including the existing Tarrone Terminal Station, 500kV Mortlake to Heywood transmission line, 132kV Macarther Wind Farm Transmission Line and the recently constructed Ryan Corner and Hawkesdale Wind Farm transmission line.

Figure 5-10 shows a view to the existing Tarrone Terminal Station.

Figure 5-10 Landscape Character Unit 6 – Infrastructure example

5.7 Landscape Sensitivity

The landscape units and sensitivity ratings will form the basis of the visual impact of views from publicly accessible locations.

There are no townships located within the study area. Residential dwellings are located within the farming zone.

Landscape sensitivity from individual residential properties will always be assessed as 'high', as for a resident, their home will always be a highly sensitive location and disturbances to a resident's views must always be considered to have the highest degree of sensitivity.

Table 5-1 summarises the six landscape character units and sensitivity identified in the study area. These units will be referred to in the assessment of views and visual impact from publicly accessible viewpoints.

Table 5-1: Landscape Character Unit and Sensitivity rating

Landscape Unit	Sensitivity
Landscape Unit 1 – Cleared Flat Farmland	**Low –** These areas are highly modified, are not rare, and are not topographically dramatic. These areas are extensively modified and include regular visual changes. Provisions within the planning scheme often provide greater protections for the use of these areas and the potential for offsite amenity impacts and impacts to these uses through encroachment from sensitive residential uses. It is recognised that these areas are often highly regarded in a local context.
Landscape Unit 2 – Cleared Undulating Farmland	**Low to Moderate –** Highly modified by way of clearing of native vegetation. The intersection of rolling hills provides for a diversity of framing of views that are either closed and confined or reveal longer views across the valley floor and to the elevated hills in the distance. These areas are also highly modified, albeit less prevalent than flat farmland. Provisions within the planning scheme often provide greater protections for the use of these areas and the potential for offsite amenity impacts and impacts to these uses through encroachment from sensitive residential uses. It is recognised that these areas are often highly regarded in a local context.
Landscape Unit 3 – Lava Flows: Farmland and stony-rises	**Low to Medium –** This landscape type is widespread throughout the study area. Its features are not often apparent when viewed from the ground and have been highly modified for agricultural uses.
Landscape Unit 4 –Waterways	**Moderate to High –** Water bodies and waterways are considered to have a high sensitivity to visual change due to their scenic qualities, contemplative aspects, and intrinsic values.
Landscape Unit 5 –Timber Plantation	**Low –** These areas may be considered attractive for some viewers when vegetation is established and mature. Plantings are often uniform in height and planting spacings, with vegetation appearing regular and in rows. These areas constantly change through growth cycles culminating in rapid change through harvesting.
Landscape Unit 6 – Industrial	**Low –** These areas are highly modified landscapes. Although rare in terms of use and land cover, they are recognised as being intensively modified areas that can contribute to offsite impacts, including noise, dust, and visual amenity.

6. Cumulative Considerations

Cumulative visual impact can be defined as the combined effect of changes brought about by the proposed development in conjunction with other similar developments in the area.

Cumulative visual impact can occur either by:

- Sequential views
- Simultaneous views

Figure 6-1 shows the other constructed or approved projects within and surrounding the study area.

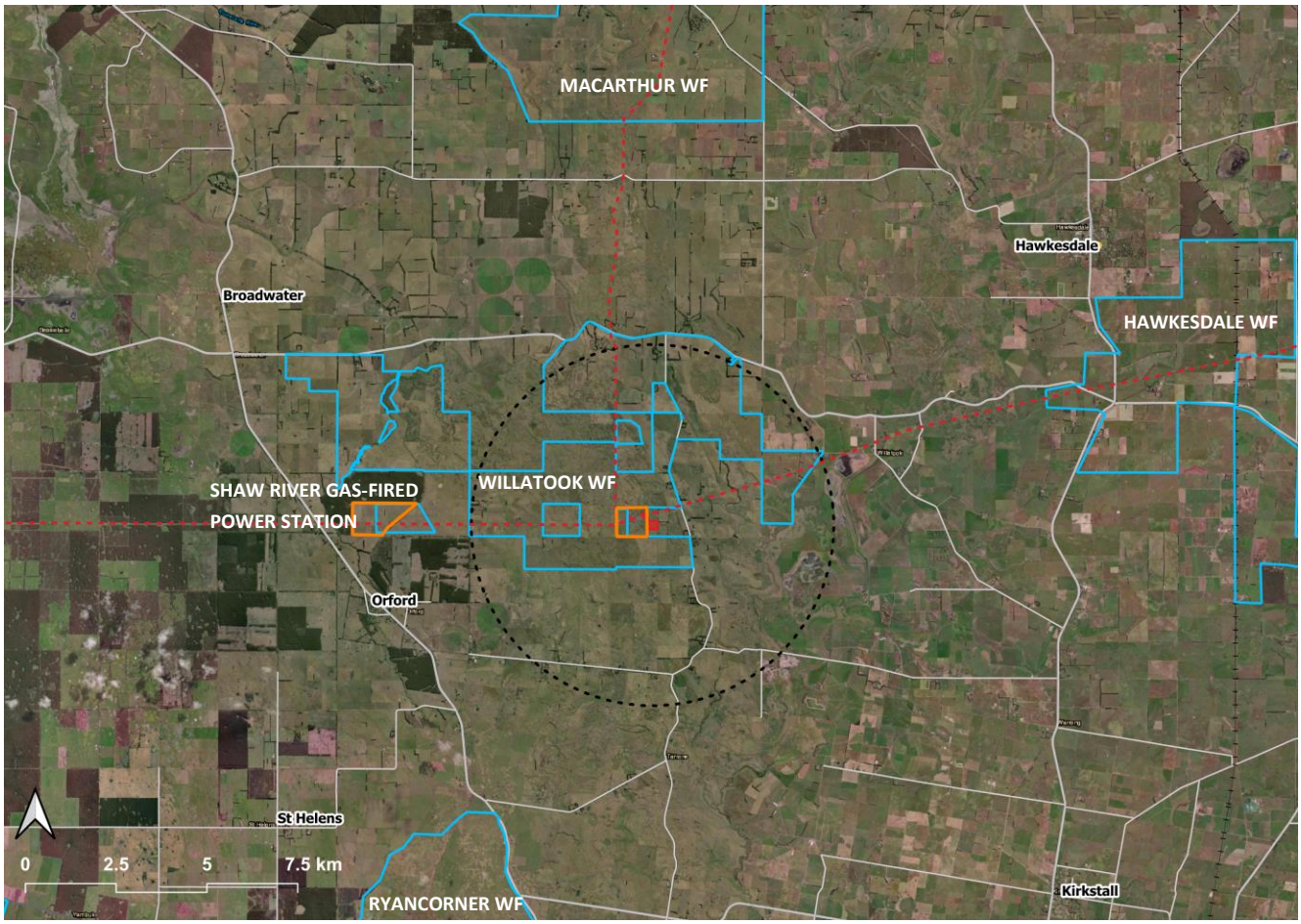


Figure 6-1 Constructed and approved projects in the study area

Existing and approved projects within and surrounding the study area include:

- Tarrone Terminal Station and 500kV transmission line (existing)
- 132kV Macarther Wind Farm transmission line (existing)
- Ryan Corner and Hawkesdale Wind Farm transmission line (Recently constructed)
- Willatook Wind Farm (Approved but not constructed)
- Macarthur Wind Farm (Operating)
- Hawkesdale Wind Farm (Under Construction)
- Ryan Corner Wind Farm (Under Construction)
- Tarrone Gas-Fired Power Station (Approved but not constructed)
- Shaw River Gas-Fired Power Station (Approved but not constructed)

6.1 Existing Tarrone Terminal Station and transmission lines

The study area includes several pieces of infrastructure including the existing Tarrone Terminal Station, 500kV Mortlake to Heywood transmission line, 132kV Macarther Wind Farm Transmission Line and the recently constructed Ryan Corner and Hawkesdale Wind Farm transmission line.

Figure 6-2 shows a view to the existing Tarrone terminal station, existing 500kV Mortlake to Heywood transmission line and recently constructed Ryan Corner and Hawkesdale Wind Farm transmission line.

Figure 6-2 Existing Tarrone Terminal Station and 500kV transmission lines

Figure 6-3 shows the recently constructed Ryan Corner and Hawkesdale Wind Farm transmission line.

Figure 6-3 Recently constructed Ryan Corner and Hawkesdale Wind Farm transmission lines

6.2 Willatook Wind Farm

Willatook Wind Farm is located to the west and north of the Project. Recently the Minister for Planning made an assessment on the Environmental Effects Statement for the Willatook Wind Farm. The Minister for Planning's assessment found that the proposal would be required to implement a number of measures *to strengthening Wind Prospect's proposed avoidance and management measures with regard to the Brolga and Southern Bent-wing Bat*.

It is understood that the revised brolga buffers required by the Minister for Planning's assessment will substantially reduce the number of turbines within the proposed wind farm footprint.

Figure 6-4 shows the current proposal of turbines within the south-eastern section of the Project and the proposed substation, grid connection and battery storage.

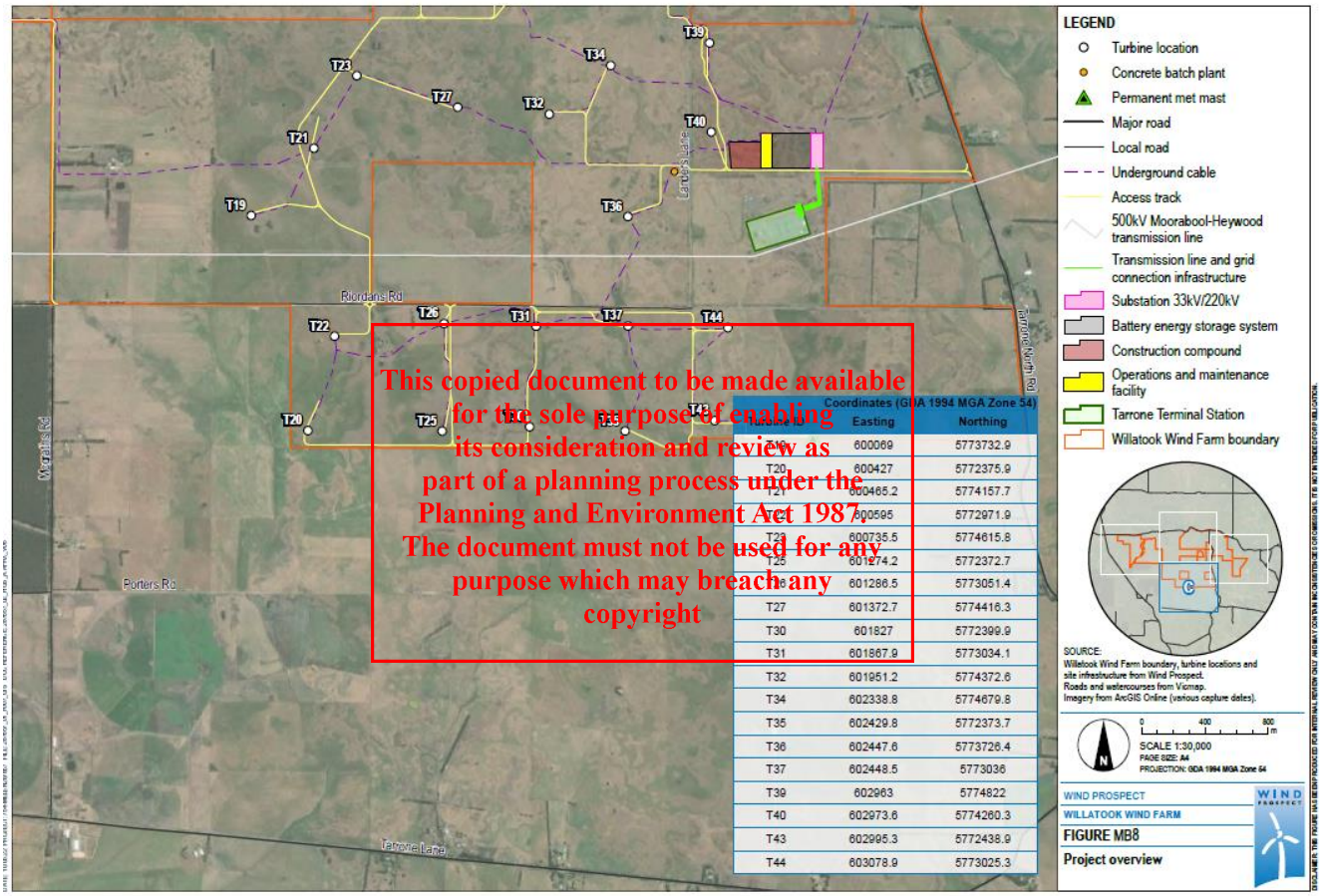


Figure 6-4 Willatook Wind Farm Project Overview Plan (Source: Figure MB8 Willatook Wind Farm Mapbook)

The proposed substation and battery storage facility is to be located to the north of the existing Tarrone terminal station. It is unclear at this stage which turbines in this section will be affected. It is likely that turbines would be visible in most views surrounding the Tarrone BESS project.

6.3 Macarthur Wind Farm

The existing Macarthur Wind Farm is located approximately 11km north of the Project.

The Macarthur Wind Farm consists of 140 turbines with a tip height of 145m. The Macarthur Wind Farm is visible from areas within the study area.

Figure 6-5 shows a view to the Macarthur Wind Farm from the northern edge of the study area on Woolsthorpe-Heywood Road.

Figure 6-5 Macarthur Wind Farm view from Woolsthorpe Heywood Road

6.4 Hawkesdale Wind Farm

The Hawkesdale Wind Farm is currently under construction. The closest turbine would be located approximately 13.5km north-east of the Project.

The Hawkesdale Wind Farm will consist of 23 turbines with an overall tip height of 180m. Figure 6-6 shows the proposed Hawkesdale Wind Farm layout.

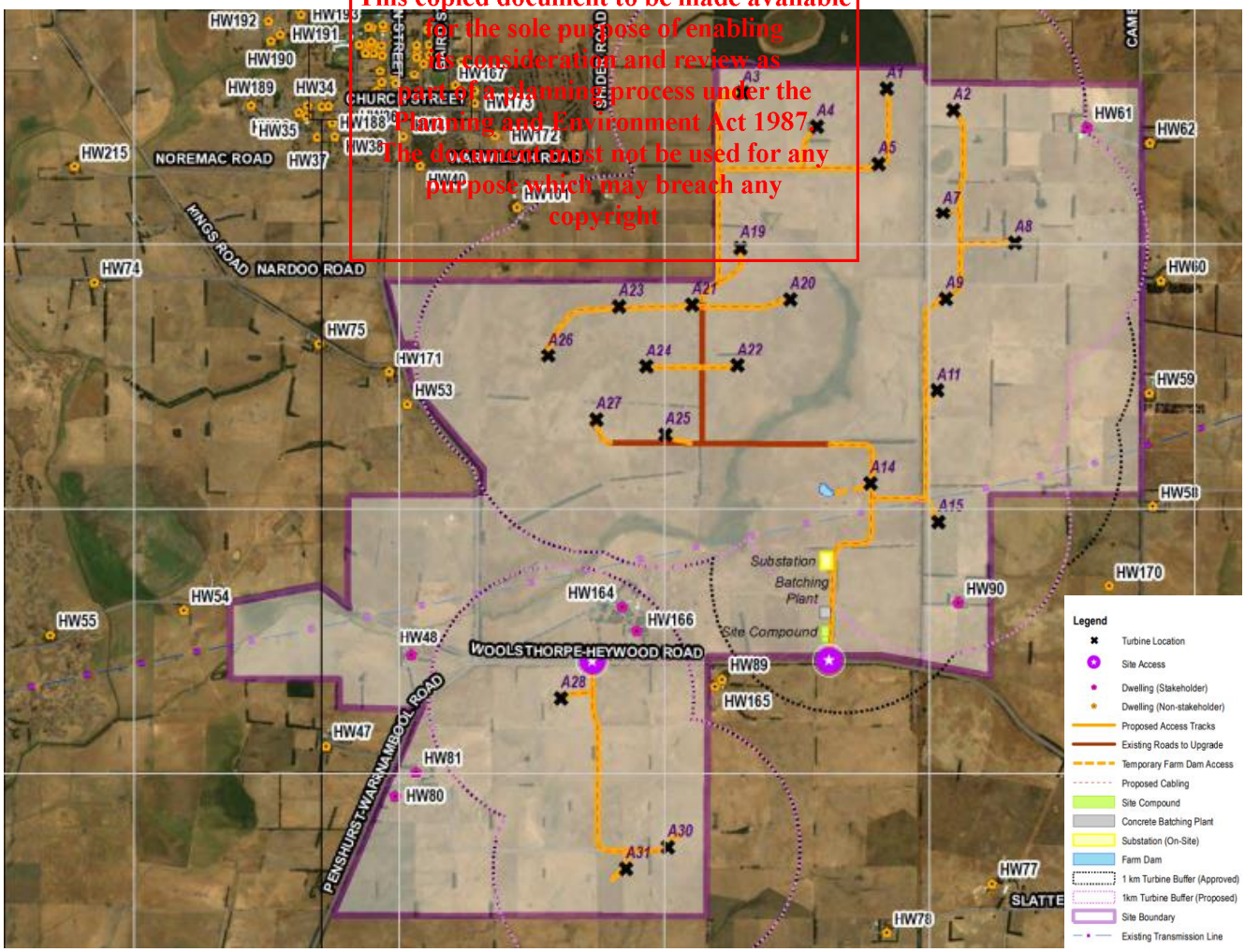


Figure 6-6 Hawkesdale Wind Farm Site Layout (Source: ERM Drawing No. 0105123_001_HDWF_Layout_R4T.mxd)

6.5 Tarrone Gas-Fired Power Station

The Tarrone Gas-Fired Power Station was approved in 2012. The project proposed up to four gas turbines, each with an exhaust stack of up to 45 m, as well as other supporting infrastructure including a gas pipeline, to be built adjacent to the existing Tarrone substation and high voltage transmission lines.

Referral number: 2009R00019 noted that *the construction of the proposed power station and ancillary works would not have significant adverse impacts on landscape… as they would be located on mostly cleared farmland*.

This project is yet to be constructed, with the developer (AGL) currently stating the initiation of the project will depend on market conditions.

Figure 6-7 shows the proposed site layout of the Tarrone Gas-Fired Power Station to the west of the existing Tarrone Terminal Station.

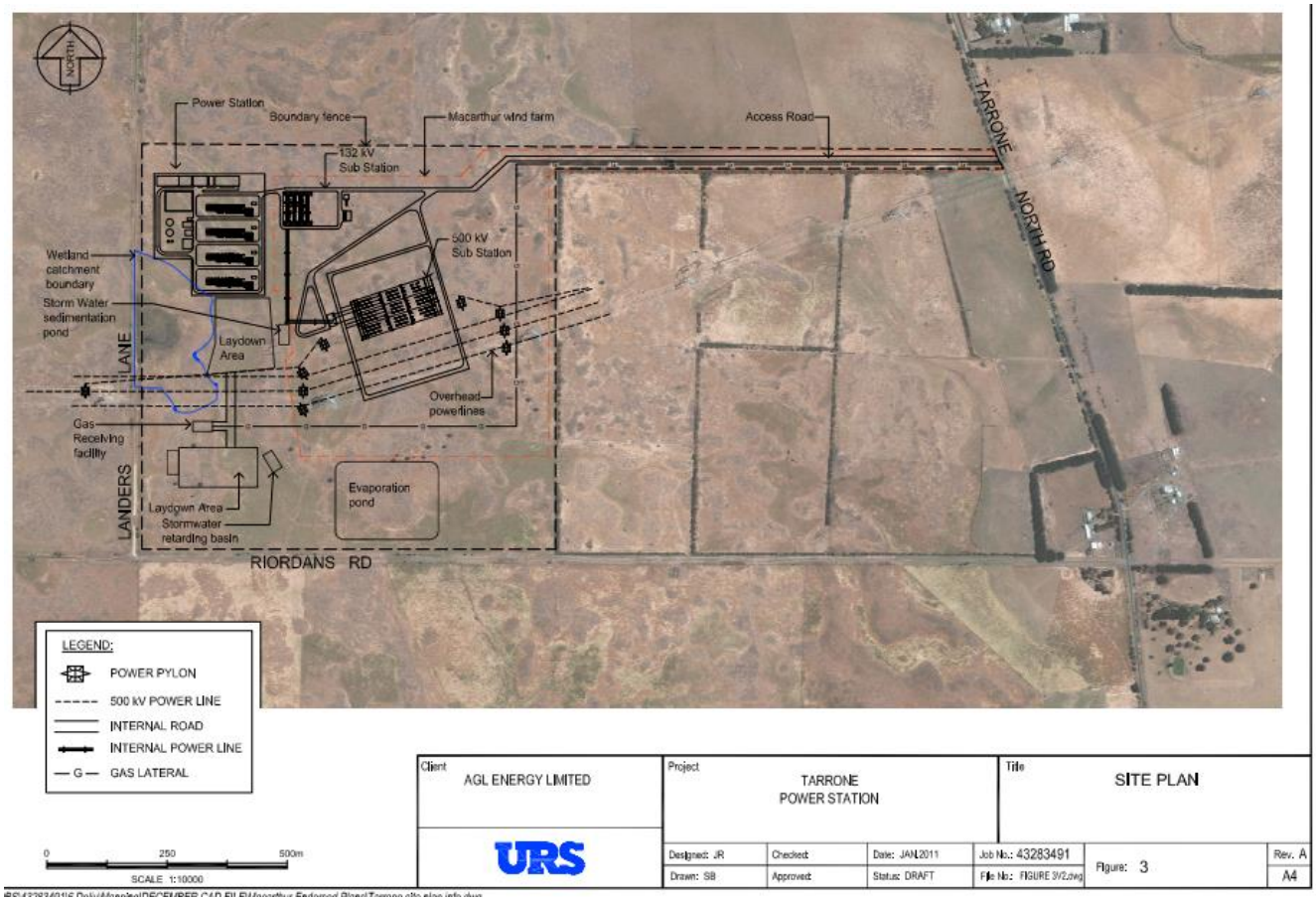


Figure 6-7 Tarrone Gas-Fired Power Station (Source: URS Site Plan Drawing No. FIGURE3V2.dwg Rev A Jan 2011)

7. Publicly Accessible Viewpoints

Twelve publicly accessible viewing locations have been chosen to represent views from locations of theoretical project visibility and from where people are likely to view the Project to consider the range of views that are likely to be affected by the Project.

The location of the viewpoints in relation to the Project are shown in Figure 7-1 below.

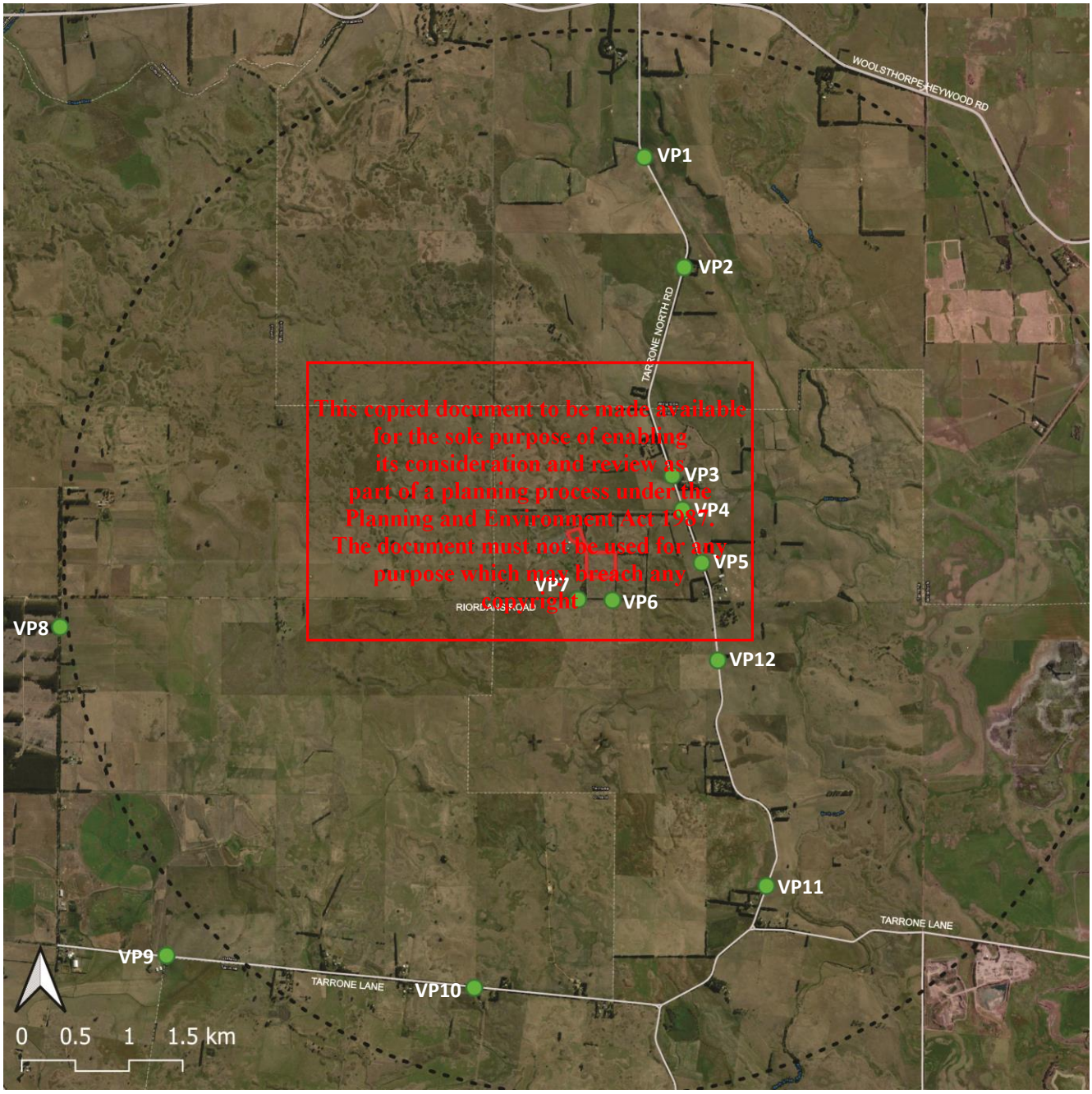


Figure 7-1 Viewpoint Location Map

A summary of the quantitative criteria such as distance, viewer numbers and landscape sensitivity are set out in a summary table at each viewpoint. This is not to be relied upon for the determination of the overall visual impact as the qualitative criteria such as landscape sensitivity, features in the view and mutable factors such as screening provided by local topography, vegetation and buildings which cannot be captured or summarized through metrics are not accounted for. For this reason, the key considerations which have contributed to the overall visual impact arrived at for each viewpoint are described in the qualitative assessment above the summary table.

7.1 VP1 – Tarrone North Road #1

Viewpoint 1 is located on Tarrone North Road approximately 1.5km south of the Woolsthorpe-Heywood Road intersection.

The closest Project site boundary is approximately 3.5km south-west.

Figure 7-2 shows the view looking south-west towards the Project.

Cumulative Considerations

The existing Tarrone Terminal Station and transmission lines are visible central to the image.

The proposed Willatook Wind Farm would be visible from this location.

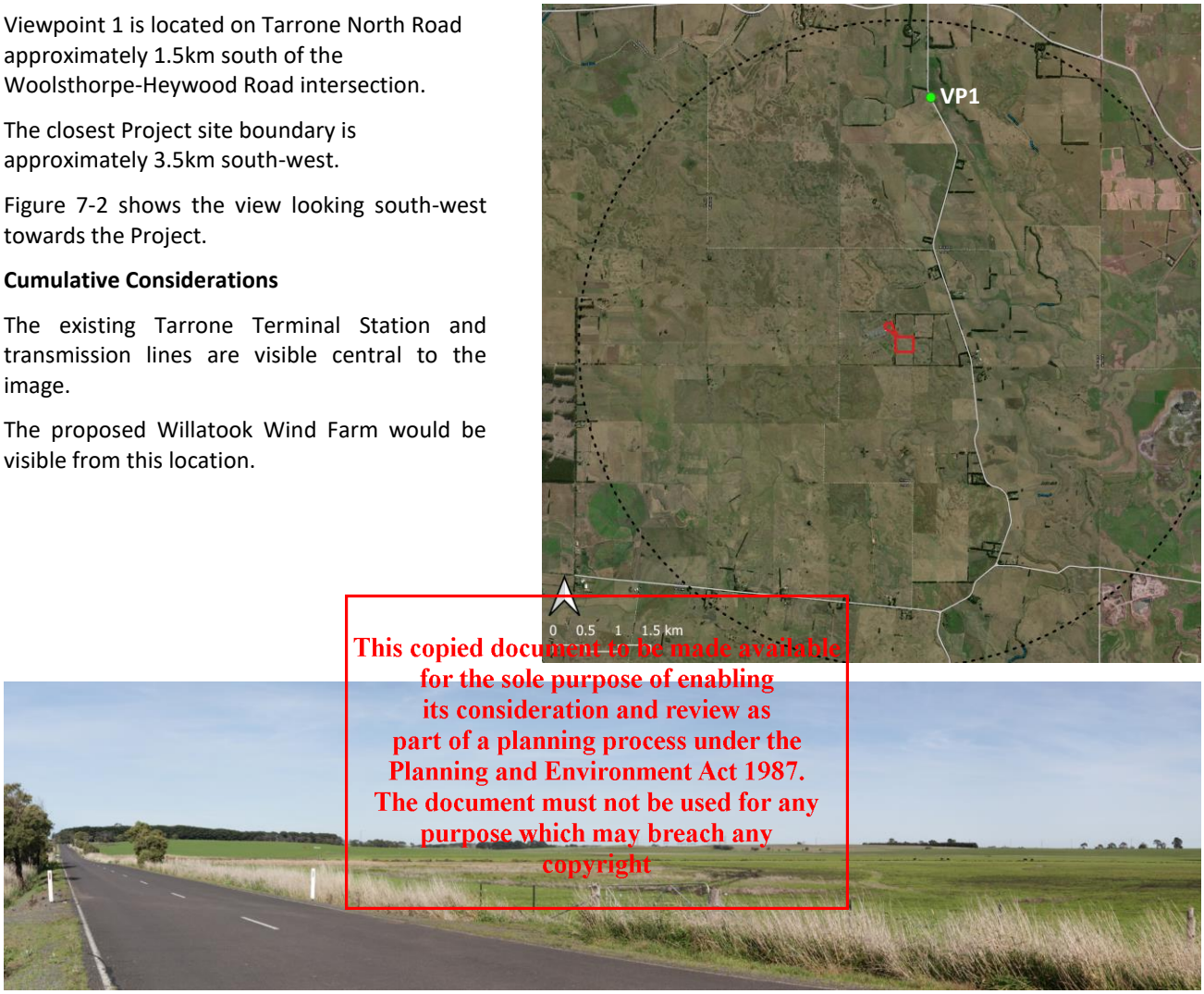


Figure 7-2 Viewpoint 1 - Existing view looking south through south-west

Views to the south-west are across cleared flat farmland. This viewpoint is from section of Tarrone North Road where a break in roadside vegetation allows for views towards the Project. Tarrone Terminal Station can be seen central to the view.

From this location the Project would be located behind Tarrone Terminal Station and will be screened by existing intervening topography and vegetation.

For these reasons, the overall visual impact would be **Negligible-Nil**.

Table 7-1: Viewpoint 1 summary table

VIEWPOINT 1 – TARRONE NORTH ROAD #1 (GPS 54H 604259, 5777268)			
Distance	3.5km SW	**Viewer type and numbers**	Local Road - Low
Landscape Unit	Unit 1 – Cleared Flat Farmland	**Sensitivity**	Low
OVERALL VISUAL IMPACT	**NEGLIGIBLE-NIL**		

7.2 VP2 – Tarrone North Road #2

Viewpoint 2 is located on Tarrone North Road approximately 2.5km south of the Woolsthorpe-Heywood Road intersection.

The closest Project site boundary is approximately 2.6km south-west.

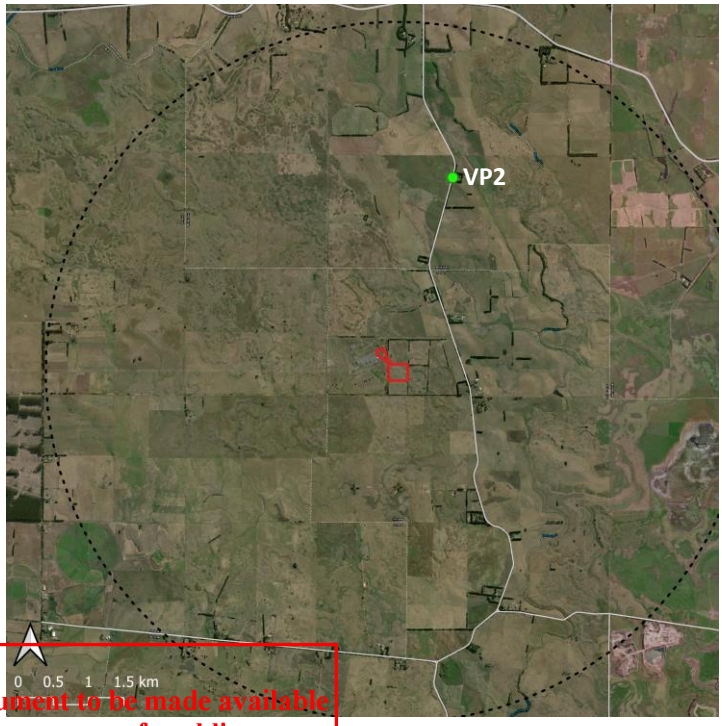
Figure 7-3 shows the view looking south through south-west.

Cumulative Considerations

The existing Tarrone Terminal Station and transmission lines are visible central to the image.

The proposed Willatook Wind Farm would be visible from this location.

The proposed Tarrone Gas-Fired Power Station would likely be visible from this location.



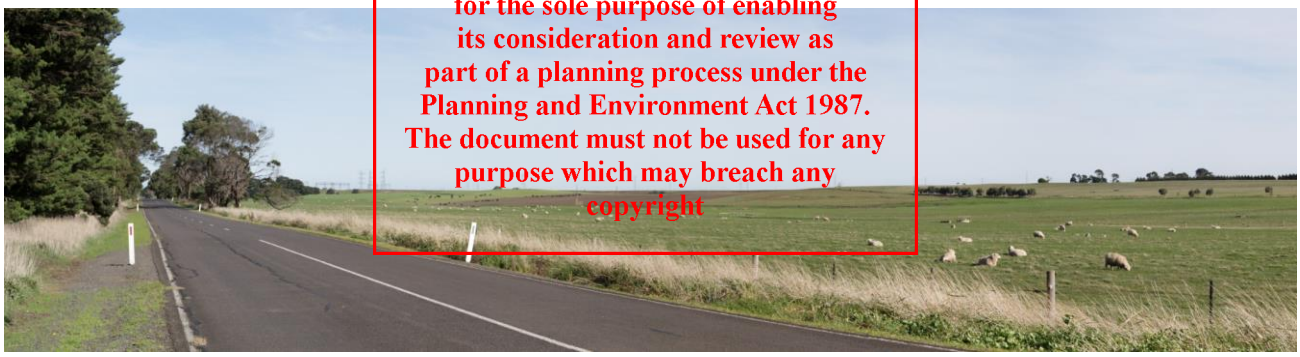


Figure 7-3 Viewpoint 2 - Existing view looking south through south-west

Views to the south are screened by roadside vegetation. Views to the south-west are across cleared flat farmland. This viewpoint is from section of Tarrone North Road where a break in roadside vegetation allows for views towards the Project. Tarrone Terminal Station can be seen to the left of the view.

From this location the Project would be located behind Tarrone Terminal Station and will be screened by existing intervening topography and vegetation. At a distance of 2.6km if visible, the Project would not be a dominant element in the view. For these reasons, the overall visual impact would be **Negligible-Nil**.

Table 7-2: Viewpoint 2 summary table

VIEWPOINT 2 – TARRONE NORTH ROAD #2 (GPS 54H 604630, 5776242)			
Distance	2.6km SW	**Viewer type and numbers**	Local Road - Low
Landscape Unit	Unit 1 – Cleared Flat Farmland	**Sensitivity**	Low
OVERALL VISUAL IMPACT	**NEGLIGIBLE-NIL**		

7.3 VP3 – Tarrone North Road #3

Viewpoint 3 is located on Tarrone North Road approximately 1.2km north-west of the intersection with Riordans Road.

The closest Project site boundary is approximately 1.0km south-west.

Figure 7-4 shows the view looking south through south-west.

Cumulative Considerations

The existing Tarrone Terminal Station and transmission lines are visible to the right of the image below.

The proposed Willatook Wind Farm including the proposed substation and BESS would be visible from this location.

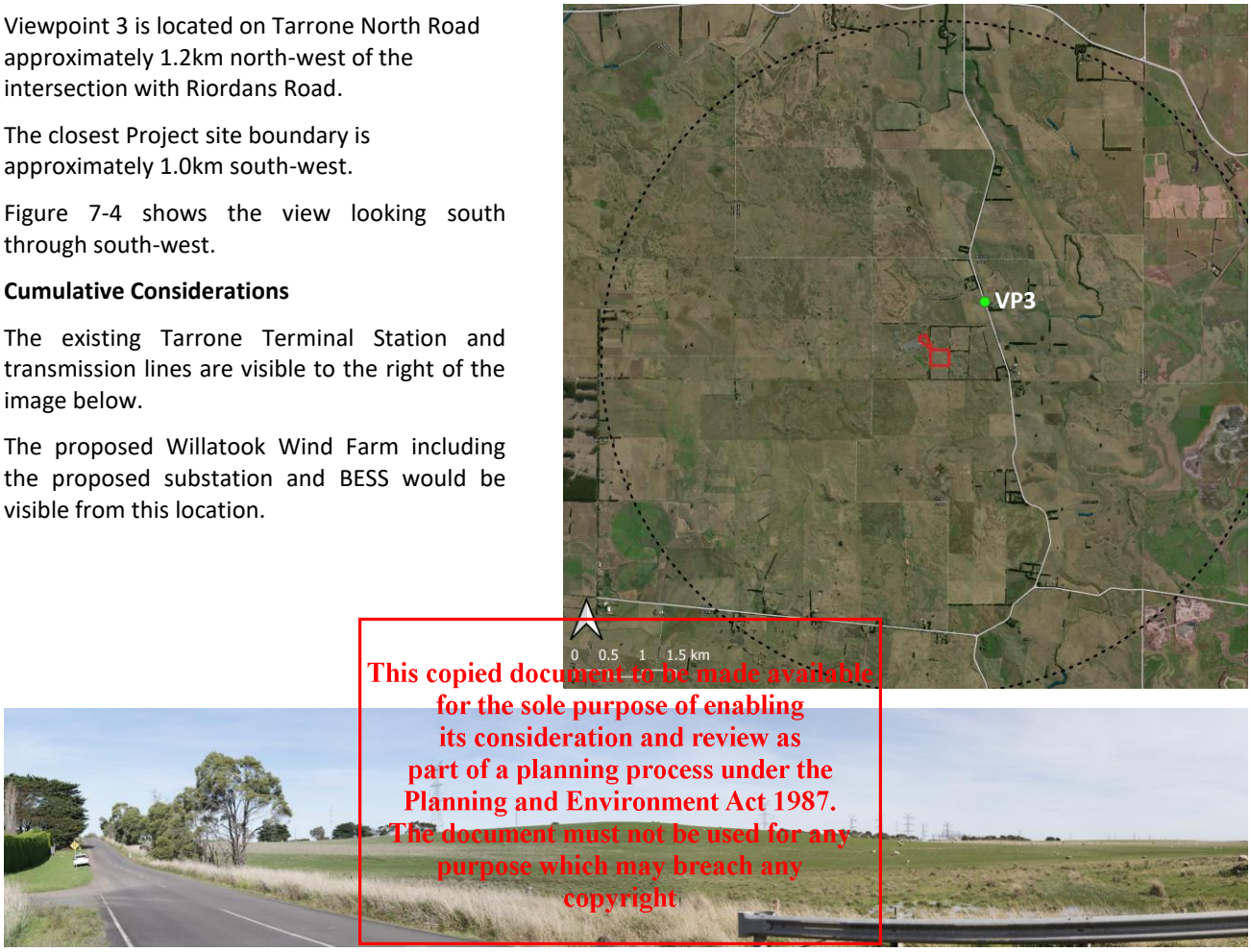


Figure 7-4 Viewpoint 3 - Existing view looking south through south-west

Viewpoint 3 is taken from a section of Tarrone North Road where a break in vegetation allows for views towards the Project. The existing Tarrone Terminal Station is visible to the right of the image. The Project would be located behind and to the left of the Terminal Station.

The BESS would be screened by intervening topography and vegetation. For these reasons, the overall visual impact would be **Negligible-Nil**.

Table 7-3: Viewpoint 3 summary table

VIEWPOINT 3 – TARRONE NORTH ROAD #3 (GPS 54H 604514, 5774320)			
Distance	1.0km SW	**Viewer type and numbers**	Local Road - Low
Landscape Unit	Unit 2 – Cleared Undulating Farmland	**Sensitivity**	Low-Moderate
OVERALL VISUAL IMPACT	**NEGLIGIBLE-NIL**		

7.4 VP4 – Tarrone North Road #4

Viewpoint 4 is located on Tarrone North Road approximately 815m north of the intersection with Riordans Road.

This viewpoint is located near the entrance road to the Tarrone Terminal Station. The closest Project site boundary is approximately 745m south-west.

Figure 7-5 shows the view looking south through west.

Cumulative Considerations

The existing Tarrone Terminal Station and transmission lines are visible central to the image.

The proposed Willatook Wind Farm would be visible from this location The proposed substation and BESS would likely be filtered or partially screened by the existing vegetation to the right of the image.

The proposed Tarrone Gas-Fired Power Station would likely be visible from this location.

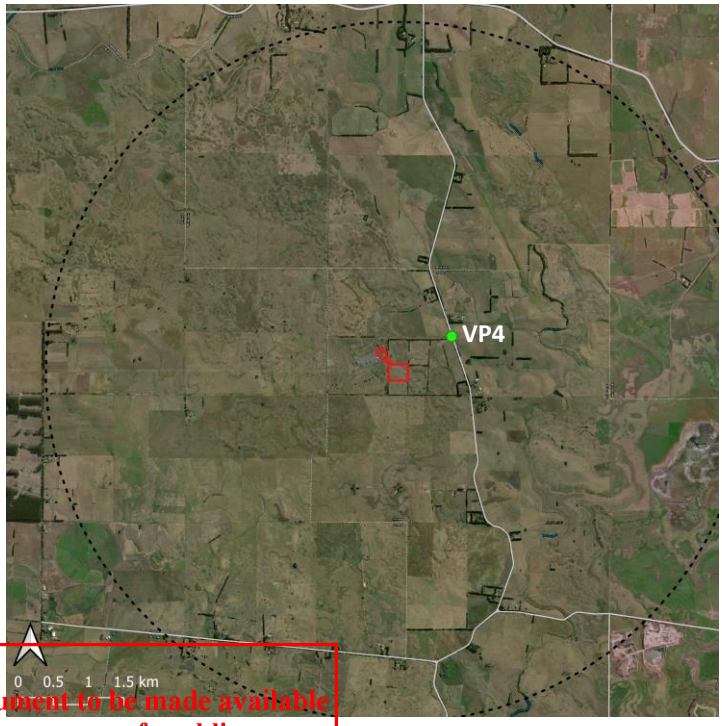


Figure 7-5 Viewpoint 4 - Existing view looking south through west

Views to the south-west and west include several constructed elements including the Tarrone Terminal Station, 500kV transmission line and the recently constructed Ryan Corner and Hawkesdale Wind Farm transmission line.

The Project would be located central to the view. A small section of the vegetation will be removed to construct the eastern access road. Parts of the Project may be visible through breaks in vegetation. Views would be short in duration and perpendicular to the direction of travel along Tarrone North Road.

For these reasons, the overall visual impact would be **Negligible**.

Table 7-4: Viewpoint 4 summary table

VIEWPOINT 4 – TARRONE NORTH ROAD #4 (GPS 54H 604638, 5773944)			
Distance	745m SW	**Viewer type and numbers**	Local Road - Low
Landscape Unit	Unit 1 – Cleared Flat Farmland	**Sensitivity**	Low
OVERALL VISUAL IMPACT	**NEGLIGIBLE**		

7.5 VP5 – Tarrone North Road #5

Viewpoint 5 is located on Tarrone North Road approximately 360m north of the intersection with Riordans Road.

This is the location of the proposed east entrance road. The closest Project site boundary is approximately 800m west.

Figure 7-6 shows the existing view looking west.

Cumulative Considerations

The existing Tarrone Terminal Station and transmission lines are visible central to the image. The recently installed Ryan Corner and Hawkesdale Wind Farm transmission line runs across the view.

The proposed Willatook Wind Farm would be visible from this location. The proposed substation and BESS would likely be filtered or partially screened by the existing vegetation to the right of the image.

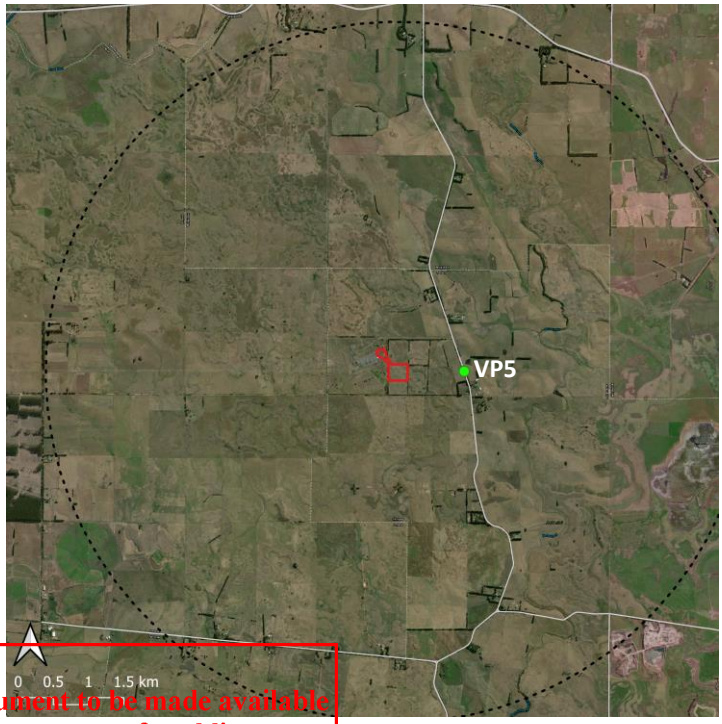


Figure 7-6 Viewpoint 5 - Existing view looking west

Figure 7-7 shows the same view with a wireframe model of a previous version of the Project (GPG Plan BESS_GPG_AU_TAR_002 Rev 2) superimposed in the view. Noting this version of the project included up to 204 individual BESS modules and is a more conservative view. It is also noted that a wireframe view shows the project elements that would be located behind vegetation.

Figure 7-7 Viewpoint 5 – Wireframe view

This view is taken at the entrance of the eastern access road. The eastern access road will require the removal of the tree within the road reserve and a section of the boundary planting seen central to the view. Figure 7-8 shows an enlargement of the wireframe view.

Figure 7-8 Viewpoint 5 – Enlargement of wireframe view

From this view parts of the Project may be visible between breaks in vegetation. Although visible they would not be a dominant element in the view. The most noticeable change would be during construction with the removal of vegetation and the installation of the access road.

Overtime, this would appear similar to existing farm access roads within the study area.

For these reasons, the overall visual impact would be **Low**.

Table 7-5: Viewpoint 5 summary table

VIEWPOINT 5 – TARRONE NORTH ROAD #5 (GPS 54H 604794, 5773491)			
Distance	800m W	**Viewer type and numbers**	Local Road - Low
Landscape Unit	Unit 1 – Cleared Flat Farmland	**Sensitivity**	Low
OVERALL VISUAL IMPACT	**LOW**		

7.6 VP6 – Riordans Road #1

Viewpoint 6 is located on Riordans Road approximately 885m west of the intersection with Tarrone North Road.

This is the location of the entrance to the south access road. The closest Project boundary is approximately 215m north.

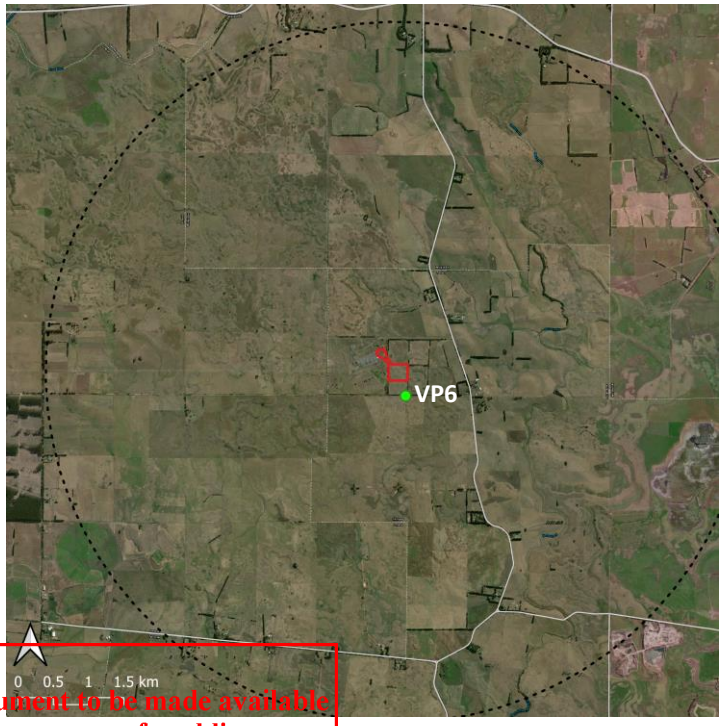
Figure 7-9 shows the view looking north.

Cumulative Considerations

The existing Tarrone Terminal Station and transmission lines are visible central to the image.

The proposed Willatook Wind Farm would be visible from this location. The proposed substation and BESS would be screened by topography and vegetation.

The proposed Tarrone Gas-Fired Power Station would be screened by the vegetation to the left of the image.



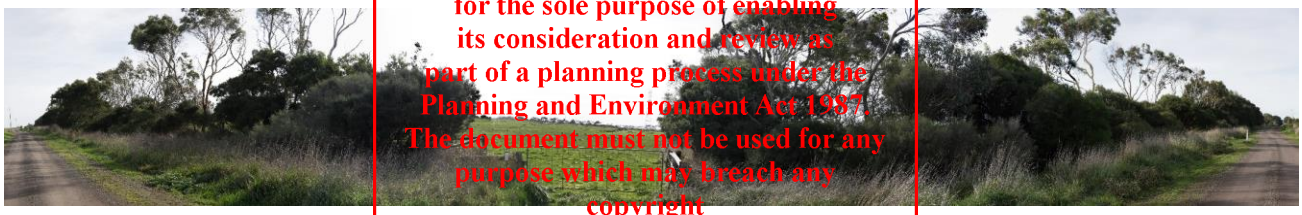


Figure 7-9 Viewpoint 6 - Existing view looking north

Viewpoint 6 is taken from a section of Riordans Road where an access gate provides a break in roadside vegetation and allows views towards the Project. The proposed southern access road would require this break in vegetation to be widened.

The proposed BESS and site compound would be visible. Although visible, this would be for a short duration and perpendicular to the direction of travel. Views from further east and west of this location would be screened or filtered by the existing vegetation.

For these reasons, the overall visual impact would be **Low-Negligible**.

Table 7-6: Viewpoint 6 summary table

VIEWPOINT 6 – RIORDANS ROAD #1 (GPS 54H 603982, 5773144)			
Distance	215m N	**Viewer type and numbers**	Local Road - Low
Landscape Unit	Unit 3 – Lava Flows: Farmland and stony-rises	**Sensitivity**	Low-Moderate
OVERALL VISUAL IMPACT	**LOW-NEGLIGIBLE**		

7.7 VP7 – Riordans Road #2

Viewpoint 7 is located on Riordans Road approximately 615m east of the intersection with Landers Lane.

The closest Project site boundary is approximately 330m north-east.

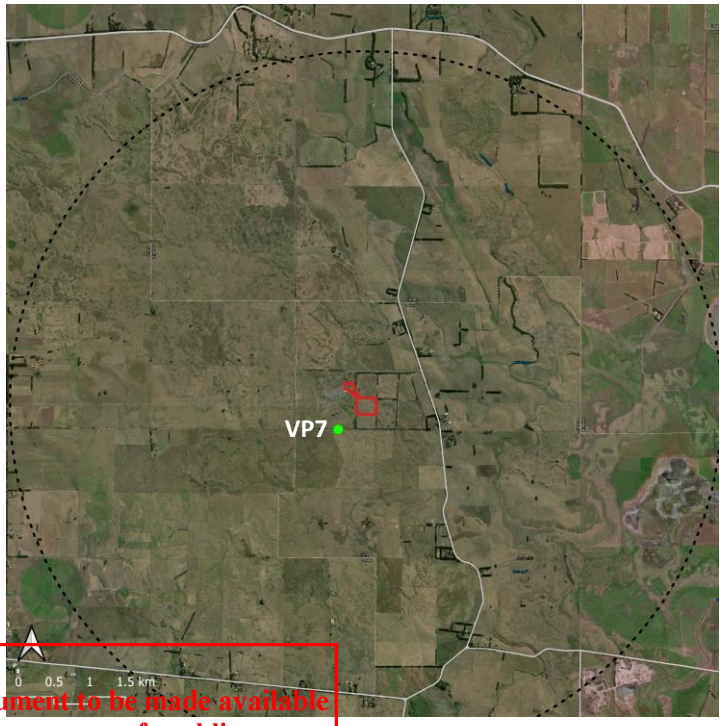
Figure 7-10 shows the view looking north through east.

Cumulative Considerations

The existing Tarrone Terminal Station and transmission lines are visible central to the image.

The proposed Willatook Wind Farm would be visible from this location. The proposed substation and BESS would be screened by topography and vegetation.

The proposed Tarrone Gas-Fired Power Station would be screened by the vegetation to the left of the image.



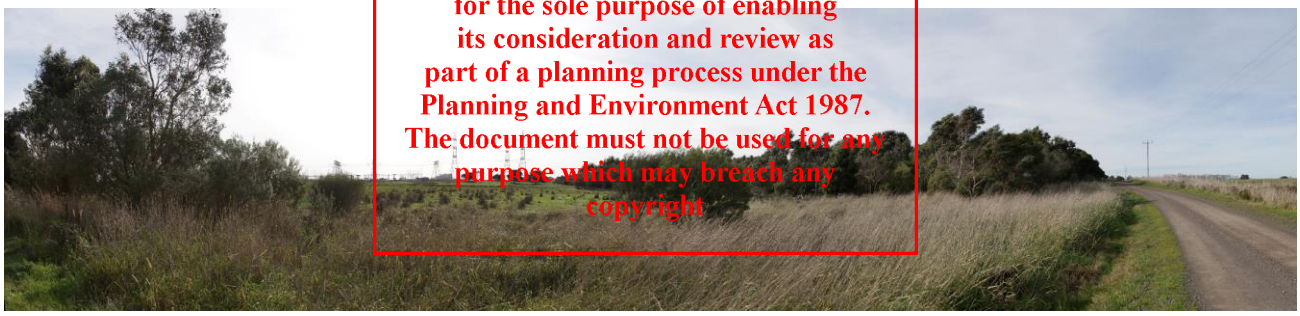


Figure 7-10 Viewpoint 7 - Existing view looking north through east

Views to the north-east are through a break in roadside vegetation across the stony-rises landscape to the existing Tarrone Terminal Station. The BESS would be located behind the existing vegetation seen to the right of the image.

For these reasons, the overall visual impact would be **Negligible-Nil**.

Table 7-7: Viewpoint 7 summary table

VIEWPOINT 7 – RIORDANS ROAD #2 (GPS 54H 603458, 5773147)			
Distance	330m NE	**Viewer type and numbers**	Local Road - Low
Landscape Unit	Unit 3 – Lava Flows: Farmland and stony-rises	**Sensitivity**	Low-Moderate
OVERALL VISUAL IMPACT	**NEGLIGIBLE-NIL**		

7.8 VP8 – McGraths Road

Viewpoint 8 is located on McGraths Road approximately 275m south of the intersection with Riordans Road.

The closest Project site boundary is approximately 4.8km north-east.

Figure 7-11 shows the view looking north-east.

Cumulative Considerations

The existing Tarrone Terminal Station and transmission lines are visible in the distance central to the image.

The proposed Willatook Wind Farm would be visible from this location.

The proposed Tarrone Gas-Fired Power Station would likely be visible from this location albeit at a distance.

Figure 7-11 Viewpoint 8 - Existing view looking north-east

The Project would be located central to the view to the right of the existing Tarrone Terminal Station. The project would be filtered by existing vegetation to the west of the Project. With the tallest element of the Project being 3.6m in height, if visible, at a distance of approximately 4.8km the Project would not be a dominant element in the view.

For these reasons, the overall visual impact would be **Negligible-Nil**.

Table 7-8: Viewpoint 8 summary table

VIEWPOINT 8 – MCGRATHS ROAD (GPS 54H 598816, 5772893)			
Distance	4.8km NE	**Viewer type and numbers**	Local Road - Low
Landscape Unit	Unit 1 – Cleared Flat Farmland	**Sensitivity**	Low
OVERALL VISUAL IMPACT	**NEGLIGIBLE-NIL**		

7.9 VP9 – Tarrone Lane #1

Viewpoint 9 is located on Tarrone Lane approximately 1km west of the intersection with McGraths Road.

The closest Project site boundary is approximately 5.2km north-east.

Figure 7-12 shows the view looking north-east.

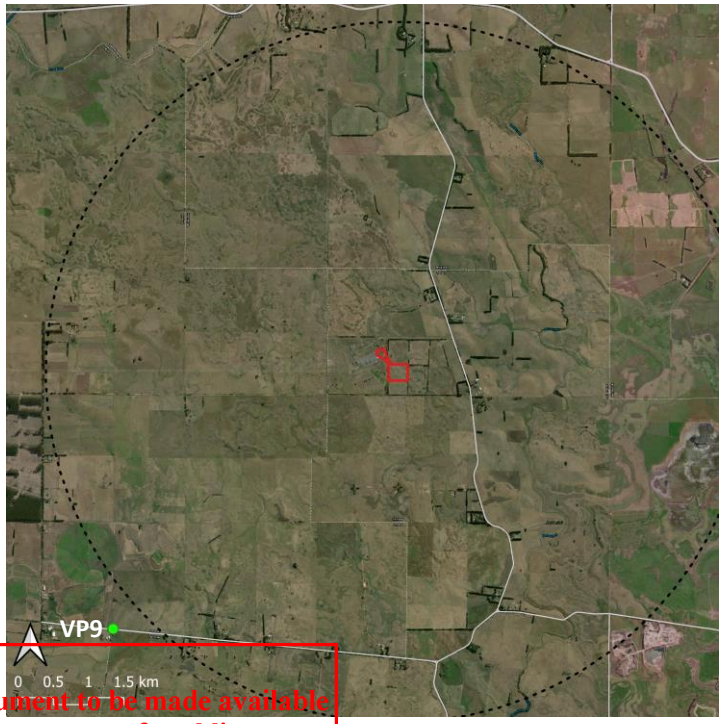
Cumulative Considerations

The existing Tarrone Terminal Station and transmission lines are visible central to the image.

The proposed Willatook Wind Farm would be visible from this location.

The proposed Tarrone Gas-Fired Power Station would likely be visible from this location.

The existing Macarthur Wind Farm is visible in the distance to the left of the image.



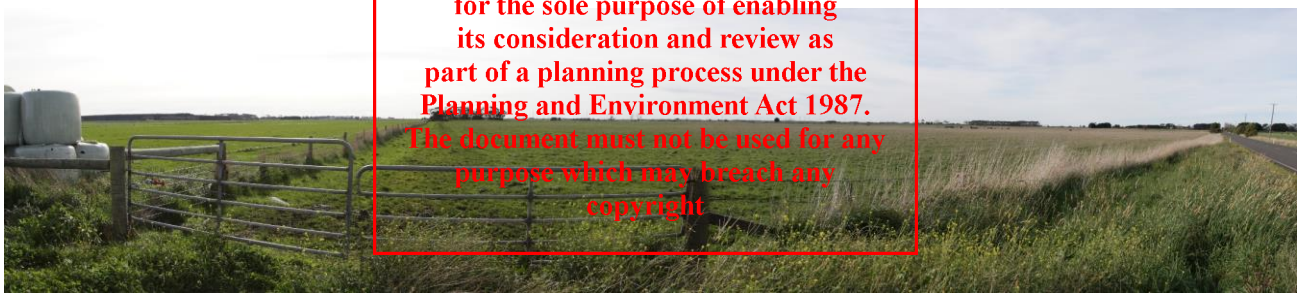


Figure 7-12 Viewpoint 9 - Existing view looking north-east

Viewpoint 9 is taken from a section of Tarrone Lane where a break in roadside vegetation allows for clear views across farmland towards the Project.

The Project would be partially screened by existing vegetation. At a distance of approximately 5.2km the Project, where visible would not be a dominant element in the view.

For these reasons, the overall visual impact would be **Negligible**.

Table 7-9: Viewpoint 9 summary table

VIEWPOINT 9 – TARRONE LANE #1 (GPS 54H 599808, 5769835)			
Distance	5.2km SW	**Viewer type and numbers**	Local Road - Low
Landscape Unit	Unit 1 – Cleared Flat Farmland	**Sensitivity**	Low
OVERALL VISUAL IMPACT	**NEGLIGIBLE**		

7.10 VP10 – Tarrone Lane #2

Viewpoint 10 is located on Tarrone Lane approximately 1.7km west of the intersection with Faulkners North Road.

The closest Project site boundary is approximately 3.9km north-east.

Figure 7-13 shows the view looking north-east.

Cumulative Considerations

The existing Tarrone Terminal Station and transmission lines are visible through a break in vegetation central to the image.

Turbines from the proposed Willatook Wind Farm would be visible through breaks in vegetation from this location.

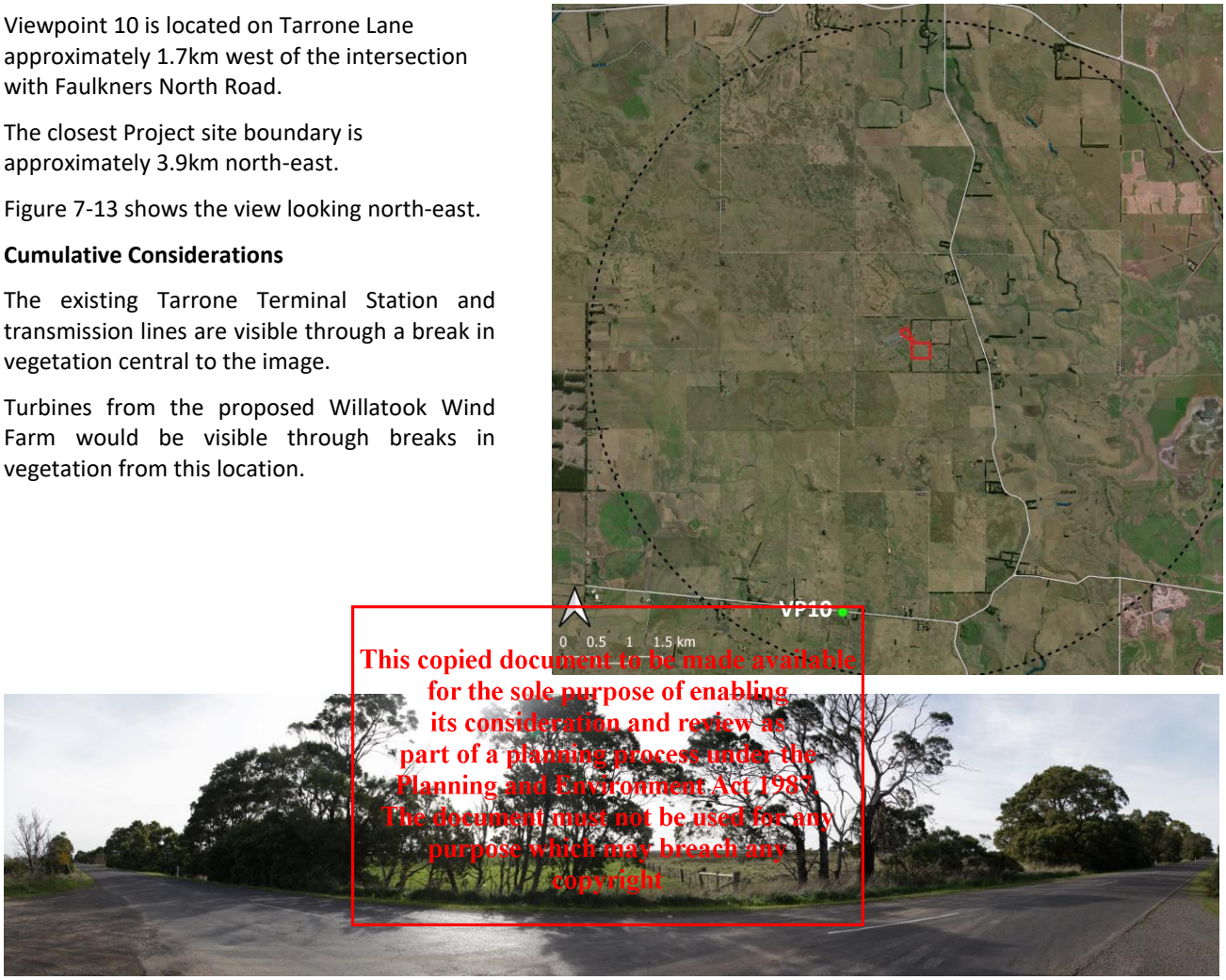


Figure 7-13 Viewpoint 10 - Existing view looking north-east

Viewpoint 10 is taken along Tarrone Lane showing the filtering effects of existing roadside vegetation. Views through this section would be filtered and screened by existing vegetation. A narrow break in vegetation allows for views to the existing Tarrone Terminal Station.

Views through this section would be perpendicular to the direction of travel. At this distance the Project if visible would not be a dominant element in the view.

For these reasons, the overall visual impact would be **Negligible-Nil**.

Table 7-10: Viewpoint 10 summary table

VIEWPOINT 10 – TARRONE LANE #2 (GPS 54H 602676, 5769534)			
Distance	3.9km NE	**Viewer type and numbers**	Local Road - Low
Landscape Unit	Unit 1 – Cleared Flat Farmland	**Sensitivity**	Low
OVERALL VISUAL IMPACT	**NEGLIGIBLE-NIL**		

7.11 VP11 – Tarrone North Road #6

Viewpoint 11 is located on Tarrone North Road approximately 420m north of the intersection with Tarrone Lane.

The closest Project site boundary is approximately 3.2km north-west.

Figure 7-14 shows the view looking north-west.

Cumulative Considerations

The existing Tarrone Terminal Station and transmission lines are visible central to the image.

The proposed Willatook Wind Farm would be visible from this location.

The proposed Hawkesdale Wind Farm turbines have the potential to be visible to the north-east.

The proposed Tarrone Gas-Fired Power Station would likely be visible from this location.

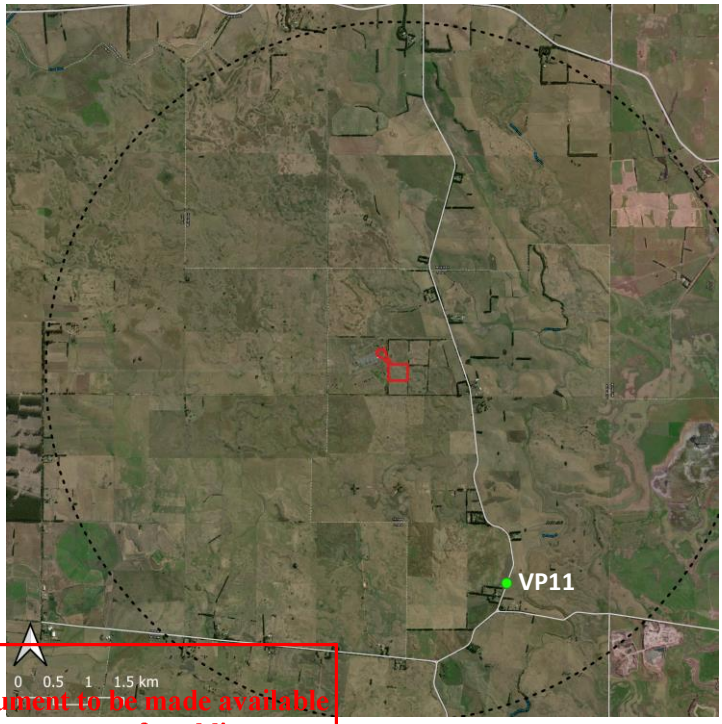


Figure 7-14 Viewpoint 11 - Existing view looking north-west

Viewpoint 11 is taken from a section of the Tarrone North Road where the Project is theoretically visible. The Project would be screened by the existing vegetation surrounding the dwelling seen central to the view.

For these reasons, the overall visual impact would be **Nil**.

Table 7-11: Viewpoint 11 summary table

VIEWPOINT 11 – TARRONE NORTH ROAD #6 (GPS 54H 605397, 5770482)			
Distance	3.2km NW	**Viewer type and numbers**	Local Road - Low
Landscape Unit	Unit 3 – Lava Flows: Farmland and stony-rises	**Sensitivity**	Low-Moderate
OVERALL VISUAL IMPACT	**NIL**		

7.12 VP12 – Tarrone North Road #7

Viewpoint 12 is located on Tarrone North Road approximately 550m south of the intersection with Riordans Road.

The closest Project site boundary is approximately 1.2km north-west.

Figure 7-15 shows the view looking north-west.

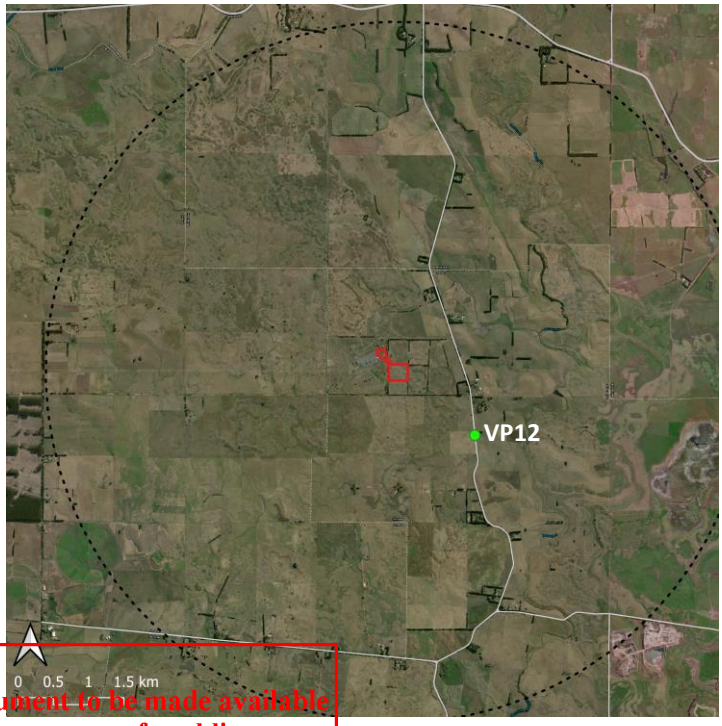
Cumulative Considerations

The existing Tarrone Terminal Station and transmission lines are visible central to the image.

The proposed Willatook Wind Farm would be visible from this location.

The proposed Tarrone Gas-Fired Power Station would likely be visible from this location.

The proposed Hawkesdale Wind Farm turbines have the potential to be visible to the north-east. The recently installed Ryan Corner and Hawkesdale Wind Farm transmission line is located to the right the image.



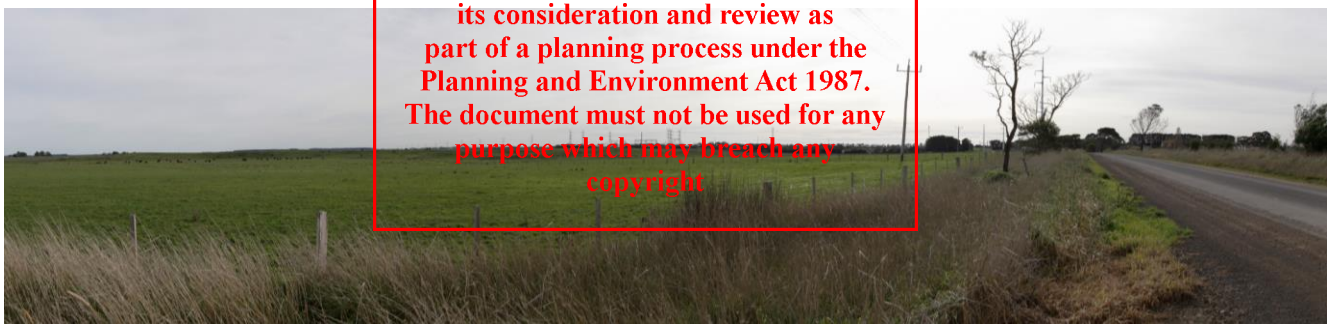


Figure 7-15 Viewpoint 12 - Existing view looking north-west

Views to the north-west are over the stony-rises landscape character resulting from the Mount Rouse lava flow. The existing Tarrone Terminal Station is visible central to the view. The Project would be located in front of the Tarrone Terminal Station.

The Project would be partially filtered by existing vegetation along the northern side of Riordans Road. Parts of the Project would be visible above and through sections of this vegetation. Although visible, at a distance of approximately 1.2km the Project would not be a dominant element in the view. For these reasons, the overall visual impact would be **Negligible**.

Table 7-12: Viewpoint 12 summary table

VIEWPOINT 12 – TARRONE NORTH ROAD #7 (GPS 54H 604944, 5772583)			
Distance	1.2km NW	**Viewer type and numbers**	Local Road - Low
Landscape Unit	Unit 3 – Lava Flows: Farmland and stony-rises	**Sensitivity**	Low-Moderate
OVERALL VISUAL IMPACT	**NEGLIGIBLE**		

7.13 Landscape Mitigation

The previous section has demonstrated that the Project would be largely screened or filtered by existing vegetation surrounding the Project. There are no views that were assessed as having a higher visual impact than Low. For these reasons, landscape mitigation of the Project would not be required.

8. Conclusion

The majority of the Project site and surrounding study area are located within the Farming Zone. There are no designated views or sites of significance within the study area. Views of the Project would be limited to local roads within the Farming Zone surrounding the Project.

The preceding assessment has shown that the Project would be predominantly screened from views by existing topography and vegetation surrounding the Project and within the surrounding study area. Where visible the Project with the tallest element being the module batteries at approximately 3.6m in height would not be a dominant element in the view.

Further, the Project will be connected to the Tarrone Terminal Station via an underground 132kV transmission line, not adding any overhead connections.

Appendix A. Wireframe

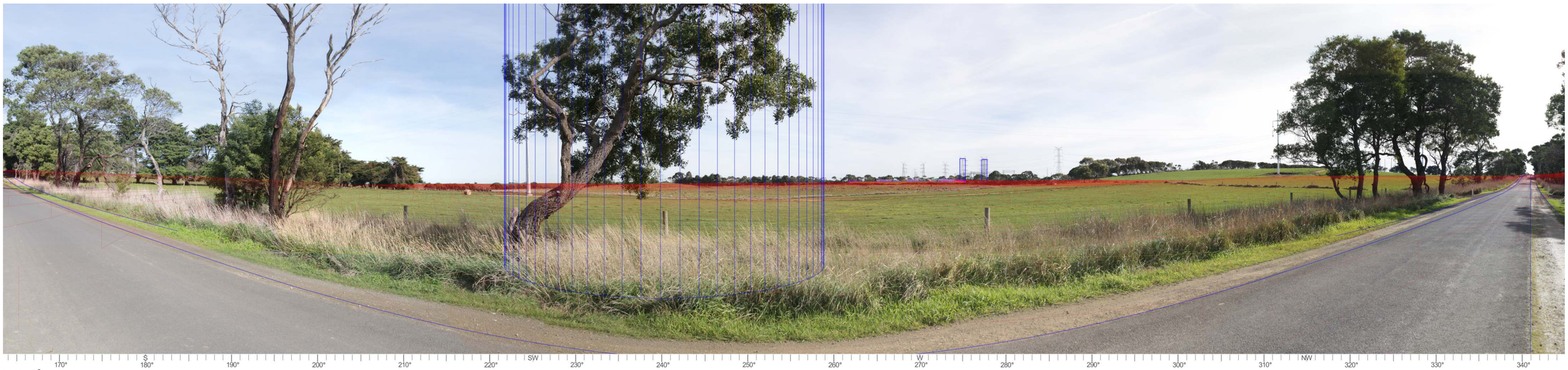
TARRONE BESS

VIEWPOINT 5

View looking south though north-west

(GPS 54H 604794, 5773491)

Existing view



Wireframe

See Sheet 2

Viewpoint Map

TARRONE BESS - VIEWPOINT 5
COORDINATES: 54H 604794, 5773491
SHEET: 1/2 DATE: 29/08/2023

Distance to nearest site boundary: Approximately 800m west
Based on GPG Plan BESS_GPG_AU_TAR_001 Rev 2 (up to 204 individual BESS Modules)

aela.

TARRONE BESS

VIEWPOINT 5

View looking west

(GPS 54H 604794, 5773491)

Existing view

Wireframe

TARRONE BESS - VIEWPOINT 5

COORDINATES: 54H 604794, 5773491

SHEET: 2/2 DATE: 29/08/2023

Distance to nearest site boundary: Approximately 800m west

Based on GPG Plan BESS_GPG_AU_TAR_001 Rev 2 (up to 204 individual BESS Modules)

aela.