



# **Acknowledgement of Country**

East Gippsland Shire Council acknowledges the Gunaikurnai, Monero and the Bidawel people as the Traditional Custodians of this land that encompasses East Gippsland Shire, and their enduring relationship with country. The Traditional Custodians have cared and nurtured East Gippsland for tens of thousands of years.

Council value their living culture and practices and their right to self-determination. Council pays respect to all Aboriginal and Torres Strait Islander people living in East Gippsland, their Elders, past, present, and future.

# **Council information**

East Gippsland Shire Council live streams, records and publishes its meetings via webcasting (youtube.com/c/EastGippyTV) to enhance the accessibility of its meetings to the broader East Gippsland community.

These recordings are also archived and available for viewing by the public or used for publicity or information purposes. At the appropriate times during the meeting, any members of the gallery who are addressing the council will have their image, comments or submissions recorded.

No other person has the right to record Council meetings unless approval has been granted by the Chair.

In line with the *Local Government Act* 2020, Councillors are able to attend Council meetings electronically or in person and the meetings will be open to the public via livestreaming.

Members of the public are invited to view the Council Meeting livestreamed by following the link on Council's website or Facebook page.

## Councillors

Cr Tom Crook (Mayor)

Cr Jane Greacen OAM (Deputy Mayor)

Cr Arthur Allen

Cr Sonia Buckley

Cr Mark Reeves

Cr Trevor Stow

Cr Mendy Urie

Cr Kirsten Van Diggele

Cr John White

## **Executive Leadership Team**

Fiona Weigall Acting Chief Executive Officer Wayne Richards Acting General Manager Assets and Environment Sarah Johnston General Manager Business Excellence Stuart McConnell General Manager Place and Community

# Purpose of Council meetings

- (1) Council holds scheduled meetings and, when required, unscheduled meetings to conduct the business of Council.
- (2) Council is committed to transparency in decision making and, in accordance with the *Local Government Act 2020*, Council and Delegated Committee meetings are open to the public and the community are able to attend.
- (3) Meetings will only be closed to members of the public, in accordance with section 66 of the Act, if:
  - (a) there are clear reasons for particular matters to remain confidential; or
  - (b) a meeting is required to be closed for security reasons; or
  - (c) it is necessary to enable the meeting to proceed in an ordinary manner.
- (4) A meeting closed to the public for the reasons outlined in sub-rule 3(b) or 3(c) will continue to be livestreamed. In the event a livestream is not available:
  - (a) the meeting may be adjourned; or
  - (b) a recording of the proceedings may be available on the Council website.

#### Governance Rules

A copy of East Gippsland Shire Council's governance rules can be found at https://www.eastgippsland.vic.gov.au/council/council-policies

## Councillors pledge

As Councillors of East Gippsland Shire Council, we solemnly and sincerely declare and affirm that we will consider each item on this agenda in the best interests of the whole municipal community.

# **Vision**

East Gippsland is an inclusive and innovative community that values our natural environment, puts community at the centre of Council decision-making, and creates the conditions in which communities can thrive.

# **Our Strategic Objectives**

- 1. An inclusive and caring community that respects and celebrates diversity.
- 2. Planning and infrastructure that enriches the environment, lifestyle, and character of our communities.
- 3. A natural environment that is managed and enhanced.
- 4. A thriving and diverse economy that attracts investment and generates inclusive local employment.
- 5. A transparent organisation that listens and delivers effective, engaging and responsive services.

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#### 1 Procedural

#### 1.1 Recognition of Traditional Custodians

East Gippsland Shire Council acknowledges the Gunaikurnai, Monero and the Bidawel people as the Traditional Custodians of this land that encompasses East Gippsland Shire, and their enduring relationship with country. The Traditional Custodians have cared and nurtured East Gippsland for tens of thousands of years.

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- 1.2 Apologies
- 1.3 Declaration of Conflict of Interest
- 1.4 Confirmation of Minutes

That the minutes of the Council Meeting held Tuesday 12 December 2023 be confirmed.

#### 1.5 Next Meeting

The next Council Meeting is scheduled be held on Tuesday 27 February 2024 at the Corporate Centre, 273 Main Street Bairnsdale commencing at 6.00 pm

- 1.6 Requests for Leave of Absence
- 1.7 Open Forum
- 1.7.1 Petitions
- 1.7.2 Questions of Council
- 1.7.3 Public Submissions
- 1.8 Items for Noting
- 2 Notices of Motion
- 3 Deferred Business
- **4 Councillor and Delegate Reports**

## **5 Officer Reports**

#### 5.1 Place and Community

5.1.1 Planning Permit Application - 5.2018.32.3 - 550 Metung Road,

Metung - Use and development of the land for racing dog

husbandry (excluding racing dog training) - Amendment to permit

Authorised by General Manager Place and Community

#### **Conflict of Interest**

Officers preparing this report have no conflict of interest to declare.

#### **Executive Summary**

An application to amend planning permit 5.2018.32.2 (formerly 32/2018/P/A) at 550 Metung Road, Metung has been lodged with Council. The application (**Attachment 1**) requests modification to conditions of the permit to increase the number of racing dogs permitted to be kept from 16 to 34 (increase by 18), and to endorse new plans, including for a larger new secure kennel building.

The application is assessed as being exempt from notice and review by third parties. However, there have been many complaints received by Council since the use was established in 2017 and continuing after the previous permit was granted and implemented.

Having considered the East Gippsland Planning Scheme and its relevant polices and provisions, the recommendation from Officers is to issue a Notice of Decision to refuse to amend a permit. The recommendation considers the suitability of the proposal in relation to particular requirements for racing dog husbandry in the Planning Scheme, contrasted against the ongoing complaints regarding the existing approved use.

With uncertainty regarding the ability of the use to be managed in a way that prevents unreasonable noise, it is not appropriate to increase the intensity of the use on the land.

#### Officer Recommendation

#### That Council:

- 1. receives and notes this report and all attachments pertaining to this report; and
- 2. being the Responsible Authority and having considered all the relevant planning matters, determines that Planning Permit Application 5.2018.32.3 to amend Permit 5.2018.32.2 (formerly 32/2018/P/A) for Use and development of the land for racing dog husbandry (excluding racing dog training) at 550 Metung Road, Metung is inconsistent with the requirements and objectives of the East Gippsland Planning Scheme and therefore resolves to issue a Notice of Decision to Refuse to Amend a Permit by:
  - including a second secure kennel building (shed) for up to 24 dogs (restricted by overall limit imposed by permit condition);
  - modifying permit conditions 12 and 14 to permit increasing the number of dogs permitted from 16 to 34, excluding puppies up to 6 months of age; and
  - revised landscape plan, management plan, and waste management plans to be considered;

#### for the following reasons:

- a. the proposal is inconsistent with the planning policy framework, specifically 13.05 Noise and 13.07 Amenity, human health and safety;
- b. the proposal is considered likely to increase amenity impacts on residents of the locality:
- the proposal to expand the use and development is considered to be incompatible with adjoining and nearby sensitive land uses (residential development); and
- d. the proposal is considered likely to increase negative effects on human health.

#### **Background**

#### Subject Site

550 Metung Road, Metung, is a rural allotment of 40.03 hectares. The land features gently rolling hills. The existing development, including a dwelling, horse stables, the shed, and the existing racing dog husbandry facility, are shielded from view from most of the adjacent road networks and neighbouring properties by the topography of the land and established vegetation.

The land is accessed from Metung Road, with a good quality rural gravel crossover and driveway established. The dwelling and shed were constructed with the appropriate building permits.

The site is shown in locality context in *Figure 1*. Land to the east (south of Nungurner Road) is zoned Low Density Residential. To the north of Nungurner Road, and to the north, south and west of the property the land is zoned Farming Zone 1. To the south of Hardys Road, the land is also zoned Low Density Residential Zone.



Figure 1. The site (550 Metung Road, Metung) in locality context

#### Permit History

The landowners applied in April 2017 for a Permit to Keep More Than Allowed Animals under the Shire's General Local Law. The landowners were not informed of any planning permit requirements at this time. Enforcement action was commenced following dog barking complaints being received by the Development Compliance and Community Laws officers. The enforcement letter provided that the use and development could be approved under a planning permit, however an application was required which would require assessment.

In August 2017, the State Government published the *Planning requirements for racing dog keeping and training* (Department of Environment, Land, Water and Planning, August 2017), and also amended the planning scheme via VC139 to implement new provisions for racing dog keeping and training in relevant planning schemes.

The amendment introduced Clause 53.12 to the East Gippsland Planning Scheme, and the original application was made in relation to this provision. VC148 Gazetted on 31 July 2018 clarified that a proposal for racing dog keeping was exempt from notice and review if the Planning requirements are met.

After April 2017, the landowners took time to prepare an application as they were advised that the Planning requirements would come into effect as part of the East Gippsland Planning Scheme.

In early 2018, Council received a planning permit application to use and develop land for racing dog keeping. The application related to the kennel facilities which had been established and were primarily outdoor.

The assessment undertaken in relation to the application was that the Planning requirements were not met as a result of the construction methods and noise attenuation standards not being met. Notice was given, and there were several objections received. The application was amended to improve the construction and noise attenuation methods, following a planning consultation meeting.

Council considered the application at its 13 November 2018 meeting and resolved to issue a Notice of Decision to grant a permit subject to conditions. This determination was appealed to VCAT, with the case being heard in June 2019.

In August 2019, VC159 amended the planning provisions, including terms and definitions that had been relied upon in the case. Further submissions were made to VCAT by Council and the other parties. Specifically, there was clarification required in relation to the parent land use term being updated to racing dog husbandry which also included racing dog training, where the application had always been premised on not providing for racing dog training on the land.

The application was determined finally on 28 October 2019. In the order, the Tribunal outlined the reasons for the determination, and altered the proposed permit conditions. The full reasons and conditions are available: <u>Hunter v East Gippsland SC [2019] VCAT 1174</u> (28 October 2019).

Subsequent to the planning permit being granted, a request was made by the permit applicant to have plans endorsed that provided for a single secure building rather that outside kennels being used to meet the planning permit requirements. This necessitated an amendment to plans and the permit conditions, and was considered under delegation, the officers having clarified that the original application should have been exempt from notice and the Tribunal not making a determination that only the Tribunal could amend the permit.

The permit was therefore amended in January 2020, and construction of the secure building commenced soon after. Shortly after, the Covid19 pandemic resulted in work from home and stay at home directions being in place, and the inspections required under the permit were not considered to be essential work. This delayed resolution of the permit conditions.

In this time, complaints continued from the objectors, and further queries resulted in barking dog diaries being filled out by the landowner. Objectors refused to participate, as they had become frustrated with the ongoing disturbance.

#### **Compliance Activity**

In late 2021 and early 2022, the ongoing complaints resulted in the Manager Planning arranging for further inspection of the property and acoustic monitoring by a suitably qualified acoustic engineer. The result of the investigation was one area of non-compliance with the permit conditions, but also revealed significant noise exceedance (above EPA guidelines for overnight noise) emanating from the property in the broader landscape.

Council required the non-compliance issue (door rating) to be fixed, and the works were carried out in early 2022 to Council's satisfaction.

This did not result in a decrease in the detriment claimed by affected persons, and complaints continue to be received.

#### Proposal to amend the permit

The landowners continue to engage in racing dog husbandry activities as a hobby and desire to expand the number of dogs able to be kept on the land. They cite the provisions of the Planning requirements, which allow up to 50 racing dogs on land in the Farming Zone, subject to a rate of 10 racing dogs per hectare. On the subject land, being 40 hectares, 50 racing dogs meet the facility scale objective. The permit restricted the number to 16, excluding puppies.

The landowners, with the assistance of their architect, made an initial request to construct a new building to provide a secure building for 18 additional dogs. The application was assessed as being in contravention of the permit conditions, and therefore officers suggested the approach of amending the existing permit, to consider the appropriateness of varying the permit condition which relates to the use of the land.

Therefore, the application to amend the permit (*Attachment 1*) relates to:

- including a second secure kennel building (shed) of 11.7m x 17.140m, with kennels for up to 24 dogs (occupied only under the proposed increase in number of dogs) (see *Figure 2*);
- modifying permit conditions 12 and 14 to permit increasing the number of dogs permitted from 16 to 34, excluding puppies up to 6 months of age; and
- revising the landscape, management, and waste management plans accordingly.

The original amendment request was modified during the assessment of the application to amend the permit. The original proposed building was larger than 200 square metres in area and would have also triggered the Erosion Management Overlay. The currently assessed plans demonstrate a building less than 200 square metres in area, which no longer triggers the Erosion Management Overlay.

The plans show kennel numbers in excess of one per permitted dog. The reason for this is that puppies were being kept, but not contained within the existing secure building. The additional secure building would resolve the issue of puppies being kept outside a secure building, and potentially reduce the overall amenity impact of the use.

#### **Current Status**

The current application to amend the permit has been assessed as being compliant with the *Planning requirements for racing dog keeping and training.* As such, the proposal is exempt from notice to affected landowners and review of Council's decision by third parties.

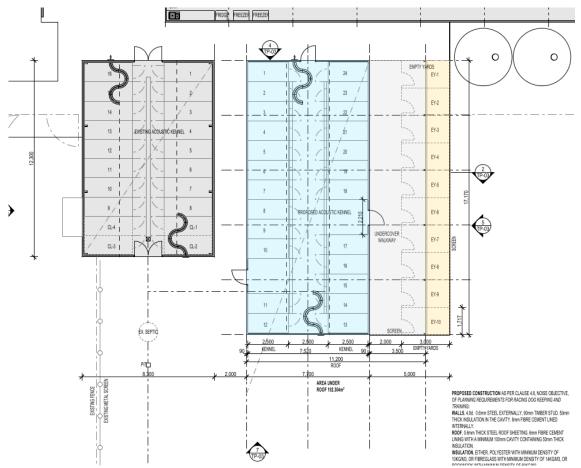


Figure 2: Proposed new shed floor layout in relation to existing building

Notwithstanding the notice exemption, Council has made the previous objectors aware of the proposal, and a number of submissions have been made to officers and Councillors, which have been considered in making the recommendation.

#### Legislation

The implications of this report have been assessed and are not considered likely to breach or infringe upon the human rights detailed in the Victorian Government's Charter of *Human Rights and Responsibilities Act* 2006.

In preparing this report the Victorian *Gender Equality Act* 2020 has been considered. The implications of the report have been assessed and are compliant with the obligations and principles of the *Gender Equality Act* 2020.

Planning and Environment Act 1987 and the East Gippsland Planning Scheme

The application is made and assessed under the *Planning and Environment Act* 1987 (the Act) and associated regulations. Policy and controls applicable are established under the East Gippsland Planning Scheme.

Planning policy relating to the proposal generally seeks to:

- Direct development to appropriately zoned and serviced land;
- Protect residential amenity; and
- Ensure that amenity impact is not unacceptable or unreasonable.

The key aspect of decision making in relation to this matter will be to ensure that the application has appropriately addressed all the purposes and objectives of the Zone, and Particular Provisions relating to the subject site and immediate surrounds.

#### East Gippsland Planning Scheme

The policy, standards, and decision guidelines are summarised below to inform Council of the scope of considerations which are made in the detailed Planning Scheme assessment.

#### Planning Scheme Controls and decision criteria

The following is a summary of the controls applicable to the assessment.

Scheme Part	Detail	Relevance
Zone	35.07 Farm Zone (Schedule 1)	A permit is required use (35.07-1) and develop (35.07-4) land for racing dog husbandry.
Overlay	44.04 Erosion Management Overlay	The proposed additional buildings and works are exempt under the schedule to the zone.
Particular Provisions	53.12 Racing dog husbandry	An application to use land or construct a building or construct or carry out works, for racing dog husbandry under a provision of a rural zone must comply with Planning requirements for racing dog keeping and training (Department of Environment, Land, Water and Planning, August 2017).

#### Planning Policy Framework

13.05 Noise

#### 13.05-1S Noise management

#### **Objective**

To assist the management of noise effects on sensitive land uses.

#### Strategy

Ensure that development is not prejudiced and community amenity and human health is not adversely impacted by noise emissions.

Minimise the impact on human health from noise exposure to occupants of sensitive land uses (residential use, child care centre, school, education centre, residential aged care centre or hospital) near the transport system and other noise emission sources through suitable building siting and design (including orientation and internal layout), urban design and land use separation techniques as appropriate to the land use functions and character of the area.

#### Policy guidelines

Consider as relevant:

• The noise requirements in accordance with the Environment Protection Regulations under the Environment Protection Act 2017.

#### Policy documents

Consider as relevant:

- Environment Protection Regulations under the Environment Protection Act 2017
- Noise Limit and Assessment Protocol for the Control of Noise from Commercial, Industrial and Trade Premises and Entertainment Venues (Publication 1826, Environment Protection Authority, May 2021)
- Environment Reference Standard (Gazette No. S 245, 26 May 2021)

# 13.07 Amenity, Human Health and Safety 13.07-1S Land use compatibility Objective

To protect community amenity, human health and safety while facilitating appropriate commercial, industrial, infrastructure or other uses with potential adverse off-site impacts. **Strategies** 

- Ensure that use or development of land is compatible with adjoining and nearby land uses
- Avoid locating incompatible uses in areas that may be impacted by adverse off-site impacts from commercial, industrial and other uses.
- Avoid or otherwise minimise adverse off-site impacts from commercial, industrial and other uses through land use separation, siting, building design and operational measures.
- Protect commercial, industrial and other employment generating uses from encroachment by use or development that would compromise the ability of those uses to function safely and effectively.

#### **Policy documents**

Consider as relevant:

• Recommended separation distances for industrial residual air emissions (Publication 1518, Environment Protection Authority, March 2013).

#### Planning Policy Framework Assessment

In Hunter v East Gippsland, the Tribunal highlighted the above policy positions, commenting:

#### Key planning policies

- 32. There is little specific policy guidance for racing dog husbandry but there are a number of broader policy themes that are of relevance to the determination of the issues in this proceeding.
- 33. Noise abatement policies at clause 13.05-1S have an objective to 'assist the control of noise effects on sensitive land uses'.
- 34. Strategies ask that use or development should not prejudice community amenity by noise emissions, 'using a range of building design, urban design and land use separation techniques as appropriate to the land use functions and character of the area'.
- 35. A policy document to be considered as relevant is the Interim Guidelines for Control of Noise from Industry in Country Victoria (Environment Protection Authority, 1989).
- 36. I note that the EPA's website advises that these interim guidelines have been superseded by the Noise from Industry in Regional Victoria Guideline (EPA publication 1411) in October, 2011.
- 37. I have considered both of these documents. However, I give the greatest weight to the noise related guidance provided in the Planning requirements for racing dog keeping and training because it provides more specific guidance and unlike either the interim guidelines and its successor are not incorporated in the planning scheme.

Like the Tribunal, the *Planning requirements for racing dog keeping and training* have been considered to have significant weight, and it is not contested that on the basis of the *Planning requirements for racing dog keeping and training alone*, the proposal to amend the permit should be approved. However, the context of the impact of intensification must be considered. In particular, the Tribunal noted:

67. I agree with the council's submission that the location of the proposal relative to surrounding dwellings is not a favourable attribute and that a location further west might have been preferable. However, I must base my assessment on this proposal before me. On balance, I find that the particular attributes of this proposal combined with its relatively modest intensity will allow it to be absorbed into its surrounds without unreasonable effects on identified strategic, agricultural and landscape values.

The application to amend the permit, however, is a more intense use and development of the land and is considered in light of the existing detriment reported through consistent complaints from the public. It is considered that the proposal to increase the intensity of the use and development fails to achieve the policy objectives of 13.05 and 13.07.

#### 35.07 FARMING ZONE

#### **Purpose**

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.

#### 35.07-4 Buildings and works

A permit is required to construct or carry out any of the following:

- A building or works associated with a use in Section 2 of Clause 35.07-1. This does not apply to:
  - An alteration or extension to an existing building used for agriculture provided the floor area of the alteration or extension is not more than the area specified in a schedule to this zone or, if no area is specified, 200 square metres. Any area specified must be more than 200 square metres. The building must not be used to keep, board, breed or train animals.
- A building which is within any of the following setbacks:
  - The setback from a Transport Zone 2 or land in a Public Acquisition Overlay if the Head, Transport for Victoria is the acquiring authority and the purpose of the acquisition is for a road specified in a schedule to this zone or, if no setback is specified, 50 metres.

#### 35.07-6 Decision guidelines

Before deciding on an application to use or subdivide land, construct a building or construct or carry out works, in addition to the decision guidelines in Clause 65, the responsible authority must consider, as appropriate:

#### General issues

- The Municipal Planning Strategy and the Planning Policy Framework.
- Any Regional Catchment Strategy and associated plan applying to the land.
- The capability of the land to accommodate the proposed use or development, including the disposal of effluent.
- How the use or development relates to sustainable land management.
- Whether the site is suitable for the use or development and whether the proposal is compatible with adjoining and nearby land uses.
- How the use and development makes use of existing infrastructure and services.

Agricultural issues and the impacts from non-agricultural uses

- Whether the use or development will support and enhance agricultural production.
- Whether the use or development will adversely affect soil quality or permanently remove land from agricultural production.
- The potential for the use or development to limit the operation and expansion of adjoining and nearby agricultural uses.
- The capacity of the site to sustain the agricultural use.
- The agricultural qualities of the land, such as soil quality, access to water and access to rural infrastructure.
- Any integrated land management plan prepared for the site.

#### Design and siting issues

- 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.

#### SCHEDULE 1 TO CLAUSE 35.07 FARMING ZONE

#### 1.0 Subdivision and other requirements

	Land	Area/ Dimensions/ Distance
Maximum floor area for which no permit is required to alter or extend an existing building used for agriculture (square metres)	None specified	None specified
Minimum setback from a road (metres).	A Transport Zone 2 or land in a Public Acquisition Overlay if:  • The Head, Transport for Victoria is the acquiring authority; and • The purpose of the acquisition is for a road.	100 metres
Minimum setback from a boundary (metres).	Any other boundary	5 metres
Minimum setback from a dwelling not in the same ownership (metres).	Any dwelling not in the same ownership	100 metres

#### Farming Zone 1 - Assessment

The proposal is a section 2 use of the land, and the amendment relates specifically to buildings and works associated with the section 2 use, as well as changes to the use restrictions (maximum number of dogs).

It has previously been determined by VCAT that the use of the land is appropriate, however the impact of the intensification of the use must be considered in relation to general amenity. When assessing use, the requirements of the Guidelines are taken into account, and supersede any other general amenity consideration of the zone. As such, the proposal is considered to be an appropriate use of the land in the zone.

In *Hunter v East Gippsland*, the Tribunal specifically removed the ability for the responsible authority to consider increasing the number of dogs without a formal amendment to the permit. Officers believe that this was intentional for the responsible authority to critically assess the request in relation to amenity impacts of a more intense proposal.

The decision guidelines of the zone are therefore considered. Specifically, the general guideline of, "Whether the site is suitable for the use or development and whether the proposal is compatible with adjoining and nearby land uses."

Officers note the ongoing and continuous complaints from the public since the use commenced, with concerns continuing despite the completion of works approved in January 2020.

The landowners have admitted through the assessment of the application that puppies have been excluded from the secure building, and housed instead in the kennels which were initially constructed and retained after the development of the secure building. These kennels do not carry the same construction standards. Without constant monitoring at significant ratepayer expense, it is difficult to confirm the link between the ongoing noise complaints and the puppies.

In its current form, the application to increase the number of dogs cannot satisfy the decision guidelines. The proposal is considered to be likely to cause detriment to the amenity of the locality, resulting in complaints of interrupted sleep due to persistent and frequent howling dogs in early morning hours (typically 3-4am).

#### Planning requirements for racing dog keeping and training

An assessment of the proposal in relation to the *Planning requirements for racing dog keeping and training* has been made, and the finding is that the proposal meets the objectives of the *Planning requirements for racing dog keeping and training*.

The objectives and assessment thereto are provided below:

Objective Requirement	Assessment
<ul> <li>3.0 Application requirements</li> <li>An application must be accompanied by the following information, as appropriate: <ul> <li>A layout plan, drawn to scale and fully dimensioned showing:</li> <li>the boundaries and dimensions of the site</li> <li>adjoining roads</li> <li>the applicable setbacks specified in Table 1 to approved measure 4.2.1</li> <li>the layout of existing and proposed buildings and works, including, kennels, fences, yards, tracks and waste treatment areas</li> <li>existing and proposed landscape areas.</li> </ul> </li> <li>Elevation drawings to scale showing the height, colour, construction and <ul> <li>materials of all proposed buildings and works, including screening.</li> </ul> </li> <li>A written statement describing how the objectives specified in Clause 4.0 of the planning requirements are met</li> </ul>	The layout plan provided is sufficient and the setback distances noted include dwellings within 500 metres of the proposed new building.  The elevations plans are sufficient, save for any demonstration of contour/slope/cut and fill. The revised plans from November 2023 address this by attesting that there will be no cut/fill more than 1 metre from natural ground level.  The written statement provided (Attachment 1) is sufficient for assessment.

#### 4.0 Objectives and approved measures

This clause contains:

**Objectives**: An objective describes the outcome to be achieved by the proposed racing dog facility.

**Approved measures:** An approved measure is an approach, action, practice or method that meets the objective.

#### An application:

- must meet all of the objectives of this clause; and
- should meet all of the approved measures of this clause.

An application that meets all the approved measures for an objective is deemed to comply with the objective.

The responsible authority may consider an alternative measure if the applicant can demonstrate that the relevant objective can still be met.

Under objective 4.8 (Noise objective) the approved measure specifies an RW rating that meets the objective. A number of kennel construction methods and materials can be used instead of the RW rating to meet the objective. An RW rating is a measure of the acoustic separation (as determined in a laboratory) provided by a single building element. Where an approved measure specifies an RW rating, one of the following is required to demonstrate compliance:

- a laboratory acoustic test report for the proposed construction; or
- an acoustic opinion provided by a suitably qualified acoustic consultant

Objective Requirement	Assessment
4.1 Facility scale objective	Complies
To ensure the scale of a racing dog facility	The applicant requests amending permit
does not adversely impact the amenity of the	condition to increase the number of dogs
surrounding area.	from 16 to 34 (18 increase). The land is 40
Approved measure	hectares and is zoned Farming Zone.
4.1.1 The number of racing dogs on the land	
must not exceed:	The maximum number of dogs permitted
- 50 in the Farming Zone, and	under this objective is 50.
- 10 racing dogs per hectare.	
4.2 Setback objective	Property Boundaries:
To ensure the racing dog facility is	All kennels, spelling yards, exercise yards,
appropriately set back from boundaries and	and rearing/puppy yards will be located more
neighbouring dwellings to minimise its	than the minimum setback from a property
impact on the character and amenity of the	boundary.
surrounding area.	
Approved measure	Separation from dwellings in separate
4.2.1 The setback distances specified in	ownership:
Table 1 must be met.	The maximum setback requirement of 100
	metres is more than achieved as shown in
	Figure 3.

#### **Table 1: Setback distances**

Type of racing dog facility	Minimum distance from the property boundary (measured from the external edge of the racing dog facility)	Minimum distance from a dwelling in separate ownership (measured from the external edge of the racing dog facility to the external edge of the dwelling)
Kennel, where the total number of racing dogs housed in one or more		
kennels is:		
- up to 5	1.5 m	10 m
- 6 to 20	10 m	50 m
- more than 20	10 m	100 m
Spelling yard for:		
- up to 5 racing dogs	1.5 m	10 m
- more than 5 racing dogs	10 m	50 m
Rearing/puppy yard	10 m	50 m
Exercise yard	25 m	100 m
Slipping track	5 m	50 m



**Figure 3**: Setback 100m (radius of annotated circles) from closest dwellings in separate ownership (Source: Intramaps)

Objective Requirement	Assessment
4.3 Visual amenity objective	Complies
To ensure that buildings are constructed of materials and finishes that minimise their impact on	The existing development is constructed of
the visual amenity of the surrounding area.	colorbond metal cladding, in grey tones. The
Approved measure	visual impact of the existing and proposed
4.3.1 Building materials must be non-reflective and finished in natural colours and tones of	development is minimal in the landscape.
surrounding vegetation, soil and rocks.	This has been assessed from several
	vantage points around the land (Hardys
A A Landa anima ahia ativa	Road, Currawong Court, Metung Road).
4.4 Landscaping objective	Complies
To ensure that views of buildings from adjacent roads and dwellings on neighbouring properties are screened to minimise their impact on the visual amenity of the surrounding area.	Landscaping as required by the approved measure has been established and
Approved measure	additional planting for the proposed building
4.4.1 Buildings visible from adjacent roads and dwellings on neighbouring properties must be	is also demonstrated in the proposed plans.
screened by a 1.5 metre wide strip of vegetation with a height of at least 1.2 metres when fully	is also demonstrated in the proposed plans.
mature.	
4.5 Fencing and gates objective	Complies
To ensure that adequate fencing and gates are provided to prevent escape of racing dogs.	The proposed plans demonstrate compliance
Approved measures	with the fencing and gates objective.
4.5.1 Any area where a racing dog is kept must be enclosed by secure fencing and gates with a	
height of at least 1.5 metres above ground level.	
4.5.2 Any area where a racing dog is trained must be enclosed by secure fencing and gates with	
a height of at least 1.2 metres above ground level.	
4.6 Screening objective	Complies
To ensure that any area where a racing dog is kept is appropriately screened to minimise	The proposed plans demonstrate compliance
barking as a result of external activity.	with the approved measure.
Approved measure	
4.6.1 Fencing around the area where a racing dog is kept must be covered in a material that	
screens the animal's outward view.	
The screening must be: - to a height of at least 1.2 metres above ground level; and	
	1
- non-reflective and finished in natural colours and tones of surrounding vegetation, soil, rocks	

Objective Requirement	Assessment
4.7 Site management objective	Complies
To ensure the management of the racing dog facility minimises its impact on the amenity of the	The permit conditions imposed on the parent
surrounding area.	permit provide that the dogs must be fed
Approved measures	inside a secure building if fed between 6pm
4.7.1 A racing dog must only be fed outside a secure building if:	and 7am. The requirement applies because
- it is fed at least 500 metres from any dwelling in separate ownership and the boundary of any land in a residential zone; or	the setback to dwellings in separate ownership is less than 500 metres.
- it is fed between the hours of 7am and 6pm.	·
4.7.2 A racing dog must only be trained outside a secure building if:	Training of racing dogs was explicitly
- it is trained at least 500 metres from any dwelling in separate ownership and the boundary of	excluded from what the permit allowed, and
any land in a residential zone; or	no request has been made to alter this
- it is trained during daylight hours.	exclusion.
4.8 Noise objective	Complies as below
To ensure the design, construction and use of a kennel minimises noise impacts on adjoining	_
properties.	
Approved measures	
4.8.1 The kennel must be:	Complies
<ul> <li>located more than 500 metres from any dwelling in separate ownership and the boundary</li> </ul>	The kennels will be constructed in such a
of any land in a residential zone; or	manner as to comply with objective 4.8.1. as
constructed in accordance with the following requirements:	follows:
Wall construction	Complies
A kennel wall must be:	Wall construction will be 110mm solid block
<ul> <li>constructed to achieve a minimum R<sub>W</sub>50 rating; or</li> </ul>	work to R <sub>W</sub> 50 rating.
constructed of one of the following:	
a. minimum 110 millimetre brickwork	
b. minimum 100 millimetre concrete panels	
c. minimum 140 millimetre hollow concrete blocks	
d. materials comprising a minimum:	
<ul> <li>0.6 millimetre steel or 6 millimetre fibre cement sheet; and</li> </ul>	
<ul> <li>90 millimetre timber or steel studs; and</li> </ul>	
<ul> <li>50 millimetre thick insulation in the cavity; and</li> </ul>	
6 millimetre fibre cement sheet, 13 millimetre thick plasterboard or 18 millimetre	
thick plywood.	

Objective Requirement	Assessment
Roof and ceiling construction A kennel roof and ceiling must be: constructed to achieve a minimum R <sub>W</sub> 45 rating; or constructed with:  • minimum 0.6 millimetre thick steel roof; and • minimum 6 millimetre thick fibre cement or 13 millimetre thick plasterboard ceiling; and • a minimum cavity of 100 millimetres between the ceiling and the roof; and • minimum 50 millimetre thick insulation in the cavity.	Complies Roof and ceiling construction will be 100mm concrete to R <sub>w</sub> 50 rating.
Cavity insulation Insulation for a kennel wall or roof cavity must be:  • polyester insulation with a minimum density of 10 kilograms per cubic metre; or  • fibreglass insulation with a minimum density of 14 kilograms per cubic metre; or  • rockwool with a minimum density of 60 kilograms per cubic metre.	Complies There will be no cavities to walls or roofing.
External doors  An external kennel door must be located in a wall facing away from the nearest dwelling in separate ownership and must be:  • constructed to achieve a minimum R <sub>w</sub> 30 rating; or  • constructed to meet the following:  o the door must be hinged and constructed of a minimum 40 millimetre thick solid core; and  o compressible seals positioned around the door perimeter consisting of a polyurethane foam core or rubber compressible strip (not a brush, open cell foam or felt type seal); and  o an airtight drop seal for the door bottom (not a brush type seal); and  o if the door contains a vision panel, the panel must be a minimum 10.38 millimetres thick laminated single glazing; and  o if the door contains glass, the glass must be set and sealed in an airtight non-hardening sealant or a soft elastomer gasket.	Complies External doors will be 40mm solid core construction hinged to block work.  A compressible seal will form the entire perimeter of the door.  No vision panels will be incorporated within the kennels.
Glazing Kennel glazing must be located on the roof or in a wall facing away from the nearest dwelling in separate ownership and must be:  • constructed to achieve a minimum R <sub>w</sub> 36 rating; or • constructed to meet the following:	No response, no glazing proposed.

Objective Requirement	Assessment
o be a minimum 10.38 millimetres thick; and	
<ul> <li>comprise less than 20 per cent of the area of the wall or roof that it is located in;</li> <li>and</li> </ul>	
<ul> <li>if operable, be hinged (awning-style) and fitted with compressible acoustic seals around the perimeter, consisting of a polyurethane foam core or rubber compressible strip (not a brush, open cell foam or felt type seal).</li> </ul>	
Ventilation	Complies
Kennel ventilation, including intake and exhaust air openings, ductwork, pipes, conduits or the like, must be:	The kennels will be ventilated by installing a baffled sound vent to the door with the
<ul> <li>constructed to achieve a minimum R<sub>w</sub>40 rating; or</li> </ul>	capacity to have the required minimum air
constructed to meet the following:	changes.
<ul> <li>be located in a wall facing away from the nearest dwelling on another property, or on the roof; and</li> </ul>	
<ul> <li>be restricted in size to the minimum required to achieve the necessary air change rate; and</li> </ul>	
<ul> <li>be ducted from the opening in the kennel wall or roof with rigid ductwork for a minimum length of 2 metres incorporating at least two 90-degree bends; and</li> </ul>	
<ul> <li>be internally lined with minimum 50 millimetre thick, 32 kilogram per cubic metre</li> </ul>	
insulation, with a perforated foil facing with an open area of at least 10%; and	
<ul> <li>be caulked or filled with mortar.</li> </ul>	

#### Recommendation

The Planning Officers, having considered the proposal in accordance with the relevant policies and zone, and with special consideration given to the prior VCAT decision, find that the proposal, although compliant with the Planning requirements, fails to adequately protect the neighbouring residential development from unreasonable amenity impact from noise, as demonstrated by the history of noise complaints and recorded impact on comfort and disturbed sleep over nearly a seven year period, including following completion of the now established secure building.

As such, it is recommended that a Notice of Decision to refuse to amend the permit is issued.

#### **Collaborative procurement**

Not applicable

#### **Council Plan**

This report has been prepared and aligned with the following strategic objectives set out in the Council Plan 2021-2025:

Strategic Objective 2: 2.1 Statutory and strategic planning for land use delivers sustainable outcomes that balance the need for growth with the enhancement of our lifestyle, character, the built and natural environment.

#### **Council Policy**

In accordance with Council's *Planning Delegations Policy* 2023, the application has been called-up by three Councillors for determination.

#### **Options**

Council may consider the following options in making a determination on the application:

- Adopt the officer recommendation to issue a Notice of Decision to refuse the amendment. The determination may be challenged by the applicant. No other parties are able to join the matter at VCAT due to the exemption from review by third parties.
- Defer the matter and direct officers to continue negotiations with the permit applicant in relation to buildings and works and or increase in number of dogs that would balance noise concerns and cost viability in relation to additional secure buildings. This has the potential to resolve noise concerns but cannot be forced on the applicant.
- 3. Issue the amended permit as per the application, increasing the number of dogs permitted to 34 and endorsing the proposed plans. This option may or may not resolve the ongoing noise complaints from the public. The determination can only be appealed in relation to conditions being set but is relatively straightforward procedurally.

#### Resourcing

#### Financial

The recommendation does not result in any financial contribution by Council. An appeal against the determination recommended will be managed by officers.

Plant and equipment

Nil required.

**Human Resources** 

Assessment of the application to amend the permit is by officers of Council.

Risk

The risks of this proposal have been considered and it is considered that the amenity impacts communicated to Council over six and a half years warrants the recommendation. Approval of the proposed amendment may worsen the existing condition and increase litigation against Council.

#### **Economic**

The recommendation does not have a broad or community economic impact. Personal economic impacts may arise from the recommendation.

#### Social

The recommendation has considered social impact in relation to general amenity and noise.

Gender Impact Statement

The planning consideration is not considered to be influenced by or having an impact in relation to gender.

#### **Environmental**

Waste disposal arrangements relating to the proposal are subject to a waste management plan and requirements relating to an existing on-site wastewater disposal system, regulated under the Environment Protection Act.

Climate change

This report has been prepared and aligned with the following Climate Change function/category:

Land Use Planning: Consideration is given to climate change in the local land use planning and includes responses to direct and indirect impacts.

#### **Engagement**

The application is considered to be exempt from notice and review under the provisions of the Planning Scheme at Clause 53.12-2. No formal notice under s52 of the Act is allowed.

Notwithstanding this restriction, Council has received regular correspondence and enquiries from the public, including objectors/applicants for review against the 2018 determination. The majority of the correspondence relates to ongoing and frequent incidents of howling dogs in the early hours of the morning, resulting in broken sleep, loss of enjoyment of property, and other ailments.

Although the responsible authority cannot verify the claimed human health impacts, there has been sufficient consistency to the complaints over time to warrant additional caution in relation to the proposal to expand the facility.

#### **Attachments**

1. Amended Application Material [5.1.1.1 - 13 pages]

#### **East Gippsland Shire Council**

273 Main Street (PO Box 1618) Bairnsdale VIC 3875 Website www.eastqippsland.vic.qov.au Email feedback@eqipps.vic.qov.au Follow us on Twitter @egsc



Telephone: (03) 5153 9500 Fax: (03) 5153 9576 National Relay Service : 133 677 ABN: 81 957 967 765

## **Application to Amend a Planning Permit**

#### Applicant details:

Name: PETER & MONIQUE	E WHERAN				
Business trading name (if applicable):	7				
Email address:					
Postal address:	METUNG	VIC			
			Postcode	39	04
Phone number: Home:	Work:	Mobile	;		
Owners details (if not the applicant):		1		di .	65
Name:					
Business trading name (if applicable):					
Email address:					
Postal address:					
			Postcode		
Phone number: Home:	Work:	Mobile	:		
Property details:					
Street number: 550 S	Street name: METUNG	ROAD			
Town: METUNE			Postcode	30	04
Lot Number:	n 🗌 Title plan 🔲 Plan of Subdiv	/ision	Number:		
Crown allotment number:	Secti	on numbe	r:		
Parish/Township name:					
Planning permit number to be amended:	32/2018/P/A				
Is there any encumbrance on the Title su agreement or other obligation such as ar		on 173	☐ Yes	X	No
Will the proposal result in a breach of a ragreement?	egistered covenant restriction or		☐ Yes	X	No

Privacy Statement

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JULY 2023

## **East Gippsland Shire Council**

273 Main Street (PO Box 1618) Bairnsdale VIC 3875 Website www.eastgippsland.vic.gov.au Email feedback@eqipps.vic.qov.au



Telephone: (03) 5153 9500 Fax: (03) 5153 9576 National Relay Service : 133 677 ABN: 81 957 967 765

Description of amendment: Describe the an evelopment):  REFER ANA		
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16. La Cara Ja		
you need more space or have more inform	nation, please attach with thi	is form.
lease make sure that:		
Form is filled in fully and signed		
The correct fee is paid or payment enclo	osed	
Attached any supporting information or		
<b>Needed</b> - Title (must have been general Amended plans	ted within the past 30 days)	
Supporting information/reports (e.g. – La Geotechnical report/waiver)	and Capability Assessment,	Bushfire Management Statement,
eclaration:		
We agree that all information on this form i lans. Any documents submitted with this iewing and copies can be made for interes	application, including plans,	, will be made available for public
Applicant signature		
	AR ARMHIETER	Date: 7 / 7 / 2023
lame: PATRICK CARSON - S (AGNETY OF OWNER	all lengillens	

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JULY 2023



2940 Council1.doc 31st March 2023

Mr R Pringle Land Use Planner East Gippsland Shire Council Via RobertP@egipps.vic.gov.au

Dear Robert.

RF. Planning Application Number: 23/2023/P. Proposed Acoustic Kennel, 550 Metung Road, Metung

We have received your letter dated 24th February 2023 and reply below.

In relation to the permit 32/2018/P/A and the existing limit of 16 racing dogs (exclusive of puppies), we understand that the advice Council are providing is that an amendment to this permit would have been better than a new permit application. It is unfortunate that this wasn't raised during or after our pre-application meetings.

Regarding item 2, (4.4 landscaping objective), the addition of vegetation to the scope is easily achievable and the drawings can be amended accordingly.

On page two of your letter, in paragraph one, it states that Council 'continue to receive reports of howling dogs affecting the sleep of residents of the locality'. As discussed in the pre-application meeting with Martin Richardson, you and me, the purpose of the additional acoustic kennel was to mitigate any potential noise generation by the puppies, which are not required to be housed in the existing acoustic kennel. It would appear that by not allowing the additional structure Council would rather leave the puppies outside as they are, is this correct?

Paragraph two refers to the acoustic engineer Council engaged in 2022 to review the facility. Can Council confirm that the acoustic readings were taken on/within the boundaries of 550 Metung Road, and if so that any noise generated by livestock (cattle) was not included in the readings? As EPA regulations 2021 SR No. 47/2021, 117 (1)(c)(x) states that livestock on farms or saleyards must not be taken into account, and there are livestock on this property. Further, can Council confirm that noise generated by other dogs in the area were isolated and not taken into account? It is our understanding that acoustic readings were taken externally to the 550 Metung property, it is also our understanding that there are other dogs that reside, both permanently and temporarily, within audible distance of this property. We can't agree with your statement that Council has 'exhausted all reasonable methods' to appease noise complaints, by using this acoustic report without confirming the above ambiguities.

What we're proposing is far above what is reasonable for the keeping of racing dogs in Victoria, it addresses any potential future noise complaints relating to this property, as any racing dog or puppy that is barking between 10pm-6am will be inside an acoustic kennel. It would appear that despite meeting or exceeding the objectives, Council officers have taken it upon themselves to not support it.

As discussed in the pre-application meeting, our client has other properties that are suitable for racing dog keeping, and were going to apply for planning on an neighbouring site. It was agreed in that meeting that it would be Council's preference to consolidate on the existing site, therefore this application is in direct response to advice received from Council.

We would appreciate some clarification on the above prior to making any decisions as to the best way of proceeding.

Yours sincerely,



SI AP ARCHITECTS Patrick Carson

CC: P&M Whelan via whelanclan@hotmail.com



2940 Council3.doc 18th Dec 2023

Mr R Pringle Land Use Planner East Gippsland Shire Council Via RobertP@egipps.vic.gov.au

Dear Robert.

RE: Amended Planning Application for 32/2018/P/A and Respnse to RFI dated 18th September 2023. For the Proposed second Acoustic Kennel, 550 Metung Road, Metung

Thank you for your emails of 18th and 19th September 2023 requesting further information and seeking clarification on how we're proposing to meet the Noise objectives 4.8

We have amended the size of the proposed acoustic kennel down to be less than 200m2 so that it doesn't trigger the EMO/permit requirement. We can also confirm that the existing site is not sloping to a degree that would require excavation/ earthworks greater than 500mm from natural ground level - i.e. less that the 1 metre trigger.

Regarding the 4.8 guidelines Noise Objectives, it was our intention to adhere explicitly to those prescribed in the guidelines. The amended drawings have been updated to reflect that.

Should you require any additional information, please let me know.

Yours sincerely,

SLAP ARCHITECTS Patrick Carson

CC: P&M Whelan via whelanclan@hotmail.com

# **PLANNING APPLICATION REPORT**

PROPOSED SECOND SECURE ACOUSTIC KENNEL, 550 METUNG ROAD **METUNG** 

#### Planning Report – 550 Metung Road, Metung

#### **Contents**

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2.0	Subject Land & Surrounding Context	2
3.0	The Proposal	2
3.1	Objectives - relating to the Planning Requirements for racing dog keeping and training	3
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Slap Architects – Planning Application Report
Proposed Acoustic Kennel Block at 550 Metung
Road, Metung
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17.11.2023

Planning Report – 550 Metung Road, Metung

#### 1.0 Introduction

This planning report is prepared in support of the proposed Amended Planning Application for 550 Metung Road, Metung 32/2018/P/A. This report addresses the provisions outlined within the *Planning Requirements for racing dog keeping and training*, Aug 2017 as issued by the Victorian Government.



Aerial image. Source: Google Maps

#### 2.0 Subject Land & Surrounding Context

The subject land is zoned Farming Zone (FZ) and is described as Lot 1, PS 625179U, Parent title volume 10370 Folio 230. The land is irregular in shape with an area of 40.03 hectares. The Eastern boundary abuts Metung Road.

#### 3.0 The Proposal

The application seeks approval to amend the existing permit for:-

- 1No. additional new acoustic kennel (a Secure Building) providing accommodation for 24No. separately housed dogs.
- Acoustic Construction that meets or exceeds the requirements in the Planning Requirements for racing dog keeping and training.
- Providing colorbond screening to the proposed Secure Building.

The application seeks endorsement to amend the permit to include a second Secure Building as detailed on the attached drawings TP-01, TP-02 and TP-03. This proposal will enable not only the existing 16No., but an additional 18No. racing dogs to be accommodated. It will also accommodate pups overnight should they need to be. The proposed 24No. pen Acoustic Kennel Block is a *secure building* and is proposed to be constructed exactly as per the requirements outlined in the *Planning Requirements for racing dog keeping and training* with 90mm timber stud frame, acoustic insulated

Slap Architects – Planning Application Report
Proposed Acoustic Kennel Block at 550 Metung
Road, Metung
Page 2 of 4

17.11.2023

Planning Report – 550 Metung Road, Metung

walls, with 6mm fibre cement sheet lining internally and 0.6mm sheet metal cladding externally, insulated 0.6mm sheet metal roof with a and fibre cement ceiling and acoustic swing doors.

The proposal seeks approval to increase the number of racing dogs allowed on this property from 16No. to 34No. (Complying development allows up to 50No. racing dogs on a property of this size, excluding dogs under 6 months old, as described in the *Planning Requirements for racing dog keeping and training,* under section 5.0 *Meaning of terms used in this document*, "*Puppy* means a *racing dog* or offspring of a *racing dog* less than 6 months old"). To further mitigate noise emanating from this property, this proposal seeks approval for an acoustic kennel large enough in size that will allow up to 16No. puppies to be accommodated overnight. As discussed in the pre-application meeting, it was agreed that extending the current approved acoustic kennel facilities on this property was preferred to establishing a new facility on an adjoining or alternative property.

The applicant understands, as outlined in the *Planning Requirements for racing dog keeping and training*, under section 4.7 *Site Management Objective*, 4.71 & 4.72: A racing dog must only be fed/trained outside a secure building if, it is fed between the hours of 7am and 6pm daily, refer attached Management Plan.

# 3.1 Objectives - relating to the Planning Requirements for racing dog keeping and training

- 4.1 Facility Scale Objective. 4.1.1 Approved measure requires
  - 50No. or less for a farming Zone.
  - 10 racing dogs per hectare (site is over 40 Ha).
  - This application is to increase from 16No. to 34No.
- 4.2 **Setback** Objective. 4.2.1 Approved measure:
  - Kennel Minimum distance from the property boundary 10m. and to a dwelling in separate ownership 100m, this application is 89m to the nearest boundary and 163.5m to the nearest dwelling.
  - Spelling Yard distance from the property boundary 10m. and to a dwelling in separate ownership 50m, this application is greater as outlined above.
- 4.3 **Visual Amenity** 4.3.1 Approved measure requires non reflective natural tones, this application has 1.5m high, non reflective sheet metal screening to the East and Southern facades, and a non reflective metal roof to match the adjacent kennel roof.
- 4.4 **Landscaping** Objective 4.4.1 Approved measure requires a 1.5m wide strip of vegetation that reaches 1.2m when mature. The existing landscaping will meet or exceed these objectives.
- 4.5 **Fencing** and **Gates**, the proposed fencing and gates will exceed the objectives of 1.2m by being 1.5m in height.

Slap Architects – Planning Application Report
Proposed Acoustic Kennel Block at 550 Metung
Road, Metung
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Planning Report - 550 Metung Road, Metung

- 4.6 **Screening** Objective 4.6.1 Approved measure requires screening of the animal's outward view, be min 1.2m high, be non reflective in natural colours, muted tones and kept in good condition. This application exceeds these objectives as the racing dogs will be kept in the secure building that has no outward viewing capabilities. Furthermore the proposed Empty Yards will be screened with 1.5m high non reflective sheet metal, exceeding the objectives of both 4.4 and 4.6.
- 4.7 **Site Management** Objective 4.7.1 Approved measure requires racing dogs to be fed indoors, this application meets this objective, as all racing dogs will be fed inside the Secure Building, which is acoustically insulated.

#### 4.8 Noise Objective 4.8.1 Approved measures:

- Wall construction is proposed to as per approved measure 4.8.1.d, being 0.6mm steel
  externally, 90mm timber studs with 50mm min thick insulation and 6mm fibre cement sheet
  internally meets objective.
- Roof and ceiling construction as per approved measure 4.8.1.d, being Metal Roof 0.6mm thick with 100mm insulation cavity, containing 50mm thick rockwool insulation 60kg/m3 and 6mm Fibre cement ceiling lining - meets objective.
- External doors R<sub>w</sub>30 or, 40mm thick door with compressible acoustic seals and drop seal at the bottom, if a vision panel to be used min 10.38mm laminated glass wet glazed - exceeds objective.
- Glazing R<sub>w</sub>36 No windows proposed exceeds objective.
- Ventilation constructed as per approved measure 4.8.1.d, being rigid ductwork, minimum 2m long with at least 2No. 90 deg bends. Ductwork to have internal perforated (10%) foil faced insulation that is 32kg/m3. All penetrations to be caulked and be facing away from nearest dwelling on an adjoining property - meets objective.

#### 5.0 Meaning of Terms

- The proposed kennel block is both a *Kennel* and a *Secure Building* as applicable to the meanings of these terms.
- Puppy as referenced is a racing dog less than 6 months old.

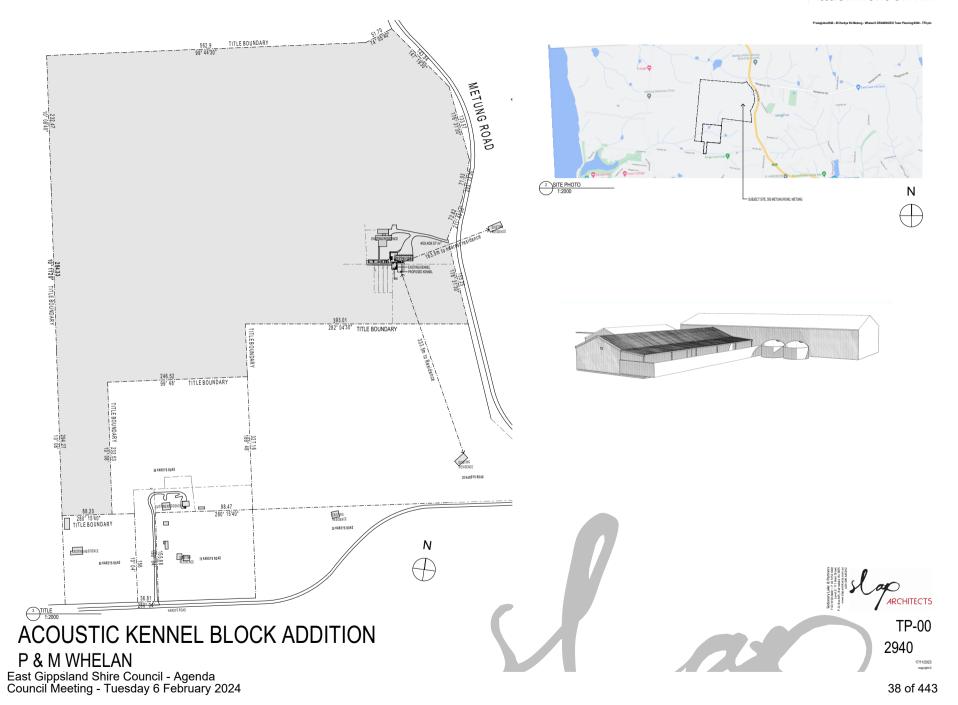
#### 4.0 Conclusion

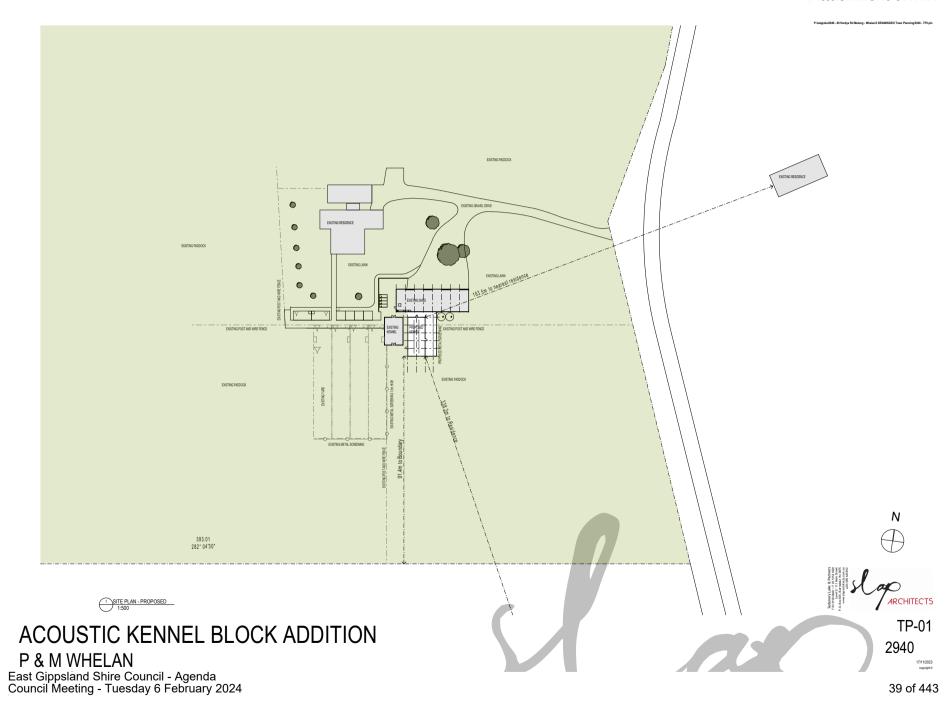
The proposed application seeks to increase the humane accommodation for the racing dogs and their pups. We believe that this proposal provides a superior noise reduction solution than the minimum requirements as prescribed in the Planning requirements for racing dog keeping and training by providing the additional accommodation for the puppies overnight when required to further reduce noise.

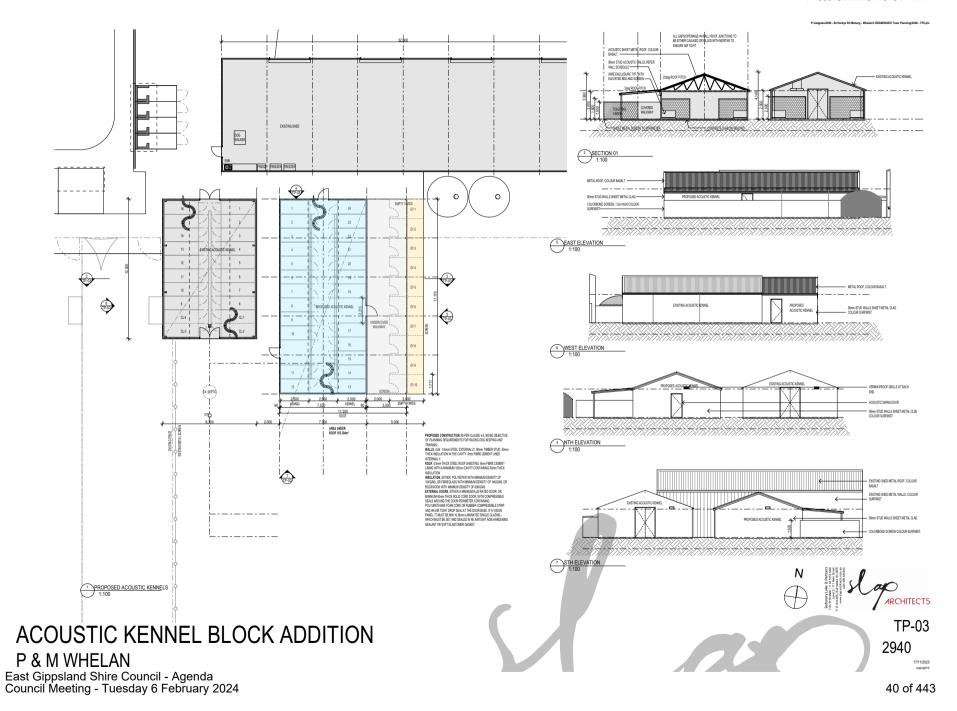
For these reasons, we request that the East Gippsland Shire Council consider the merits of the amended permit application favourably, and resolve to endorse the issued drawings.

Slap Architects – Planning Application Report
Proposed Acoustic Kennel Block at 550 Metung
Road, Metung
Page 4 of 4

17.11.2023







Management Plan - September 2022 Racing Dog Keeping 550 Metung Road, Metung

#### **Health Management Plan**

All dogs housed at the facility are toilet trained to minimise the impact of odours and effluent run off.

Special Temporary holding yards accommodate the puppies during daylight hours for this training phase, and as such it becomes routine for the animals. All solid waste is removed daily to fly proof receptacles and disposed of in the appropriate manner.

All dogs have a health register on the premises, recording illnesses and treatments, including regular vaccinations. Any dogs with an infectious disease issue are quarantined, and treated according to the attending veterinarian.

All dogs are bathed and treated for parasites weekly and pose no threat to other animals or neighbours. All dogs are registered and undergo regular veterinary checks.

All dogs will be fed between the hours of 7-8am and 5-6pm.

If a dog poses a problem with constant barking, they undergo a training routine to minimise this problem. All dogs are walked within the confines of the facility on mechanical walkers or on a leash and therefore do not pose a threat to other animals or the amenity of neighbours.

The proposed acoustic secure building will be treated at regular intervals from the invasion of pests.

#### **Animal Management**

The racing dogs will be housed, at minimum, in the new acoustic secure building between the hours of 10pm and 7am daily. At some times during the daylight hours of 7am and 6pm, some racing dogs will spend short periods of time in the existing spelling yards (existing non acoustic kennels), for the purposes of having access to sunlight. This will be closely monitored by one of the family members depending on the training/veterinary regime on a dog by dog basis. At other times the racing dogs will remain within the acoustic secure building, however the doors will be left open (between 7am and 6pm weather permitting).

The existing non acoustic kennels will only be used for short term spelling in daylight hours. At no time will these be used for any other purpose.

If a situation arises whereby the facility is unattended, all of the racing dogs will be housed in the secure acoustic buildings with the doors shut for the duration, to minimise any effect to the amenity of neighbours. As the dogs require twice daily feeding, it is envisaged that time periods where the facility is unattended will be minimal i.e. hours not days.

The second acoustic kennel will provide sufficient accommodation to house the puppies overnight should the need arise to further reduce any noise emissions from the property.

### 5.1.2 Application for Planning Permit - Use and Development of a Solar Energy Facility - 910 Princes Highway, Bairnsdale

Authorised by General Manager Place and Community

#### **Conflict of Interest**

Officers preparing this report have no conflict of interest to declare.

#### **Executive Summary**

An application for Planning Permit has been lodged with the Minister for Planning for the proposed use and development of a renewable energy facility and battery storage facility, utility installation and the removal of native vegetation at 910 Princes Highway, Bairnsdale.

In accordance with Clause 72.01 of the East Gippsland Planning Scheme, the Minister for Planning is the Responsible Authority for use and development of land for an energy generation facility with an installed capacity of one (1) megawatt or greater and for a utility installation used to:

- Transmit or distribute electricity.
- Store electricity if the installed capacity is 1 megawatt or greater.

The application is referred to Council for comment in accordance with Section 52(1)(b) of the *Planning and Environment Act* 1987.

The recommendation is that Council makes a submission to the Minister indicating support for the proposal with comments and recommended conditions. A draft response in accordance with the recommendation is provided at **Attachment 1**.

A summary assessment of the proposal against the relevant planning policy and decision guidelines is included at **Attachment 2**.

Plans and supporting documents for the proposal are included at Attachments 3-11.

#### Officer Recommendation

#### That Council:

- 1. receives and notes this report and all attachments pertaining to this report; and
- 2. provides a submission to the Minister for Planning in relation to the proposed use and development of a renewable energy facility and battery storage facility, utility installation and the removal of native vegetation at 910 Princes Highway, Bairnsdale, indicating support for the proposal with conditions as outlined in Attachment 1.

#### **Background**

In June 2023, Council Officers were advised by the Department of Transport and Planning of a proposal for use and development of a renewable energy facility and battery storage facility, utility installation and the removal of native vegetation at 910 Princes Highway, Bairnsdale.

The proposal was lodged with the Department on 7 June 2023.

On 11 January 2024, Council received formal notice of the proposal indicating that the proposal would not be determined prior to 25 January 2024. Departmental officers have advised that the determination is likely to take some time longer and Council officers have advised that we would not be in a position to make a submission until 12 February, following the first available Council meeting.

#### **Description of the site**

The property at 910 Princes Highway, Bairnsdale consists of approximately 20.8 hectares of cleared grazing land on the north side of the Princes Highway. The land is in the Farming Zone.

The site is located on the western fringe of Bairnsdale between the Princes Highway and the railway line. The site also has frontage to Power Station Road to the west. Physical access to the site is currently provided via informal crossovers to the Princes Highway and Power Station Road leading to access gates.



Figure 1: Locality Plan



Figure 2: Aerial view of the site

#### **Description of the proposal**

The proposal seeks to use and develop the site for the purpose of a solar renewable energy facility with capacity of up to 50MW to generate renewable electricity and a Battery Energy Storage System ("BESS"). The facility is proposed to be connected into the 66kV electricity network via a new connection point across Power Station Road connecting directly into the Bairnsdale substation.

To establish the facility, the proposal also requires the removal of native vegetation from the site to allow for access and the placement of PV panels and associated infrastructure. Access is proposed to be formalised from Power Station Road via the existing crossovers to the north and south of the vegetation strip. An internal driveway network is proposed for through traffic movement across the site for servicing and maintenance.

The site is located adjacent to the Bairnsdale Substation on the opposite side of Power Station Road. A new connection point to this network will be achieved via the establishment of a new underground trenching comprising a 66kV AusNet Feeder. The connection configuration can be achieved without any reconfiguration of the supply network in this area.

The proposed facility is expected to take approximately six months to complete construction. It will operate for a period of up to 30 years, after which it may be subject to further operation, with further upgrades, or decommissioned.

Specifically, the proposal involves the following primary components:

- Solar panels
- Battery energy storage systems
- Power station transformers
- 20m x 6m Switch room (plus external stairs (20m x 7m)
- 66kV Feeder Bay (AusNet owned)
- 10m x 6m Control Room (plus external stairs (10m x 7m)
- 4 x 72,000L water tanks
- Security fencing and gates

Once operational, the facility will involve daily monitoring of plant and all associated infrastructure. Staff will access the site as necessary for monitoring and management of equipment.

Where required, minor repairs and maintenance of components of the facility will be undertaken by either staff or contractors. Other occasional maintenance tasks will include washing panels, controlling grass and weeds on site, maintaining internal access tracks, general waste collection and disposal.

Regular inspections of the site will be carried out to ensure that grassland is managed to reduce the risk of bushfire to surrounding land and to control weeds. Mowing or slashing between rows of PV panels and in the area immediately surrounding the arrays would be carried out as required.

The proposed facility is expected to take approximately six months to complete construction. It will operate for a period of up to 30 years, after which it may be subject to further operation, with further upgrades, or decommissioned.

Plans of the proposal and associated technical reports are included at Attachments 3-11.

Technical reports provided consist of:

- Acoustic Report
- Agriculture Report
- Bushfire Assessment
- Glint and Glare Assessment
- Native Vegetation Report
- Planning Report
- Traffic Impact Assessment
- Visual Impact Assessment

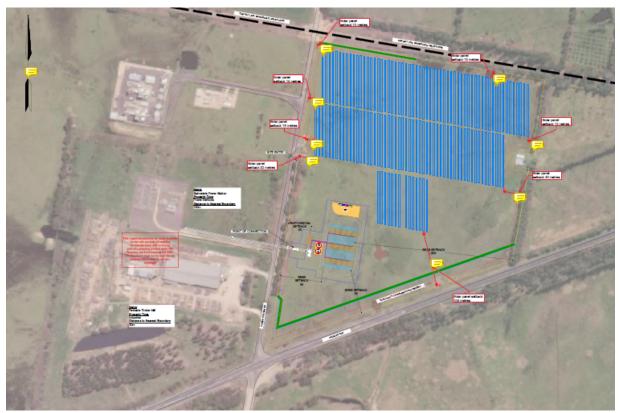


Figure 3: Site plan

#### Planning assessment

The summary assessment against Planning Scheme requirements is included at **Attachment 2**.

Each of the technical reports has been reviewed and the following is a summary of the assessment:

- The proposal is considered appropriate for the proposed location.
- The proposal is broadly consistent with the East Gippsland Planning Scheme.
- The proposal will not have a significant impact on productive agricultural land, the local environment, or amenity.
- There will be a visual impact, particularly when viewed from the Princes Highway. The application documents indicate that a landscape buffer is to be provided along the southern boundary to screen the buildings and works, however this is not evident in the plans submitted. A condition is recommended to require detailed plans of the landscape buffer and its establishment as early as possible prior to the use commencing.
- There are no significant impacts on traffic requiring traffic management measures, unless it is determined by the Department of Transport and Planning that traffic management measures are required for the Princes Highway/Power Station Road intersection.
- The proposed native vegetation removal is consistent with the 'avoid and minimise'
  principle. It is noted that no trees are to be removed, however Appendix 5 of the Native
  Vegetation Report (Photographs of native vegetation to be removed) includes
  photographs of two large trees. It should be confirmed that these trees are not to be
  removed.

It is the view of officers that the proposal will have no substantial impact and is consistent with the Planning Scheme requirements.

#### Legislation

The implications of this report have been assessed and are not considered likely to breach or infringe upon the human rights detailed in the Victorian Government's Charter of *Human Rights and Responsibilities Act* 2006.

In preparing this report the Victorian *Gender Equality Act* 2020 has been considered. The implications of the report have been assessed and are compliant with the obligations and principles of the *Gender Equality Act* 2020. The need for a Gender Impact Assessment has also been assessed. The implications of this report have been assessed and align with the principles and objects of the *Gender Equality Act* 2020.

<u>Planning and Environment Act 1987 and the East Gippsland Planning Scheme</u>
The application is made and assessed under the <u>Planning and Environment Act 1987</u> (the Act) and associated regulations. Policy and controls applicable are established under the East Gippsland Planning Scheme.

In accordance with Clause 72.01 of the East Gippsland Planning Scheme, the Minister for Planning is the responsible authority. The application has been referred to Council for comment in accordance with Section 52 of the *Planning and Environment Act* 1987.

The key aspect of decision making in relation to this matter will be to ensure that the application has appropriately addressed all the purposes and objectives of the Zone, Overlays, and Particular Provisions relating to the subject site and immediate surrounds.

The assessment of the proposal against the provisions of the Planning Scheme is included at *Attachment 2.* 

#### **Collaborative procurement**

Not applicable

#### **Council Plan**

This report has been prepared and aligned with the following strategic objectives set out in the Council Plan 2021-2025:

Strategic Objective 2: 2.1 Statutory and strategic planning for land use delivers sustainable outcomes that balance the need for growth with the enhancement of our lifestyle, character, the built and natural environment.

#### **Council Policy**

There is no established policy with respect of Council responses to applications made where the Minister is the responsible authority under the planning scheme. As there is no policy, the matter is reported to Council for endorsement of a response.

#### **Options**

Council may:

1. Make a submission to the Minister indicating support for the proposal and recommending conditions of approval.

Implications: On the officer's assessment this is the recommended course of action.

2. Make a submission to the Minister objecting to the proposal.

Implications: Council would need to establish valid planning grounds for objection.

3. Not make any submission

Implications: It is considered that Council should make a submission on such a significant proposal and that the community would expect Council to engage in the process.

Option 1 is recommended.

#### Resourcing

Financial

There are no financial implications for Council.

Plant and equipment

Not applicable.

**Human Resources** 

Assessment of the proposal has occurred within Councils human resources.

Risk

The risks of this proposal have been considered and are assessed as being acceptable.

#### **Economic**

The proposal involves a significant investment in the region and there are economic benefits in the shift to renewable energy facilities.

#### Social

There are no social implications of significance.

Gender Impact Statement

The proposal has been assessed as not requiring a Gender Impact Assessment (GIA).

#### **Environmental**

The proposal does not pose any significant environmental impacts. There are substantial environmental benefits of renewable energy facilities.

#### Climate change

This report has been prepared and aligned with the following Climate Change function/category:

Land Use Planning: Consideration is given to climate change in the local land use planning and includes responses to direct and indirect impacts.

#### **Engagement**

As the Minister for Planning is the Responsible Authority, the Department of Transport and Planning has issued public notice instructions. It is understood that letters were sent to landowners in the immediate area in the week commencing 15 January 2024. A public notice was published in the Bairnsdale Advertiser on Wednesday 24 January 2024.

As with any advertised planning application, objections may be lodged, and a decision will not be made prior to 14 days from the last date of public notice.

Council's position is based on an assessment against the Planning Scheme requirements. It is not informed by the views of the community and Council has no way of knowing what those views are. However, members of the community may lodge objections and the Minister is obliged to consider them in making a decision.

#### **Attachments**

- 1. Recommended comments and conditions [5.1.2.1 3 pages]
- 2. Planning assessment [5.1.2.2 6 pages]
- 3. Bairnsdale Solar Farm Plans [5.1.2.3 8 pages]
- 4. Bairnsdale Solar Farm Planning Report [5.1.2.4 66 pages]
- 5. Bairnsdale Solar Farm Acoustic Report [5.1.2.5 19 pages]
- 6. Bairnsdale Solar Farm Agriculture Report [**5.1.2.6** 10 pages]
- 7. Bairnsdale Solar Farm Bushfire Assessment [5.1.2.7 26 pages]
- 8. Bairnsdale Solar Farm Glint and Glare Assessment [5.1.2.8 46 pages]
- 9. Bairnsdale Solar Farm Native Vegetation Report [5.1.2.9 47 pages]
- 10. Bairnsdale Solar Farm Traffic Impact Assessment [5.1.2.10 35 pages]
- 11. Bairnsdale Solar Farm Visual Impact Assessment [5.1.2.11 16 pages]

### PROPOSED USE AND DEVELOPMENT OF A RENEWABLE ENERGY FACILITY AND BATTERY STORAGE FACILITY, UTILITY INSTALLATION AND THE REMOVAL OF NATIVE VEGETATION AT 910 PRINCES HIGHWAY, BAIRNSDALE

#### Comments

East Gippsland Shire Council provides the following comments and recommended conditions for consideration by the Minister for Planning.

The Council is broadly supportive of the proposal.

The proposal is considered appropriate for the proposed location.

The proposal is broadly consistent with the East Gippsland Planning Scheme.

The proposal will not have a significant impact on productive agricultural land, the local environment, or amenity.

There will be a visual impact, particularly when viewed from the Princes Highway. The application documents indicate that a landscape buffer is to be provided along the southern boundary to screen the buildings and works, however this is not evident in the plans submitted. A condition is recommended to require detailed plans of the landscape buffer and its establishment as early as possible prior to the use commencing.

There are no significant impacts on traffic requiring traffic management measures, unless it is determined by the Department of Transport and Planning that traffic management measures are required for the Princes Highway/Power Station Road intersection. The Traffic Impact Assessment Report indicates:

- 1. That specific areas be identified on the site plan to be dedicated to car and truck parking, vehicle manoeuvring and materials storage during the construction phase.
- 2. That detailed design of the new site entry driveway incorporate the relevant aspects of SD 265 of the IDM.

Conditions are recommended to include these requirements.

The proposed native vegetation removal is consistent with the 'avoid and minimise' principle. It is noted that that no trees are to be removed, however Appendix 5 of the Native Vegetation Report (Photographs of native vegetation to be removed) includes photographs of two large trees. It should be confirmed that these trees are not to be removed.

It is noted that the Bushfire Risk Assessment (Nature Advisory, March 2023) includes risk management strategies in accordance with the Design Guidelines and Model Requirements for Renewable Energy Facilities (CFA, 2022). It is recommended a condition be applied requiring a Fire Management Plan to be prepared to the satisfaction of the Responsible Authority, outlining the specific risk management strategies that will be implemented in the design and operation of the facility, including the specific hazards associated with battery storage, whether that be as a result of bushfire or other fires at the facility.

#### **Recommended conditions**

In addition to any conditions as required by the Minister, East Gippsland Shire Council recommends conditions to the following effect:

- Before the use commences, one or two maximum standard sealed rural vehicular crossover/s must be constructed at right angles to the road to suit the proposed driveway to the satisfaction of the Responsible Authority.
- The site is to be drained to the satisfaction of the Responsible Authority.
- 3. Before the commencement of any works associated with the development, a construction management plan to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the plan will be endorsed and will then form part of the permit. The plan must include:
  - Location of areas dedicated to car and truck parking, vehicle manoeuvering and materials storage;
  - Location of any temporary construction works office and machinery storage area;
  - The construction works access way;
  - · Details of construction days and hours;
    - 7am 6pm Monday to Friday
    - 7am 1pm Saturday
    - Public Holidays; only as approved by Council
  - Vehicle and machinery exclusion zones;
  - Location and management requirements of stockpiled soil;
  - Measures and techniques to protect drainage lines and watercourses from sediment runoff from disturbed or under construction areas;
  - Measures and methods to be employed to protect native vegetation;
  - Measures and techniques to adequately manage dust:
  - The location of a machinery and vehicle wash down area and requirements for the ongoing use of the of the machinery and vehicle wash down area by contractors;
  - Location and management of litter storage areas, construction waste areas and chemical storage areas; and
  - Methods of ensuring all contractors are informed of the requirements of the construction management plan and persons responsible for ensuring the construction management plan is adhered to.

All construction works and requirements of the construction management plan must be undertaken and completed in accordance with the endorsed construction management plan to the satisfaction of the Responsible Authority.

- 4. A detailed landscaping plan must be prepared to the satisfaction of the Responsible Authority to implement visual landscape buffers on the boundaries of the site. The landscaping shall be planted at the time of commencement of works and maintained by the applicant to appropriately screen the site from surrounding roads and properties.
- 5. A Fire Management Plan is to be prepared to the satisfaction of the Responsible Authority, outlining the specific risk management strategies that will be implemented in

the design and operation of the facility, including the specific hazards associated with battery storage. The Fire Management Plan is to form part of the endorsed plans.

#### Note 1:

Before undertaking works within a Council road reserve, a non-utility minor works consent of works within road reserve application must be lodged with the Roads and Traffic unit of East Gippsland Shire Council and approved. Refer to the Infrastructure Design Manual (IDM) SD265 for crossover designs. Note also that the location of power poles may affect the design of the new access.

Proposed use and development of a renewable energy facility and battery storage facility, utility installation and the removal of native vegetation at 910 Princes Highway, Bairnsdale

#### East Gippsland Planning Scheme

The policy, standards, and decision guidelines are summarised below to inform Council of the scope of considerations which are made in the detailed Planning Scheme assessment.

#### Planning Scheme Controls and decision criteria

The following is a summary of the controls applicable to the assessment.

Scheme Part	Detail	Relevance
Zone	Farm Zone (Schedule 1)	A permit is required to use (35.07-1) and for buildings and works (35.07-4) for a renewable energy facility.
Overlay	Vegetation protection overlay schedule 1	A permit is required for vegetation removal (42.02-2).
	Design and development overlay schedule 7	A permit is required for buildings and works (43.02-2).
Particular Provisions	Native Vegetation	A permit is required to remove, lop, or destroy native vegetation (52.17-1).
	Renewable energy facility (other than wind energy facility)	53.13 An application under any provision of this planning scheme to use or develop land for a renewable energy facility (other than a wind energy facility) must be accompanied by the prescribed information and considered against the relevant decision guidelines.

#### Planning Policy Framework

Specific policy applies to the application in Clause 19.01 – Energy.

#### 19.01-1S Energy supply

#### Obiective

To facilitate appropriate development of energy supply infrastructure.

#### Strategies

Support the development of energy generation, storage, transmission, and distribution infrastructure to transition to a low-carbon economy.

Develop appropriate infrastructure to meet community demand for energy services.

Ensure energy generation, storage, transmission and distribution infrastructure and projects are resilient to the impacts of climate change.

Support energy infrastructure projects in locations that minimise land use conflicts and that take advantage of existing resources and infrastructure networks.

Facilitate energy infrastructure projects that help diversify local economies and improve sustainability and social outcomes.

Facilitate renewable energy generation and storage to meet on-site energy needs.

#### Policy guidelines

Consider as relevant:

- The long-term emissions reduction target specified in section 6 of Part 2 of the Climate Change Act 2017.
- Interim emissions reduction targets determined under Division 2 of Part 2 of the Climate Change Act 2017.
- Adaptation action plans prepared under Division 2 of Part 5 of the Climate Change Act 2017

Comment: The proposal is consistent with the above strategies and will contribute to the reduction of emissions.

### 19.01-2S Renewable energy Objective

To support the provision and use of renewable energy in a manner that ensures appropriate siting and design considerations are met.

#### Strategies

Facilitate renewable energy development in appropriate locations.

Protect renewable energy infrastructure against competing and incompatible uses. Consider the economic, social and environmental benefits to the broader community of renewable energy generation while also considering the need to minimise the effects of a proposal on the local community and environment.

#### Policy documents

Consider as relevant:

- Policy and Planning Guidelines for Development of Wind Energy Facilities in Victoria (Department of Environment, Land, Water and Planning, November 2021)
- Solar Energy Facilities Design and Development Guideline (Department of Environment, Land, Water and Planning, October 2022)
- Victoria's Climate Change Strategy (Department of Environment, Land, Water and Planning, May 2021)
- Community Engagement and Benefit Sharing in Renewable Energy Development in Victoria (Department of Environment, Land, Water and Planning, July 2021)

Comment: The proposal is consistent with the above objective, strategies and policy documents. It is considered that there would be minimal impact on the community and environment.

The planning scheme includes a much broader range of policy relevant to the determination:

Clause 12 (Environmental and Landscape Values) which refers to the protection of values including biodiversity and any potential impacts the amenity of the landscape. Clause 12.01-15 (Protection of Biodiversity) seeks to protect and enhance Victoria's Biodiversity.

Clause 12.01-25 (Native Vegetation Management) seeks to ensure that there is no net loss to biodiversity as a result of the removal, destruction or lopping of native vegetation.

Clause 12.03-15 (River And Riparian Corridors, Waterways, Lakes, Wetlands And Billabongs) seeks to protect and enhance waterway systems including river and riparian corridors, waterways, lakes, wetlands and billabongs.

Clause 12.05-1 L (Environmentally Sensitive Areas) seeks to protect and enhance environmental, cultural and aesthetic values within East Gippsland.

Clause 12.05-25 (Landscapes) seeks to protect and enhance significant landscapes and open spaces that contribute to character, identity and sustainable environments.

Clause 13.01-15 (Natural Hazards and Climate Change) seeks to minimise the impacts of natural hazards and adapt to the impacts of climate change through risk-based planning. Clause 13.02-15 (Bushfire) seeks to strengthen the resilience of settlements and communities to bushfire through risk-based planning that prioritises the protection of human life. Clause 13.04-25 (Erosion and Landslip) seeks to protect areas prone to erosion, landslip or

other land degradation processes.

Clause 13.05-15 (Noise Management) seeks to assist the management of noise effects on sensitive land uses.

Clause 13.07-15 (Land Use Compatibility) seeks to protect community amenity, human health and safety while facilitating appropriate commercial, industrial, infrastructure or other uses with potential adverse off-site impacts.

Clause 14.01-15 (Protection of Agricultural Land) seeks to protect the state's agricultural base by preserving productive farmland.

Clause 14.01-1L-01 (Protection of Agricultural Land) applies to land located within the farming Zone - Schedule 1 and seeks to:

Clause 14.01-2S (Sustainable Agricultural land Use) seeks to encourage sustainable agricultural land use.

Clause 15.01-65 (Design for rural Areas) seeks to ensure development respects valued areas of rural character.

Clause 15.03-25 (Aboriginal cultural heritage) seeks to ensure the protection and conservation of areas of aboriginal cultural heritage significance.

Clause 19.01-15 (Energy Supply) seeks to facilitate appropriate development of energy supply infrastructure.

Clause 19.01-25 (Renewable Energy) seeks to support provision and use of renewable energy in a manner that ensures appropriate siting and design considerations are met.

Comment: The proposal is considered to be consistent with the above strategies. Subject to the imposition of appropriate conditions, the proposal poses no substantial risks in terms of the environment, hazards, noise, visual impact, land use compatibility, rural character and cultural heritage. The land is not regarded as high value agricultural land and can be converted back to agricultural use in the future.

#### Farming Zone

#### Decision guidelines

Before deciding on an application to use or subdivide land, construct a building or construct or carry out works, in addition to the decision guidelines in Clause 65, the responsible authority must consider, as appropriate:

#### General issues

- The Municipal Planning Strategy and the Planning Policy Framework.
- Any Regional Catchment Strategy and associated plan applying to the land.
- The capability of the land to accommodate the proposed use or development, including the disposal of effluent.
- How the use or development relates to sustainable land management.

- Whether the site is suitable for the use or development and whether the proposal is compatible with adjoining and nearby land uses.
- How the use and development makes use of existing infrastructure and services.

Comment: The proposal is considered to be consistent with the Municipal Planning Strategy and the Planning Policy Framework and the site is capable of accommodating the development without significant impacts.

Agricultural issues and the impacts from non-agricultural uses

- Whether the use or development will support and enhance agricultural production.
- Whether the use or development will adversely affect soil quality or permanently remove land from agricultural production.
- The potential for the use or development to limit the operation and expansion of adjoining and nearby agricultural uses.
- The capacity of the site to sustain the agricultural use.
- The agricultural qualities of the land, such as soil quality, access to water and access to rural infrastructure.
- Any integrated land management plan prepared for the site.

Comment: An Agricultural Impact Assessment has been prepared indicating that the soils are low to moderate quality and unlikely to support intensive cropping. The land will not be significantly compromised given the nature of construction works, and the use can be decommissioned and returned to an agricultural function at the end of its life. 'Agricultural production' as defined by the planning scheme includes "Any form of primary production of renewable commodities." This recognises that establishing land for renewable energy can be established in a manner which is sustainable to the agricultural conditions of rural properties. The development does not include any processes that will impact surrounding agricultural uses or expansion.

#### Environmental issues

- The impact of the proposal on the natural physical features and resources of the area, in particular on soil and water quality.
- The impact of the use or development on the flora and fauna on the site and its surrounds.
- 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 location of on-site effluent disposal areas to minimise the impact of nutrient loads on waterways and native vegetation.

**Comment:** The development is located within an area of the site that avoids the more significant areas of native vegetation (including scattered mature trees).

The proposal does not include significant earthworks or modification of the topography of the land.

#### Design and siting issues

• 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.
- Whether the use and development will require traffic management measures.

Comment: The proposal will have minimal impact on surrounding agricultural uses. There will be a visual impact, particularly when viewed from the highway. The application documents indicate that a landscape buffer is to be provided along the southern boundary to screen the buildings and works, however this is not evident in the plans submitted. A condition is recommended to include the landscape buffer. There are no significant impacts on traffic requiring traffic management measures, unless it is determined by the Department of Transport and Planning that traffic management measures are required for the Princes Highway/Power Station Road intersection.

#### Vegetation Protection Overlay

Decision guidelines

Before deciding on an application, in addition to the decision guidelines in Clause 65, the responsible authority must consider, as appropriate:

- The Municipal Planning Strategy and the Planning Policy Framework.
- The statement of the nature and significance of the vegetation to be protected and the vegetation protection objective contained in a schedule to this overlay.
- The effect of the proposed use, building, works or subdivision on the nature and type of vegetation to be protected.
- The role of native vegetation in conserving flora and fauna.
- The need to retain native or other vegetation if it is rare, supports rare species of flora or fauna or forms part of a wildlife corridor.
- The need to retain vegetation which prevents or limits adverse effects on ground water recharge.
- Any relevant permit to remove, destroy or lop vegetation in accordance with a land management plan or works program.
- Whether the application includes a land management plan or works program.
- Whether provision is made or is to be made to establish and maintain vegetation elsewhere on the land.
- Any other matters specified in a schedule to this overlay.
- The extent to which the vegetation sought to be removed or cleared contributes towards the need to:
  - o Conserve and enhance areas of high conservation value roadside vegetation.
  - o Conserve and enhance fauna habitat and habitat corridors.
  - Protect and enhance the visual amenity and landscape quality in areas of natural beauty and rural areas.
- The need to assess alternative options regarding the removal of vegetation to better achieve the Overlay objectives.
- The need to undertake revegetation with appropriate indigenous species to offset any loss of environmental values resulting from the works or development.
- The need to have regard to the Roadside Management Plan, (East Gippsland Shire Council, 1995) and as updated from time to time.

Comment: The principles of "avoid and minimise" apply to the removal of native vegetation. The proposal involves the removal of 0.383 hectares of native vegetation in patches with no trees to be removed. The original layout would have required the removal of one large tree but has been modified to avoid that and to minimise the vegetation removal. The native vegetation to be removed is not in an area mapped as an EVC.

#### Renewable energy facility

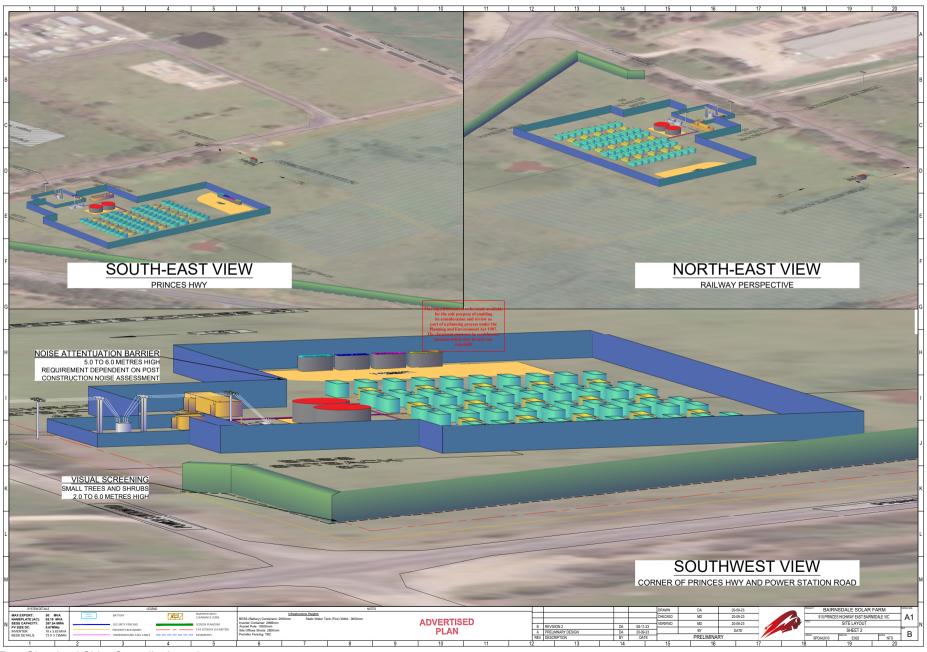
Decision guidelines

Before deciding on an application, in addition to the decision guidelines of Clause 65, the responsible authority must consider, as appropriate:

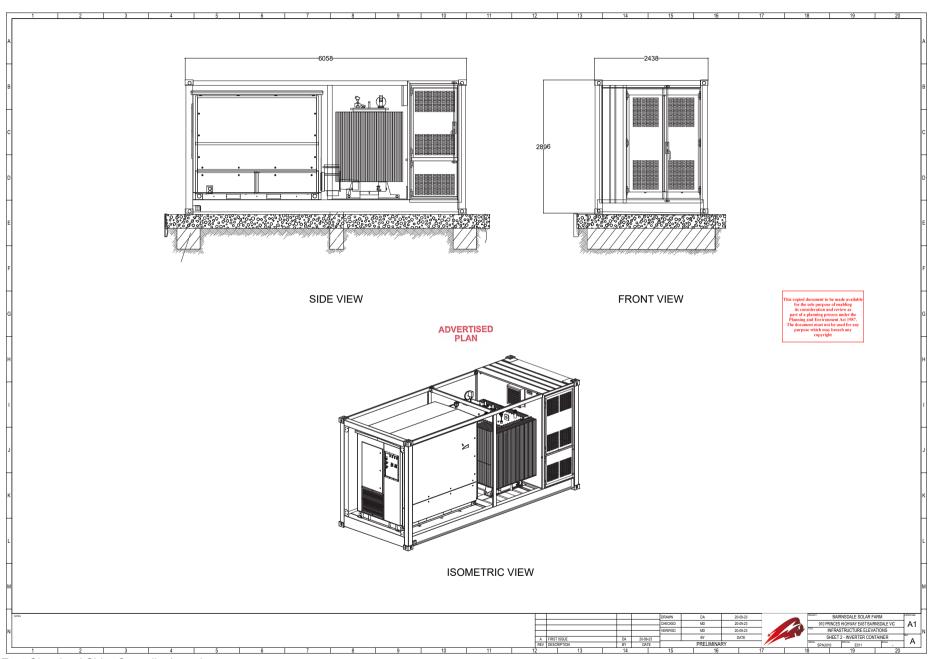
- The Municipal Planning Strategy and the Planning Policy Framework.
- The effect of the proposal on the surrounding area in terms of noise, glint, light spill, vibration, smell and electromagnetic interference.
- The impact of the proposal on significant views, including visual corridors and signtlines.
- The impact of the proposal on strategically important agricultural land.
- The impact of the proposal on the protection of declared irrigation districts.
- The impact of the proposal on the natural environment and natural systems.
- The impact of the proposal on the road network.
- Solar Energy Facilities Design and Development Guideline (Department of Environment, Land, Water and Planning, October 2022).

Comment: The proposal is assessed as having no substantial impacts on the above matters, except visual impacts. A condition is recommended to ensure that an appropriate landscaped buffer is provided on the Princes Highway frontage of the site to provide visual screening.

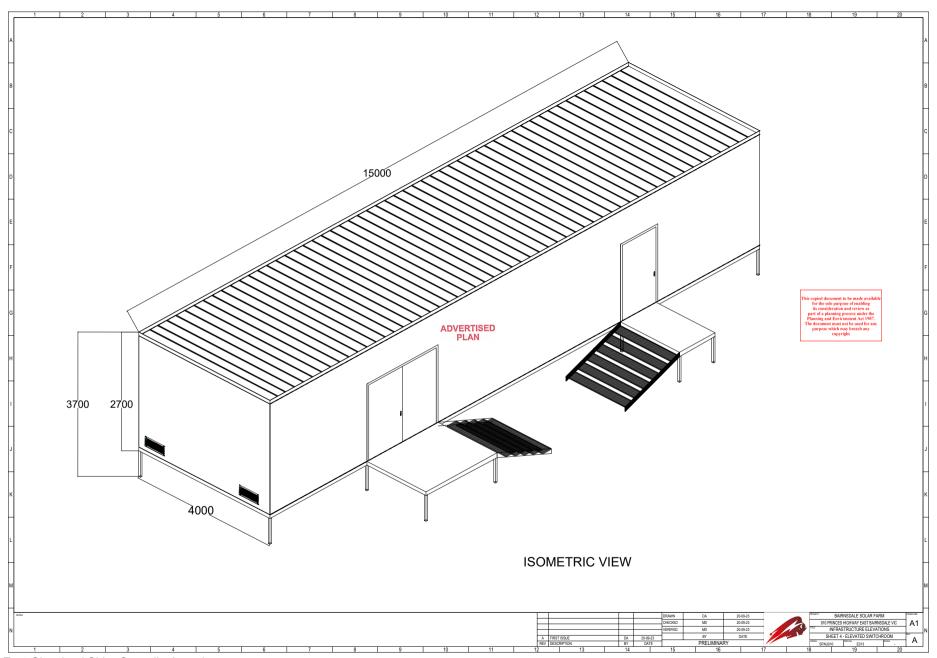


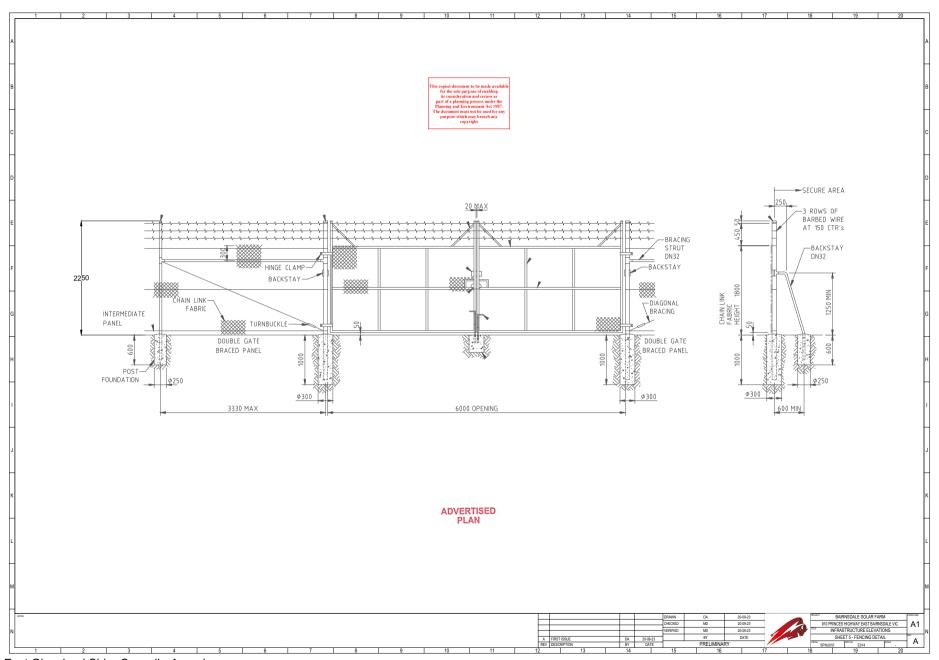


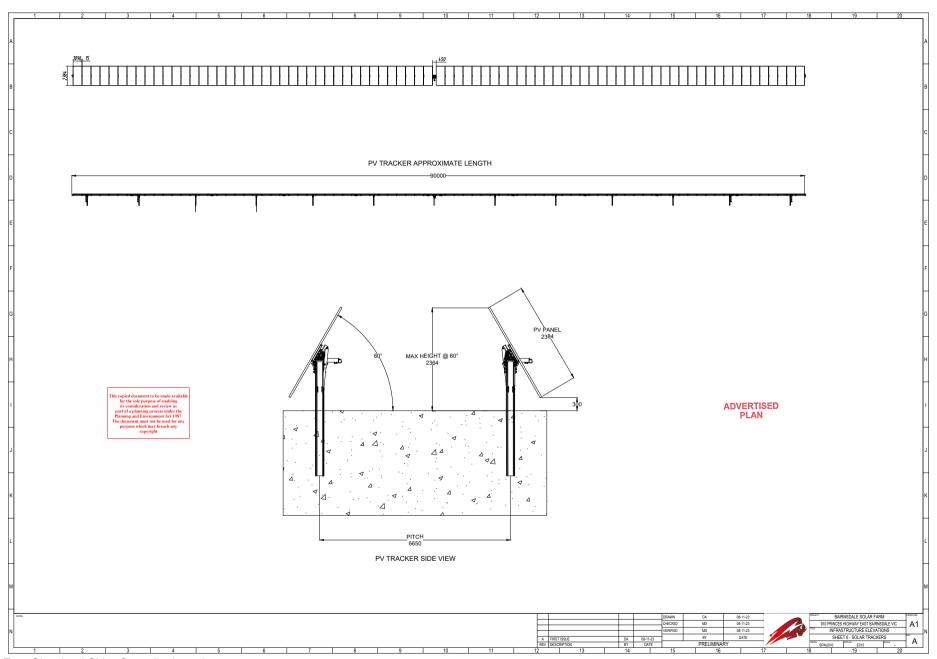












Town Planning Report

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## ADVERTISED PLAN

## Use and Development of a Solar Energy Facility

910 Princes Highway, Bairnsdale

Submitted to Minister for Planning On behalf of **BE Pro BD Pty Ltd** 

**JUNE 2023** 

#### Contact

Shannon O'Brien, Senior Planner Nick Roebuck, Business Development Manager David Hunter, Director

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PROJECT NUMBER 22301

REVISION REVISION DATE VERSION STATUS AUTHOR APPROVED NO 01 5/06/2023 Final NR/SOB DH

22301 910 Princes Highway, Bairnsdale

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### 1. Introduction

This report has been prepared by Habitat Planning on behalf of BE Pro BD Pty Ltd in support of a planning permit application for the use and development of a renewable energy facility and battery storage facility, utility installation and the removal of native vegetation at 910 Princes Highway Bairnsdale.

The subject land is zoned Farming Zone ("FZ1") pursuant to the East Gippsland Planning Scheme ("the planning scheme") and is subject to the Design and Development Overlay – Schedule 7 ("DDO7") and the Vegetation Protection Overlay – Schedule 1 ('VPO1').

This report and accompanying information is provided in accordance with the requirements of the *Planning and Environment Act 1987* and the planning scheme. It provides a detailed description of the existing site and its context, an assessment against the relevant planning policies and matters for consideration within the planning scheme and other relevant documentation. This report is also accompanied by specialist technical reports as required.

The purpose of this report is to detail the proposed development and consider the proposal against the relevant matters for consideration and demonstrate the proposal is worthy of approval by Council.

#### 1.1. Supporting Plans and Documentation

This application is accompanied by:

- Title information
- Development Site and Layout Plans, prepared by Bison Energy
- Acoustic Impact Assessment, prepared by Acoustic Dynamics
- · Agricultural Impact Assessment Report, prepared by Meridian Agriculture
- Bushfire Management Statement, prepared by Nature Advisory
- · Glint and Glare Assessment, prepared by Environmental Ethos
- · Native Vegetation Assessment Report, prepared by Nature Advisory
- Traffic Impact Assessment, prepared by TrafficWorks
- · Landscape Visual Impact Assessment, prepared by Yonder Studio
- Cultural Heritage Management Plan, prepared by Benchmark Heritage

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## 2. Site Analysis

#### 2.1. Site Location and Context

The subject site ('the site') is formally described as Lot 1 in PS516537 and is located at 910 Princes Highway, Bairnsdale VIC 3875.

The site is located on the western fringe of Bairnsdale and fronts the main western access road to the city (Princes Highway) and is adjacent to the railway line. **Figure 1** below indicates the subject land in context to the urban area of Bairnsdale.

A copy of the certificate of title and title plan is attached within this application. There are no covenants or Section 173 agreements registered on the title; however, an electricity easement does traverse the southern boundary of the property for a depth of approximately 20 metres.



Figure 1 | Context Map (VicPlan 2023)

## 2.2. Site Description

The site is an irregular in shaped corner allotment with a primary frontage to the Princes Highway of 493 metres (approx.) a secondary frontage to Power Station Road of 539 metres (approx.) and comprises a total area of 20.8 hectares (approx.). The site also has a frontage to a rail reserve along its northern boundary of 878 metres.

Physical access to the site is currently provided via informal crossovers to the Princes Highway and Power Station Road leading to access gates.

The existing conditions of the property are illustrated by the image at **Figure 2** below.





Figure 2 | Aerial view of site (NearMap, 2023)

## 2.3. Existing Conditions

The site is currently void of development, with the exception of a farm shed located toward the eastern boundary and a telecommunications tower located on the western boundary of the site. Vegetation on the site is limited and primarily concentrated along property boundaries and road frontages. The site presents generally flat topography and two dams are located in the southern third of the property.

The existing conditions of the property are illustrated by the images at Figures 3-15 below.

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Figure 3 | Subject site looking south from north west from north west from north and Environment Act 1987.



Figure 4 | Subject site looking east from north-west corner



Figure 5 | Subject site viewed from Power Station Road looking south-east, with telecommunications tower visible

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Figure 6 | View of existing telecommunications tower on western boundary of subject site, viewed from Power Station Road looking east

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part of a planning process under the Figure 7 | Existing native vegetation about 1987.



Figure 8 | Existing site access from Power Station Road



Figure 9 | Subject site viewed from Power Station Road, looking east

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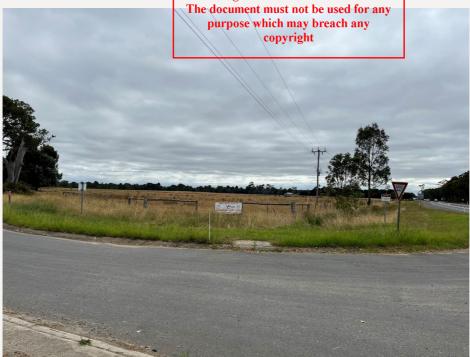


Figure 11 | Subject site looking east from south-western corner



part of a planning process under the Figure 12 | Subject site looking north planning that 15 to 1987.



Figure 13 | Subject site looking north viewed from Princes Highway

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part of a planning process under the Figure 14 | Subject site looking north promiser the Property of the Prope



Figure 15 | Subject site looking west from south-eastern corner

#### 2.4. Surrounding Development

The site is located within a rural context, attributable to its location at the western fringe of the Bairnsdale township and reflective of the underlying zoning of the area. Notwithstanding the rural context, the land use composition surrounding the site is eclectic and comprises a variety of uses.

Land to the north of the site is occupied rail reserve that serves at the primary rail connection to the Melbourne CBD. Further north land comprises rural tenements with modest agricultural activity as well as the Bairnsdale Christian College.

Land to the east of the site comprises a rural dwelling and land holding, accessed via Princes Highway. From a physical inspection of the surrounding area a demonstrable agricultural use of the land was not apparent and appeared to be managed land only.

To the south of the site, is the Princes Highway which is a state significant roadway comprising two lanes of vehicular traffic and located within the Transport 2 Zone (TR2Z). Beyond the Princes Highway land is similarly zoned for farming purposes and comprises a number of rural tenements. The Smith Creek traverses a number of properties located to the south of Princes Highway connecting to the Macleod Creek to the east.

To the west of the site is Power Station Road, a 30 metre road reserve providing a local north-south connection from the Princes Freeway in the south to the Bairnsdale Dargo Road in the north. Further west, across Power Station Road is Bairnsdale Power Station, substation and Parkside Timber Mill Bairnsdale. Beyond this, land predominantly comprises managed farmland.



Figure 16 | Entry to Bairnsdale Power Station, looking west from Power Station Road



part of a planning process under the Figure 17 | Power Station Road looking south from entry to prove Astation 7.

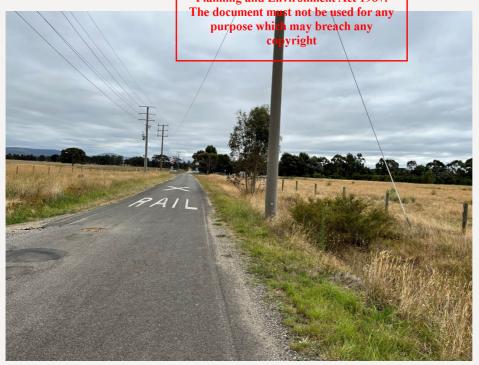
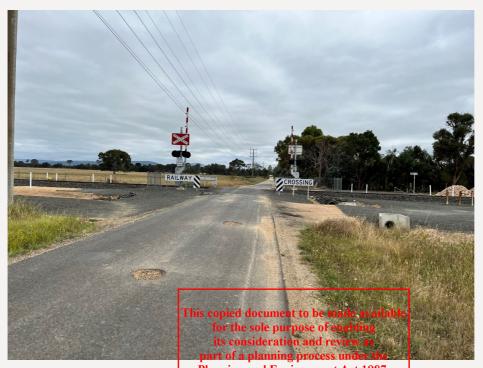


Figure 18 | Power Station Road looking north from entry to power station



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Station Road
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Figure 20 | Railway infrastructure at north-western corner of development site, looking north-east

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Figure 21 | Power Station Road looking south from north-west corner of subject site



Figure 22 | View of railway line from north-western corner of subject site looking north-east



Figure 23 | View of railway line from nicktheines tenud Cornieroofiseutije att slie 28 looking west



Figure 24 | View of entry to 25 Power Station Road, viewed from Power Station Road, looking west



part of a planning process under the Figure 25 | View of northern entry to 15 Power Station Road, looking west

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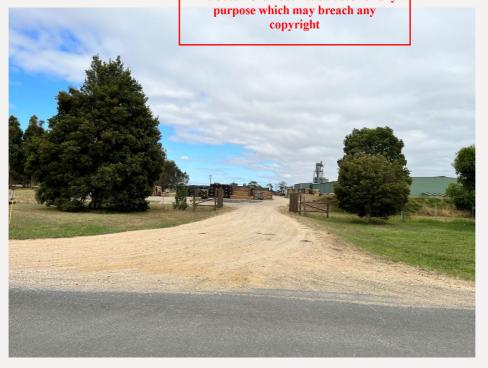


Figure 26 | View of southern entry to 15 Power Station Road, viewed from Power Station Road, looking west



part of a planning process under the Figure 27 | View of intersection of Power Maring and And Antiques Highway, looking south



Figure 28 | View of Princes Highway, looking east from Power Station Road



Figure 29 | View of intersection of Pripres Highway Endi Ranguay dea Rospi, looking south from The document must not be used for any



Figure 30 | View of property entry to 870 Princes Highway, viewed from Princes Highway looking north

## 3. Description of Proposal

#### 3.1. Overview

The proposal seeks to use and develop the site for the purpose of a solar renewable energy facility with capacity of up to 50MW to generate renewable electricity and a Battery Energy Storage System ("BESS"). The facility is proposed to be connected into the 66kV electricity network via a new connection point across Power Station Road connecting directly into the Bairnsdale substation.

To establish the facility, the proposal also requires the removal of native vegetation from the site to allow for access and the placement of PV panels and associated infrastructure. Access to the site is proposed to be formalised from Power Station Road via the existing crossovers to the north and south of the vegetation strip. An internal driveway network is proposed to be established and facilitate through traffic movement across the site for servicing and maintenance.

The site is located adjacent to the Bairnsdale Substation on the opposite side of Power Station Road. A new connection point to this network will be achieved via the establishment of a new underground trenching comprising a 66kV AustNet Feeder. The connection configuration can be achieved without any reconfiguration of the supply network in this area.

The proposed facility is expected to take approximately 6 months to complete construction. It will operate for a period of up to 30 years, after which it may be subject to further operation, with further upgrades, or decommissioned.

## 3.2. Project Details

Specifically, the proposal involves the following primary components:

- Solar panels
- · Battery energy storage systems
- Power station transformers
- 20m x 6m Switchroom (plus external stairs (20m x 7m)
- 66kV Feeder Bay (AusNet owned)
- 10m x 6m Control Room (plus external stairs (10m x 7m)
- 4 x 72,000L water tanks
- · Security fencing and gates

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A site plan of the proposal is provided in the attached plans and reproduced below.





Figure 31 | Proposed site plan

#### 3.3. PV Panel Arrays and Single Axis Tracker System

The panels will utilise a horizontal single axis tracker system aligned north-south. The arrays will have a height of 1.2m to the centroid, and 2.5m at full rotation.

The solar panels' primary function is to absorb the sunlight and convert this into electricity, with minimal reflection.

The panels will be installed on a single axis ground mounted tracker system, which will follow the sun to obtain maximum solar exposure. The panels will tilt 60 degrees in either direction, with a resting position of 10 degrees.

196 strings make up the array, although this is subject to change based on technological advancements.

## 3.4. Power Station

The development will include 18 battery inverters, being the SCS 3600 UP Inverter and 18 power stations, being the SCMV 4200 Switch/Transformer.

The structures will have dimensions of 2.78m width, 2.31m height, 1.58m depth, and will have muted tones to blend into the surrounding landscape.



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Figure 32 | Example of power station and inverter

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## 3.5. Battery Energy Storage System the sole purpose of enabling

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The development will include 72 x 3.72MM/ht Cot Tipffanting after containers. The structures will have dimensions of 6 05mplanting after with comment height 987.

The structure will be prefabricated containers that will be used for any the site. The units will each have a battery capacity of 3.72 MWh and a liquid cooling system to the batteries and red goo yields.



Figure 33 | Example of battery energy storage system



#### 3.6. Electrical Infrastructure

Supporting the PV panels will be a range of other associated electrical infrastructure components. These facilities will be contained within a dedicated area towards the west of the PV panel arrays and accessible by the internal driveway access.

The proposed power stations and battery storage units will be located adjacent to one another, with cabling from the arrays provided to the power stations via underground trenching. Additional underground cabling will also be constructed through the facility to provide connection to the electricity network to the west, including to the 66kB AusNet feeder line.

The substation yard is to comprise a levelled and compacted area of land for movement of vehicles and personnel between proposed parking areas and the facilities.

#### 3.7. Maintenance

Once operational, the facility will involve daily monitoring of plant and all associated infrastructure. Staff will access the site as necessary for monitoring and management of equipment.

Where required, minor repairs and maintenance of components of the facility will be undertaken by either staff or contractors. Other occasional maintenance tasks will include washing panels, controlling grass and weeds on site, maintaining internal access tracks, general waste collection and disposal.

Regular inspections of the site will be carried out to ensure that grassland is managed to reduce the risk of bushfire to surrounding land and a control weeds. Moving or slashing between rows of PV panels and in the area immediately surrour ding the arrays would be carried out as required for the sole purpose of enabling

its consideration and review as

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#### 3.8. Landscaping

Planning and Environment Act 1987.
The proposal includes a landscape puffer along the southern boundary. The western continue to be screened via the existing established vegetation. The other areas of the site are not proposed to include a landscape buffer due to the existing established vegetation and/or lack of interface with any sensitive uses. As such, treatments to the particular interface, the nature of development beyond the site and screening needs for each interface.

The proposed landscaping outcome is intended to be a long term addition, being that it will contribute to the long term linkages within the area and serve as a useful boundary definition for ongoing agricultural operation. The identification of landscaping on boundaries has also had regard for the long term function of the land, such as need to ensure connection between the full parcel of land after any solar proposal has been decommissioned.

The proposed landscape response is detailed in the attached plans.

#### 3.9. Stormwater and Drainage

The site is not traversed by any water courses. The proposed panels will only slightly reduce the area of pervious surfaces on the site, as the panels will be elevated on poles, retaining grass paddocks below. Stormwater drainage will be managed throughout the construction process by utilising silt traps and sediment control measures.

#### 3.10. Security

Security of the solar facility will be critical to operations and ensuring safety of the public. A new security fence and gate is to be established inside the site and set behind the proposed landscape buffers, to enclose the proposed battery container facility.

No security lighting will be installed for the facility.

#### 3.11. Vegetation Removal

The proposed works will require the removal of 0.383 hectares of native vegetation in patches to facilitate the use, development and accessing of the proposal. No large trees are proposed to be removed as part of this application.

Vegetation removal is further detailed in Section 7 of this report.

## 3.12. Decommissioning

The facility is intended to remain in operation for a period of up to 30 years and may be continued for a further period of 10 years of more beyond this period subject to landowner and operator agreement. This period of time represents the useable life of a solar facility, after which the infrastructure and components would need to be upgraded to the latest technologies for ongoing efficient operation.

If the facility ceases operations at this point, all infrastructure, panels, mounting frames including footings, inverters, cabling and other sub-surface materials would be disassembled and removed from the site to enable the site to be re-cultivated for cropping or grazing purposes.

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## 4. Statutory Planning Framework

#### 4.1. Zone

#### 4.1.1. Farming Zone - Schedule 1

The site is located within the Farming Zone (FZ1) of the East Gippsland Planning Scheme. 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.



Figure 34 | Site Zoning - Farming Zone - Schedule 1

The use and development of land for the purpose of a renewable energy facility requires a planning permit pursuant to the requirements of Clauses 35.07-1 and 35.07-4 of the Farming Zone. An application for use and development must consider the relevant Decision Guidelines of Clause 35.07-6.

Schedule 1 to the Farming outlines the following design and siting requirements:

- Minimum setback from a road within a Transport Zone 2 100 metres.
- Minimum setback from a road 20 metres

• Minimum setback from a boundary - 20 metres

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#### 4.2. Overlays

### 4.2.1. Design and Development Overlay - Schedule 7 (DDO7)

The site is partially affected by Design and Development Overlay – Schedule 7 (DDO7) which relates to Highway Corridors, Princes Highway and Great Alpine Road. The relevant design objectives of DDO7 include:

- To ensure that development in the Highway corridors in non-urban areas is managed to minimise
  adverse effects on the safe and efficient flow of traffic along the highways.
- To encourage high standards of design and the use of appropriate materials in building and works to be constructed within the highway corridors.
- To prevent linear or ribbon development along the Highway corridors.
- To protect significant native vegetation in the Highway road reserves.

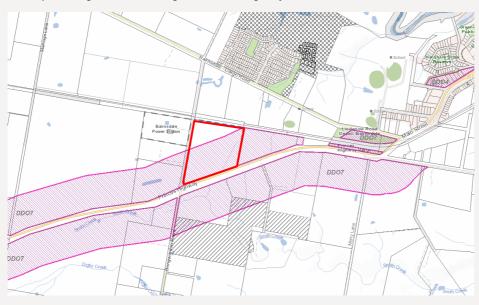


Figure 35 | Design and Development Overlay - Schedule 7 (DDO7)

Clause 2.0 to DDO7 outlines that a planning permit is not required for buildings and works if the following requirements are met:

- Buildings and works must be for a 'permit not required' use as set out in section 1 of the table of uses applicable to the zone.
- Buildings and works excepting fences, dams, driveways, services and tree planting must be sited at least 40.0 metres from the Highway frontage.

As the proposed buildings and works are associated with a Section 2 use pursuant to the requirements of the Farming Zone, a planning permit is required in this instance. An application for a permit pursuant to the requirements of DDO7 must consider the relevant decision guidelines at Clause 6.



#### 4.2.2. Vegetation Protection Overlay - Schedule 1 (VPO1)

The site is partially affected by Schedule 1 to the Vegetation Protection Overlay. VPO1 relates to the Tambo-Bairnsdale Roadside Vegetation Protection Network. The vegetation protection objectives to be achieved pursuant to this zone, include:

The Tambo-Bairnsdale Roadside Vegetation Protection Network overlay seeks to protect high conservation value roadside vegetation within Government road reserves from:

- The potential adverse impacts of establishing access through roadside vegetation located between the carriageway and adjacent private land.
- The potential adverse impacts of road maintenance and construction activities.

The overlay objective is:

- To ensure that development of access to private land, and road maintenance and construction activities occur so as:
  - To conserve areas of vegetation with high conservation value by minimising the extent of vegetation loss.
  - To conserve and enhance fauna habitat and habitat corridors by minimising the extent of vegetation loss and encouraging regeneration of indigenous species.
  - To preserve existing trees and other vegetation where it contributes to high landscape and aesthetic values.

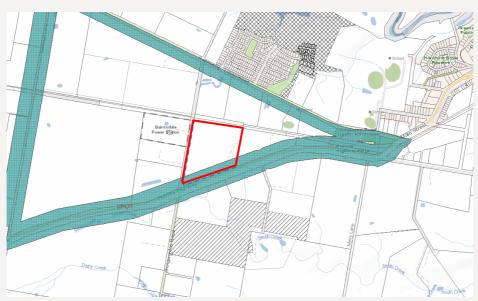


Figure 36 | Vegetation Protection Overlay - Schedule 1 (VPO1)

A planning permit is required to remove, destroy or lop native vegetation. A patch of native vegetation that traverses this overlay boundary is proposed to be removed as part of this application and accordingly a planning permit is required.

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## 4.3. Aboriginal Cultural Heritage

The site is partially affected by an area identified as being of potential cultural heritage significance.



Figure 37 | Aboriginal Cultural Heritage Sensitivity

The proposed scope of works are located outside the area of potential significance and are not considered to be high impact. Therefore, a Cultural Heritage Management Plan is not required in this instance, however a voluntary CHMP has been prepared.

#### 4.4. Particular Provisions

- Car Parking (Clause 52.06)
- Native Vegetation (Clause 52.17)
- Land adjacent to the Principal Road Network (Clause 52.29)
- Renewable Energy Facility (Clause 53.13)
- Decision guidelines (Clause 65)

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## 5. Planning Permit Requirements

The proposed development requires a planning permit for the following reasons:

#### 5.1. Use

Pursuant to the requirements of Clause 35.07-1 a planning permit is required to use land for the purpose of:

- A renewable energy facility.
- · Utility Installation.

#### 5.2. Buildings and Works

A planning permit is required to construct a building or carry out works, pursuant to:

- Clause 35.07-5 of the Farming Zone
- Clause 2.0 to Schedule 7 of the Design and Development Overlay

## 5.3. Native Vegetation Removal

A planning permit is required to remove, destroy or lop native vegetation pursuant to:

- Clause 3.0 to Schedule 1 of the Vegetation Protection Overlay
- Clause 52.17-1

#### 5.4. Access

A planning permit is required to create or alter access to a road in a Transport Zone 2, pursuant to Clause 52.29-2.

## 5.5. Notice and Review Provisions

The proposed use and development of land is not exempt from notice and review provisions.



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# habitat — Town Planning Report

## ADVERTISED PLAN

## 6. Strategic Policy Framework

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#### 6.1. Planning Policy Framework (PPF)

The PPF seeks to ensure that the objectives of planning in Victoria (as set out in Section 4 of the *Planning and Environment Act 1987*) are fostered through appropriate land use and development policies and practices. It informs the preparation and implementation of local planning policy objectives and the introduction of zone and overlay controls, and seeks to integrate relevant environmental, cultural, social and economic factors in the interest of net community benefit and sustainable development.

The following clauses from the PPF are relevant to this application:

- Clause 12 (Environmental and Landscape Values) which refers to the protection of values
  including biodiversity and any potential impacts the amenity of the landscape.
- · Clause 12.01-1S (Protection of Biodiversity) seeks to protect and enhance Victoria's Biodiversity.
- Clause 12.01-2S (Native Vegetation Management) seeks to ensure that there is no net loss to biodiversity as a result of the removal, destruction or lopping of native vegetation.
- Clause 12.03-1S (River And Riparian Corridors, Waterways, Lakes, Wetlands And Billabongs) seeks to protect and enhance waterway systems including river and riparian corridors, waterways, lakes, wetlands and billabongs.
- Clause 12.05-1L (Environmentally Sensitive Areas) seeks to protect and enhance environmental, cultural and aesthetic values within East Gippsland.
- Clause 12.05-2S (Landscapes) seeks to protect and enhance significant landscapes and open spaces that contribute to character, identity and sustainable environments.
- Clause 13.01-1S (Natural Hazards and Climate Change) seeks to minimise the impacts of natural hazards and adapt to the impacts of climate change through risk-based planning.
- Clause 13.02-1S (Bushfire) seeks to strengthen the resilience of settlements and communities to bushfire through risk-based planning that prioritises the protection of human life.
- Clause 13.04-2S (Erosion and Landslip) seeks to protect areas prone to erosion, landslip or other land degradation processes.
- Clause 13.05-1S (Noise Management) seeks to assist the management of noise effects on sensitive land uses.
- Clause 13.07-1S (Land Use Compatibility) seeks to protect community amenity, human health
  and safety while facilitating appropriate commercial, industrial, infrastructure or other uses with
  potential adverse off-site impacts.
- Clause 14.01-1S (Protection of Agricultural Land) seeks to protect the state's agricultural base
  by preserving productive farmland.
- Clause 14.01-1R (Protection of Agricultural Land Gippsland) seeks to protect productive land and irrigation assets, including the Macalister Irrigation District, that help grow the state as an important food bowl for Australia and Asia.
- Clause 14.01-1L-01 (Protection of Agricultural Land) applies to land located within the Farming Zone – Schedule 1 and seeks to:
  - Limit subdivision outside those areas defined as being suitable for rural residential development to the lot sizes shown in Schedules 2, 3 and 4 to the Farming Zone.
  - Adopt cluster housing arrangements where the balance of the land is under unified management for agricultural, pastoral or conservation purposes.

- Support tourist-related or other economic development in non-urban areas, where it maintains environmental protection and the rural character of the area.
- Restrict subdivision at W-Tree and Gelantipy unless road access and the retention of treated sewage on-site can be provided to all new lots.
- Support subdivision that prohibits or limits the development of farming land for dwellings.
- Clause 14.01-2S (Sustainable Agricultural Land Use) seeks to encourage sustainable agricultural land use.
- Clause 14.01-2L (Sustainable Agricultural Land Use) applies to land within the Farming Zone Schedule 1 and seeks to:
  - Support alternative agricultural and horticultural crops and pastoral industries including organic farming.
  - Support value-adding primary produce and resource processing industries.
- Clause 15.01-1S (Urban Design) seeks to create urban environments that are safe, healthy, functional and enjoyable and that contribute to a sense of place and cultural identity.
- Clause 15.01-1L-01 (Urban Design-General) outlines a series of strategies relating to urban design.
- Clause 15.01-6S (Design for rural character.

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- Clause 15.03-2S (Aboriginal Cultural itteritagic) cartistic partition and conservation of places of Aboriginal cultural reitagarម្បីមើ្យពីមើ្យព្រះអាពេល process under the
- Clause 19.01-1S (Energy Supply) Planning and Environment Act 1987.
  Seeks to facilitate appropriate development of energy supply infrastructure.

  Planning and Environment Act 1987.
  Seeks to facilitate appropriate development of energy supply purpose which may breach any
- Clause 19.01-2S (Renewable energy) seeks to support its trovision and use of renewable energy in a manner that ensures appropriate siting and design considerations are met.

#### 6.2. Municipal Planning Strategy

This section responds to the purpose of the Planning Scheme and the vision and strategic direction for the Municipality of East Gippsland.

- Clause 2.01 (Context) sets out the broader context for the municipality outlining its location attributes, project growth forecasts, community assets and environmental and economic development pillars.
- Clause 2.02 (Vision) outlines the Vision for the municipality as 'East Gippsland is the most liveable region in Australia. A place of natural beauty, enviable lifestyles, and opportunities. This vision is supported with principles that are relevant to land use planning including:
  - Strong and vibrant communities create healthy, productive and fulfilling places to live.
  - Proactive leadership and strategic partnerships protect and enhance our quality environment.
  - Investment and visitation develop a sustainable and prosperous economy.'
- Clause 2.03 (Strategic Direction) sets the strategic policy direction for the municipality under the key themes of: settlement and housing, environmental and landscape values, environmental risk and amenity, natural resource management, built environment and heritage, economic development, transport and infrastructure. Of particular relevance to the subject application are:
  - Clause 02.03-4 (Natural Resource Management) which sets the following strategic directions:

- Protecting water quality and quantity, particularly in water catchments used for domestic supply.
- Providing opportunities to add value to agricultural and timber products.
- Protecting high quality agricultural land from inappropriate development.
- Avoiding small lot subdivision of rural land.
- Providing for small lots where there is a lack of availability of undeveloped lots of the proposed size range in the area.
- Controlling the release of small-lot rural land and rezoning at a rate that ensures that land released does not compete with fully serviced lots in urban centres.
- Encouraging exploration for and development of mineral resources in appropriate areas.
- Clause 02.04 (Strategic Framework Plan) identifies the site is not located within an area identified as 'prime agricultural land'.

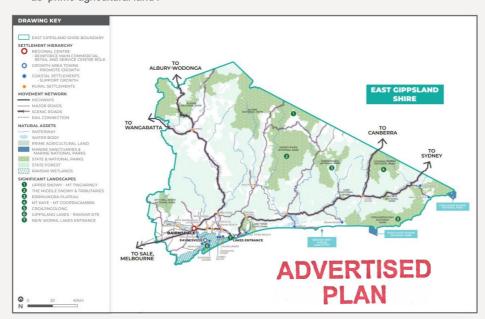


Figure 38 | Strategic Framework Plan

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## 7. Planning Considerations

A consideration of the planning merits of the proposal and how it responds to the relevant policies and planning provisions in relation to the land use and development has been divided and assessed under the following headings:

- Strategic Planning Directions
- · Land Use Consistency
- · Response to Clause 53.13
- · Built Form, Design, Siting and Visual Impact
- · Amenity Considerations
- Native Vegetation Removal
- Bushfire
- · Traffic, Access and Parking
- · Stormwater Management
- · General Provisions

#### 7.1. Strategic Planning Directions

Within the Planning Policy Framework, key themes emerge in relation to the strategic directions and policy objectives sought. The proposal responds to these themes by:

- Directly facilitating the development of renewable energy sources to assist in the combatting of climate change forces.
- Promoting the provision and use of renewable energy in a manner that ensures appropriate siting and design considerations are met.
- Providing a clean and renewable source of energy while minimising the potential for any negative environmental impacts.
- Contributing to a reduction in the Municipalities' carbon footprint to help to mitigate risks associated with climate change as well as reduce the dependence on non-renewable sources of energy.
- Siting and designing the facility to minimise impacts on the surrounding environment and community, through site responsive design including isolating the footprint to an area separated from sensitive receptors as well as mitigating issues associated with noise and visual amenity.
- Implementing the principles of ecologically sustainable development through the provision of alternative energy sources and renewable energy facilities.
- Minimising the removal of native vegetation where possible and where native vegetation has been
  proposed to be removed is proposed to be offset via a third party registered offset broker.
- Minimising the extent of ground disturbance through the use of direct piling for the installation of
  mounting pole and limiting grading and compaction construction techniques to the development of
  accessing roads and installation of associated hardstand area.
- Designing and siting the facility to protect and enhance the surrounding rural landscape while contributing to the implementation of the provision of sustainable environmental character.
- Providing a clean and renewable source of energy that supports emergency preparedness and enhances the resilience of the community.

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- Siting and designing development to minimise visual impacts on surrounding natural scenery and landscape features of the surrounding context.
- Contributing to the decentralisation of the energy production through the provision of alternate sources or energy production.
- Design for bushfire mitigation through observing the design, alignment and setback recommendations of the Solar Energy Facilities Design & Development Guidelines.
- Optimising the use of presently underutilised agricultural land for the production of renewable energy and isolating site selection of the facility away from prime agricultural land.
- Co-locating the proposed use and development in immediate proximity of existing electrical infrastructure to facilitate direct connection into the broader network supply.
- Providing a positive contribution to the built form environment through appropriate siting, design, landscaping and ongoing maintenance to minimise the impact of the development and prioritise the safety for users of the Princes Highway and Power Station Road.
- Siting and designing the facility to minimise associate impacts related to noise on surrounding sensitive receptors.
- Promoting the foundational principles of best practice urban design through the considered siting
  and location of the facility to maximise energy production through a largely unimpeded northerly
  aspect while having minimising impact on surrounding receptors and existing site conditions.
- Stimulating economic growth the This figure allocurent to be predictable and construction, development and ongoing management the supplement of the Municipality.

  Stimulating economic growth the This figure allocurent to be predictable and the construction, and the Municipality.

  Stimulating economic growth the This figure allocurent to be predictable and the construction, and the Municipality.
- part of a planning process under the

  Reducing the impacts associated with climate change through the argy ison of a dditional supply of renewable energy into to the grid, reducing the reliance on non-renewable energy sources that are associated with myriad negative climate, health and economic issues and contributing to a more sustainable and reliable energy supply to support the grown and development of the Municipality.
- Supporting the sustainable development of the Municipality through the provision of a reliable and renewable source of energy that contributes to a raft of social, economic and environmental benefits for the broader community.

## 7.2. Land Use Consistency

The overarching objectives of the Farming Zone place a strong emphasis on the retention and ongoing enhancement of productive farming land to ensure its ongoing viability for agricultural use. The Zone goes on to prioritise the use of the land for agricultural purposes and ensure that uses not directly related to agricultural activities be limited.

The use of the land for the purpose of a renewable energy facility is a Section 2 (permit required) land use. Pursuant to Clause 73.03 a renewable energy facility is defined as:

Land used to generate energy using resources that can be rapidly replaced by an ongoing natural process. Renewable energy resources include the sun, wind, the ocean, water flows, organic matter and the earth's heat.

It includes any building or other structure or thing used in or in connection with the generation of energy by a renewable resource.

It does not include a renewable energy facility principally used to supply energy for an existing use of the land.

A solar energy facility is included within this definition; however, is also separately defined pursuant to Clause 73.03 as:

Land used to generate electricity from solar energy using ground-mounted photovoltaic and thermal technology, where the primary role is to export power to the electricity network.



It does not include the generation of electricity principally used for an existing use of land.

The proposed development is considered to harness the ambitions and directions of this Clause to deliver an acceptable land use outcome for the site.

Renewable energy production is commonly undertaken in rural areas given the larger spatial provision and availability of land, and planning policy recognises that such uses can be appropriately accommodated in rural areas. In particular, it is noted that 'agricultural production' as defined by the planning scheme includes "Any form of primary production of <u>renewable commodities</u>" (emphasis added).

While not typically reflective of standard agricultural uses the proposed development delivers on the ambitions of policy through the production of renewable energy in accordance with this definition.

The development will not include any substantial permanent works on the land to enable the site to have limited direct impact on the physical state of the site and ensure transition of the site to agricultural land can be achieved efficiently after decommissioning of the solar facility.

Once operational, the proposal will be a 'passive' development in that it will not generate high levels of traffic, will not generate any significant noise and has been designed to be as recessive as possible in the landscape.

The development of a renewable energy facility is considered to facilitate the overarching objectives of this Clause in the following ways:

- Implements the MPS and PPF through the promotion of sustainable development and supporting the transition to a low-carbon economy. The production and use of reflewable energy sources can reduce greenhouse gas emissions and offitting as the PHFBOSC of CFITTING HERANGE, which are key objectives of these planning policies and review as
- part of a planning process under the

   Supporting the provision of land for an antique in the such as unused farmland for the purpose of inflating the purpose of inflating the interest of the purpose of inflating the interest of the purpose which may breach any

  part of a planning process under the purposes under the suppose of a planning process under the purpose in the purpose of a planning process under the purposes under the suppose in the purpose of a planning process under the purposes under the suppose in the purpose in the purpose
- Minimising the impact of the development on the of Minimising the impact of the development on the of Minimally invasive construction techniques to limit the impact on land.
- Providing for a meaningful contribution to the local economy through a broadening of the economic
  base to include the development of renewable energy. It is anticipated that the development will
  contribute to the creation of local employment opportunities through the construction, development
  and ongoing management of the facility as well as decentralising the income source of the
  landowner away from standard agricultural practices.
- Contributing to the sustainable management of the land through best practice initiatives including vegetation and land management, erosion control and bushfire risk minimisation.
- · Facilitating a meaningful contribution to the ongoing long-term sustainability of the area.

#### 7.2.1. Agricultural Capacity of Land

The majority of renewable solar energy development is undertaken on rural land, and the planning scheme and DELWP guidelines set out various considerations when proposing such uses on rural land. The development has been considered with regard to potential impact on agricultural production, and the need to avoid permanent loss of high value rural land.

An Agricultural Impact Assessment ("the AIA") has been undertaken by Meridian Agriculture and accompanies this planning permit application. The assessment considers the site's agricultural capability, the regional implications of removing agricultural land use from the site and provides commentary on whether the proposed facility can co-locate with other agricultural activities.

The assessment concluded that 'the soils in this location are classed as soils of low to moderate fertility with significant subsoil constraints that limit their ability to be highly productive. The soil types are not considered to be suitable for long term cropping and so they are likely to remain as pastures for

grazing. The proposed BESS at this site would have no long term detrimental effect on the productive capacity of the soil, nor would it have a significant impact on the overall productivity of the region or state, nor impact on the ability of neighbouring businesses to operate'.

Overall, while being located in a rural context, the proposal is considered appropriate as it is not strategically important and highly productive agricultural land that would be lost from production and the development will generally have a low impact on the site and its existing conditions. The design enables the site to be returned to its agricultural function at the end of its life for a solar facility.

Please refer to the AIA prepared by Meridian Agriculture for further details.

#### 7.2.2. Response to Decision Guidelines

Before deciding on an application, in addition to the decision guidelines in Clause 65, the responsible authority must consider, as appropriate the decision guidelines of the FZ. The decision guidelines considered against this proposal in below.

Table 1 | Consideration of the decision guidelines of the FZ

Decision Guidelines	Response
General	
The Municipal Planning Strategy and the Planning Policy Framework	This copied document to be made available faddlesseleip Squarenof anabling its consideration and review as part of a planning process under the
Any Regional Catchment Strate, and associated plan applying to land	
The capability of the land to accommodate the proposed use development, including the disposal of effluent.	or development as it has excellent site access for both construction and operational traffic, is flat, is generally cleared and is co-located adjacent the existing Bairnsdale Power Station and Substation where connections can easily be extended across Power Station Road.  The site is able to accommodate the use with minimal impact. The works proposed will include ground disturbance and tree removal, however no on-site wastewater disposal is required.
How the use or development relates to sustainable land management.	The use of the land in this instance is for an activity that will provide a sustainable renewable energy source. The earthworks required to establish the facility are not extensive and will involve only the driving of mounting piles and the establishment of the unsealed internal road.  The use itself allows for transition to rural land in the future and will also ensure that surrounding land is not impacted, and may still continue to be farmed. After the decommissioning of the land, the land can return to its former agricultural function.
Whether the site is suitable for the use or development and whether	

cision Guidelines	Response
the proposal is compatible with adjoining and nearby land uses.	development of a solar facility, particularly when considered against the siting and design requirements of the Solar Facility Design Guidelines.
	Residential dwellings and receptors are noted in the surrounding area, however, can be appropriately buffered from the development through the incorporation of landscape planting.
	The site is also located on land directly adjacent to existin power authority infrastructure, including Power Station and Substation that will provide for efficient distribution of generated electricity. The facility can be connected into the electrical network.
How the use and development makes use of existing infrastructure and services.	The proposal will not have any significant load on existing services in the area, and will be appropriately connected into the electricity network in accordance with AusNet's requirements.
	The proposal has a positive benefit in that it will deliver additional renewable energy input into the local electricity system.

### Agricultural issues and the impacts from non-agricultural uses

 Whether the use or development will support and enhance agricultural production. An Agricultural Impact Assessment has been prepared by Meridian Agriculture and should be referred to for further detailed assessment

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The proposed use is for a renewable energy facility, however, has been carefully considered and designed to be integrated into the agricultural context without significant impacts. The land will not be significantly compromised given the nature of construction works, and can be decommissioned and returned to an agricultural function at the end of its life.

'Agricultural production' as defined by the planning scheme includes "Any form of primary production of renewable commodities." This recognises that establishing land for renewable energy can be established in a manner which is sustainable to the agricultural conditions of rural properties.

 Whether the use or development will adversely affect soil quality or permanently remove land from agricultural production. The Agricultural Impact Assessment, prepared by Meridian Agriculture completed a review of soil quality and concluded the following:

'The soils in this location are classed as soils of low to moderate fertility with significant subsoil constraints that limit their ability to be highly productive. The soil types are not considered to be suitable for long term cropping and so they are likely to remain as pastures for grazing.

Decision Guidelines	Response
This copied document to be made available	The proposed BESS at this site would have no long term detrimental effect on the productive capacity of the soil, nor would it have a significant impact on the overall productivity of the region or state, nor impact on the ability of neighbouring businesses to operate.'
for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright	Earthworks for the development are minimal, as described above, and will not include significant disturbance of the site conditions.  Topography and other physical conditions will be generally unchanged.  Once decommissioned, the subject site can be easily reinstated to be used for productive purposes. The works
The potential for the use or development to limit the operation	will therefore not permanently remove land from agricultural production.  The development does not include any processes that will impact surrounding agricultural uses or expansion.
<ul> <li>and expansion of adjoining and nearby agricultural uses.</li> <li>The capacity of the site to sustain</li> </ul>	As established, the proposed use is considered to be
the agricultural use.	consistent with the broader definition of 'agricultural production' and is thus consistent with the overarching objectives and purposes of the Farming Zone provisions.  The proposed land use is consistent with surrounding land uses which also accommodate similar uses including a power station and substation and represents an efficient use of marginal agricultural land that provides for a broader community benefit than standard agricultural production in this instance through providing additional and
	renewable energy supply to the broader network.  The proposed development will not remove any 'prime agricultural land' from production and has been designed to minimise impact on the land to ensure that once decommissioned the land can be used to accommodate more conventional agricultural practices.
<ul> <li>The agricultural qualities of the land, such as soil quality, access to water and access to rural infrastructure.</li> </ul>	Refer to discussion above.
Any integrated land management plan prepared for the site.	Not applicable.
Environmental issues	
<ul> <li>The impact of the proposal on the natural physical features and resources of the area, in particular on soil and water quality.</li> </ul>	The development has been designed to minimise the impact upon the natural and environmental features of the land.

Decision Guidelines	Response
	It has been located within an area of the site that avoids the more significant areas of native vegetation (including scattered mature trees) and isolates the facility primarily land which has been heavily modified for agricultural uses.
	The proposal does not include significant earthworks or modification of the topography of land and will be constructed using primarily 'light touch' construction techniques to enable minimal land disturbance.
The impact of the use or development on the flora and fauna on the site and its surrounds	As above, the proposed works are within an area of the site that avoids significant areas of native vegetation.  With respect to removal the accompanying Native Vegetation Removal Report, prepared by Nature Advisory states:  "the proponent proposes to remove 0.383 hectares of
This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987.	native vegetation in patchesbased on the extent of native vegetation, the number of large trees, and the location category, the proposal must be assessed under the Basic assessment pathway. This would not trigger referral to the Department of Energy, Environment and Climate Action (DEECA)".
The document must not be used for any purpose which may breach any copyright	The report goes on to identify the following offset requirements:  0.055 general habitat units with the following offset attribute requirements:
	- A minimum strategic biodiversity value (SBV) of 0.364
	- Located within the East Gippsland CMA boundary or the East Gippsland Shire Council.
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	Areas of more significant vegetation have been protected by the proposal. The development will also include the establishment of new perimeter plantings in sections that are not buffered by established vegetation, which will provide additional revegetation opportunities. The development will also offset the vegetation loss from the site within the surrounding region.
The location of on-site effluent disposal areas to minimise the impact of nutrient loads on waterways and native vegetation.	There is no on-site effluent disposal required as part of the proposal.
Design and siting issues	
The need to locate buildings in one area to avoid any adverse impacts on surrounding agricultural uses	The layout of all structures is distributed across the site, while incorporating generous setbacks and perimeter landscaping.
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#### **Decision Guidelines** Response and to minimise the loss of The proposed design and siting of the development has productive agricultural land. had regard to the setback requirements outlined within Schedule 1 to the Farming Zone. The development can adequately accommodate these setbacks to side and rear boundaries as well as to Power Station Road. The proposal does; however, seek to slightly This copied document to be made available vary the 100 metre setback to the Princes Highway for a for the sole purpose of enabling minor portion of the development. However, on balance its consideration and review as does maintain a 100 metre average setback across this part of a planning process under the frontage. The proposed variation is considered to be minor Planning and Environment Act 1987. and of minimal impact on the visual presentation of the The document must not be used for any development noting that the proposed landscape concept purpose which may breach any seeks to establish landscape buffering along this interface. copyright As discussed throughout this report, the placement of panels also allows generally minimal impact on the landscape and avoids large scale landform changes. The impact of the siting, design, The subject site and immediate surrounds are generally height, bulk, colours and materials flat; however, the size and scale may have visual impacts to be used, on the natural on the surrounds. A visual impact assessment has been carried out in response, and subsequently recommends environment, major roads, vistas and water features and the appropriate interface plantings and treatments. measures to be undertaken to minimise any adverse impacts. Visual impacts have been considered in terms of general visual impact and glare impacts, with the landscaping and siting design response provided accordingly. Landscape buffers are proposed along parts of the perimeter without vegetation interface. This is also intended to assist with minimising potential for glare. The impact on the character and The design of the facility incorporates generous setbacks appearance of the area or features from side and rear boundaries, adjoining roads and of architectural, historic or scientific incorporates the use of landscape planting to ensure the significance or of natural scenic development compliments the rural character. The new beauty or importance features on the site will be generally non-reflective and the panels will be treated with anti-reflective coating. This means that the facility will remain passive in the landscape. The location and design of existing The proposed facility is provided with public road access, and proposed infrastructure including the primary access via Power Station Road. including roads, gas, water, drainage, telecommunications and The proposal will connect to the electrical infrastructure point of connection located to the immediate west opposite sewerage facilities the Power Station Road. The site does not require connections to other essential service infrastructure A Traffic Impact Assessment has been completed and is Whether the use and development will require traffic management attached to this application, please refer to this report for

further details.

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measures



### 7.3. Response to Clause 53.13

Clause 53.13 applies to a renewable energy facility, other than a wind energy facility, and the considerations of this clause therefore apply to the proposal. The purpose of this clause is to provide the framework for facility design and site determination.

It is also noted that the Department of Environment, Land, Water and Planning (DELWP) has released the Solar Energy Facilities Design & Development Guidelines (August 2019), which outlines the key considerations for the use and development of solar facilities across Victoria. The guidelines include siting and design guidance along with recommendations for community consultation, design, consideration of off-site impacts, construction, operation and decommissioning. The relevant considerations of the Guidelines are discussed below.

### 7.3.1. Application requirements

In accordance with Clause 53.13-2, an application must be accompanied by the information presented in the following table.

Table 2 | Application requirements for the development of a renewable energy facility (other than a wind energy facility)

Requirement	Response
A site and context analysis, including his	copied document to be made available for the sole purpose of enabling
site and the surrounding area	its consideration and review as Addressed in Section 2 and Section 3 of this report, as It of a praining proposed site plans attached anning and Environment Act 1987. document must not be used for any
A location plan showing the full site area, local electricity grid, access roads to the site and direction and distance to nearby accommodation, hospital or education centre.	purpose which may breach any Refer Sections rights report, and proposed site plans attached at Appendix B.
A design response, including:	
Detailed plans of the proposed development including, the layout and height of the facility and associated building and works, materials, reflectivity, colour, lighting, landscaping, the electricity distribution starting point (where the electricity will enter the distribution system), access roads and parking areas	The proposed development plan indicates the dimensions of the development, proposed alignments, landscaping and materials to be used in the development.  The facility will incorporate non-reflective and muted materials and colours to avoid impacts on the surrounding area.  The facility is intended to connect directly to adjacent electrical infrastructure which are located to the west of the site.
Accurate visual simulations illustrating the development in the context of the surrounding area and from key public view points.	A visual assessment of the site and surrounding area has been prepared and is attached with this report.

Requirement	Response
The extent of vegetation removal and a rehabilitation plan for the site.	The site is generally disturbed; however, will require the removal of native vegetation to establish the development. The full extent of vegetation removal is addressed in the Native Vegetation Assessment attached with this report.
	While there is no rehabilitation plan prepared as part of this proposal, the works will include perimeter screening planting, that will consist of local native species in accordance with the attached Landscape Plan, ensuring the partial reinstatement of native habitat.
<ul> <li>Written report and assessment, including:</li> <li>An explanation of how the proposed design derives from and responds to the site analysis.</li> <li>A description of the proposal, including the types of process utilised, materials to be stored the treatment of waste.</li> <li>Whether a Works Approval or Licence is required from the Environment Protection Authority. The the potential amenity impacts such as noise, glint, light spill, emissions to air, land or water, vibration, smell and electromagnetic interference.</li> <li>the effect of traffic to be generated on roads.</li> <li>the impact upon Aboriginal or non-Aboriginal cultural heritage.</li> <li>the impact of the proposal on any species listed under the Flora and Fauna Guarantee Act 1988 or Environment Protection and Biodiversity Conservation Act 1999.</li> <li>A statement of why the site is suitable for a renewable energy facility including, a calculation of the greenhouse benefits.</li> </ul>	properties of major access roads. Panels are designed to anning and Environment Act 1987  The non-reflective and will be screened from surrounding
<ul> <li>An environmental management plan including, a construction management plan, any rehabilitation and monitoring.</li> </ul>	

## 7.3.2. Decision guidelines

Before deciding on an application, in addition to the decision guidelines in Clause 65, the responsible authority must consider, as appropriate the decision guidelines of clause 53.13-3 for the development of a renewable energy facility. The decision guidelines considered against this proposal in the following table

Table  $3 \mid$  Decision guidelines for the development of a renewable energy facility (other than a wind energy facility)

Decision Guidelines		Response	
The Municipal Planning Strategy and the Planning Policy Framework		Addressed in <b>Section 7.1</b> of this report.	
•	The effect of the proposal on the surrounding area in terms of noise, glint, light spill, vibration, smell and electromagnetic interference	The subject site has considered the impact of the development on the surrounding landscape and sensitive receptors from a visual, noise, glint and glare perspective, with the mitigation measures within this report setting out	
for the its compart of	d document to be made available ne sole purpose of enabling onsideration and review as a planning process under the	the manner in which the site is to be treated to mitigate these impacts. The general operation of the facility is not anticipated to generate substantial noise, light spill, or vibration.  A Glint and Glare Assessment is attached and considers	
The docu	g and Environment Act 1987. Iment must not be used for any ose which may breach any copyright	the potential impact of the development on surrounding properties.  An Acoustic Impact Assessment Report is also attached to consider the impact of noise on adjoining properties.	
•	The impact of the proposal on significant views, including visual corridors and sightlines	The subject site is in a relatively flat area and is not located along any ridgelines, valleys or other important sightlines.  A Visual Impact Assessment Report is attached and considers the potential implications on the effect on visual amenity as a result of the proposed facility.	
	The impact of the proposal on strategically important agricultural land, particularly within declared irrigation districts.	An Agricultural Impact Assessment has been completed by Meridian Agriculture in support of the proposal and is attached. This assessment did not identify the land as being located in strategically important. Please refer to this report for further details.	
	The impact of the proposal on the natural environment and natural systems	As discussed within the assessment of impacts within this report and the attached technical documents, the proposal is designed to minimise impacts on the physical conditions of the site, by avoiding substantial landform changes and/or hardstand areas that may alter the site conditions.	
	The impact of the proposal on the road network.	This is addressed in detail in the Traffic Impact Assessment attached. The proposal is not anticipated to significantly increase the traffic of the surrounding roads beyond their design capacity.	

Decision Guidelines	Response
Solar Energy Facilities Design and Development Guideline (Department of Environment, Land, Water and Planning, August 2019).	The relevant matters of the Solar Energy Facilities Design and Development Guideline have been addressed within this report and the attached technical documents.

### 7.4. Built Form, Design, Siting and Visual Impact

Guidance in relation to the design, siting and built form outcome for the development is primarily limited to the provision of the Farming Zone, Design and Development Overlay – Schedule 7, Clauses 15.01-1S, 15,01-1L-02, 15.01-6S and more broadly the Urban Design Guidelines for Victoria. The proposal responds to this policy context by:

- Generally meeting the broad setback requirements outlined within Schedule 1 to Farming Zone.
  Where variations to such setback requirements have been sought, the development continues to
  maintain a suitable setback distance from primary vistas to ensure it remains a recessive element
  within its context.
- Responding to the physical and contextual characteristics of the site and surrounds through sympathetic design techniques and building siting.
- Minimising potential visual ame http://impapiedsbecumentate the made apraidable bugh building siting and the provision of meaningful landscapinthersoleigns two efficients bugh building siting and the provision of meaningful landscapinthersoleigns two efficients bugh building siting and the provision of meaningful landscapinthersoleigns two efficients bugh building siting and the provision of meaningful landscapinthersoleigns to the development from the public realim.
- Isolating vehicle entry and egress to part of a planning process under the primary highway interface.

  part of a planning process under the primary highway from the primary highway and Environment Act 1987.

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- Promoting best practice urban design de
- Incorporate non-reflective and muted materials and colours to ensure the development is read a secondary element within the broader landscape context to avoid impacts on the surrounding area.
- Consolidating development to a site characterised by relatively flat topography to minimise visual impact on surrounding scenery and landscape features.

A more detailed response to the specific design consideration of the proposal is provided below.

### 7.4.1. Built Form and Design

The design and layout of the facility has been considered with a view to maximise energy production while having minimal impact on the site conditions. The land containing the facility is largely unconstrained, which allows for the PV panels to be arranged with maximum northern exposure.

The design has also been informed by the considerations of bushfire, observing the design, alignment and setback recommendations of the Solar Energy Facilities Design & Development Guidelines in August 2019. It has been designed to minimise potential impacts on the surrounding land uses ensuring that productive agriculture is not unreasonably impeded.

The solar energy facility will be operational for a period of at least 30 years, after which it is likely to be decommissioned and returned to agricultural production. The design is therefore considered on the basis of minimising the impacts on the natural conditions of the site so that it may be easily returned to its original state.

The proposal aims to retain as much of the overall property for agricultural production by only using the area necessary to generate the 50MW output. The proposal also utilises the most up to date panel technology to obtain higher energy outputs using less panel infrastructure. The ongoing maintenance of facility will ensure that any adverse impacts on nearby agricultural land are avoided.

## 7.4.2. Design and Development Overlay Schedule 7 (DDO7)

The land is within a Design and Development Overlay (DDO) Schedule, specifically Schedule 7 which refers to 'Highway Corridors, Princes Highway, & Great Alpine Road'. This DDO schedule seeks to ensure that development positively contributes to the built environment by providing high quality, attractive building design outcomes that improve the visual appearance of the area and are attractive and inviting for residents and visitors.

The proposal represents a considered design response with respect to the overarching objectives of this Clause. The proposal has been designed and sited as to minimise impacts associated with visual amenity. A visual impact assessment, landscape plan, glint and glare assessment and traffic impact assessment have been prepared, accompany this application, and have informed the eventual locational and design response of the development.

As a result of this technical input the proposed design response represents a considered outcome that seeks to minimise any associated impacts on the public domain through a combination of development setbacks, materiality and associate landscape treatment along sensitive interfaces.

A comprehensive assessment against the relevant Decision Guidelines is provided below.

#### 7.4.3. Decision Guidelines

Before deciding on an application, in addition to the decision guidelines in Clause 65, the responsible authority must consider, as appropriate:

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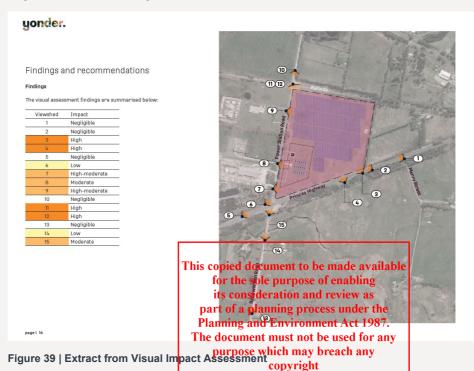
Table 4 | Consideration of the decision guidelines of the DDO7

Decision Guideline	Response	
The need to minimise development with direct access or frontage to the highway.	The proposal does not seek to provide access via the Princes Highway and will consolidate access via Power Station Road.	
Any additional traffic which may be generated by the use or development.	A Traffic Impact Assessment has been prepared by Traffic Works that confirms management arrangements for traffic generation associated with the development. Please refer to this report for further details.	
The potential impact of the use or development on significant vegetation in the highway corridor.	The proposed development will not result in any unreasonable impacts on any significant vegetation within the highway corridor.	
its col part of a	The design of the facility incorporates with generous setbacks from side and rear described a side and rear described and rearrants the sure the side and rearrants the fund character. Plainting wroats early the facility and the facility and the facility and the facility will remain passive in the landscape.	
Any signs associated with the proposed use or development and their likely impact on the visual amenity and character of the area.	Copyright No signs are proposed	
The need for the use or development to promote the purpose of the zone.	Please refer to <b>Section 7.2</b> .	
The need for buildings to be designed and constructed and use materials and colours that compliment the visual amenity of the landscape.	A visual impact assessment, landscape design and glint and glare assessment have been prepared and accompany this application. The proposed design and siting of the facility have been informed by this suite of technical report to ensure that the proposal sits comfortably within its context. The provision of substantial landscape planting along primary interfaces coupled with non-reflective panel will ensure the facility compliments the visual amenity of the area.	

## 7.4.4. Visual Impact

The proposal is located within an area where the landscape is generally flat and the site may be observed in the broader landscape from prominent public locations. A Visual Impact Assessment has been carried out by Yonder Studio, with associated landscape recommendations included in a Landscape Plan.

The Visual Impact Assessment includes an investigation of possible viewsheds along Princes Highway, Power Station Road and Bengworden Road where the proposed development may be seen, and undertaking a visual impact assessment using the grading matrix, considering visual sensitivity and the magnitude of the visual change.



The assessment identifies that the approach along the Princes Highway from the east, and the approach from the north along Power Station Road were of the highest visual sensitivity. As a result of this, the subsequent landscape recommendations are for the establishment of a landscape buffer along western and southern boundaries.

The landscape concept intends to create a natural condition along the site perimeter to firstly enable a screening of the facility, but also provide a long term benefit to the natural conditions of the area. The proposed landscaping outcome is intended to be a long term addition, being that it will contribute to the long term linkages within the area and serve as a useful boundary definition for ongoing agricultural operation.

Accordingly, the proposed development is not considered to result in an unreasonable visual impact, subject to the implementation of the recommendations of this assessment. Please refer to the assessment and plan for further details.

### 7.4.5. Glint and Glare

Generally, solar panels will not create significant glint and glare compared with other commonly existing surfaces. Likewise, photovoltaic solar panels are generally less reflective than other naturally occurring elements such as soils and crops.

A Glint and Glare assessment prepared by Environmental Ethos accompanies this application. The assessment utilised the Solar Glare Hazard Analysis Tool (SGHAT 3.0) in conjunction with a viewshed analysis, to undertake the glare modelling which is the basis for the impact assessment methodology. The assessment identified that:

• The SGHAT modelling identified no glare is geometrically possible affecting rural and residential dwellings within 1km of the Project, therefore no impact is likely.



- The SGHAT modelling identified no glare is geometrically possible affecting the Princes Highway, local roads, and Gippsland rail line within 1km of the Project, therefore no impact is likely.
- The SGHAT modelling identified no glare affecting the runway approach paths (within the 2 mile flight path limit) for the two runways at Bairnsdale Airport.
- The SGHAT modelling also identified no glare affecting Bairnsdale Christian College, the level railway crossing on Power Station Road, and the entrance to Bairnsdale Power Station.

The assessment went on to include the following recommendation for management and mitigation measures:

The Project Environmental Management Plan (EMP) should detail glare management measures, including the parameters detailed in this report. In addition, the EMP should detail a process for monitoring glare hazard and managing possible complaints.

Overall, the assessment determines that there will be no glare impacts on the surrounding receptors, providing that backtracking is not allowed by the proposal system. The applicant has committed to this outcome and it is expected that any approval will require this outcome.

## 7.5. Amenity Considerations

Amenity impacts associated with the development are likely to be isolated to matters pertaining to visual and acoustic amenity. Matters associated with visual amenity have been assessed above within Section 7.4 of this report.

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With respect to acoustic amenity Clause 150511s provines me fretailolite assessment guidance in relation to the assessment of noise impacts the policy guidance a Noise Impact Assessment Relation to the proposed development. The purpose printing sensible in the proposed development. The purpose printing sensible in the proposed development and to determine required noise control measures, if necessary, to achieve compliance with relevant noise limits applicable under the legislation at noise sensitive locations.

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The report concluded that "..the proposed development can be designed to comply with the relevant acoustic criteria of the East Gippsland Shire Council, EPA Victoria and Australian Standards. It is our opinion that the acoustic risks associated with the proposal can be adequately controlled and the amenity of neighbouring properties and residents satisfactorily protected".

Please refer to this report for further details.

### 7.6. Native Vegetation Removal

Clause 52.17 of the planning scheme refers to native vegetation and has the purpose to ensure that there is no net loss to biodiversity as a result of the removal, destruction or lopping of native vegetation. The requirements of the clause are supported by application of the three step approach in accordance with Guidelines for the removal, destruction or lopping of native vegetation (Department of Environment, Land, Water and Planning, 2017) ("the Guidelines").

A planning permit is required pursuant to clause 52.17-1 to remove, destroy or lop native vegetation, including dead native vegetation, unless an exemption is otherwise specified.

The proposal seeks to remove native vegetation to establish the new PV array and infrastructure. There are no exemptions which apply to these trees and a permit is therefore required.

A Native Vegetation Removal Report has been prepared by Nature Advisory that provides a detailed assessment of the proposed vegetation removal. The report concludes that the proposed vegetation removal is acceptable. Please refer to this report for further details.



Figure 40 | Extract from Native Vegetation, Report life in and receipt of to be Removed

## 7.7. Bushfire

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The subject land is not mapped as Bushfire Management Overlay but in recognised as Bushfire Prone under the building regulations. Having regard to this, and the policy directions of clause 13.02-1S, it is appropriate that the facility be designed with regard to bushfire risks.

A Bushfire Management Statement has been prepared by Nature Advisory and demonstrates how the proposal meets the requirements of Clause 13.02-1S. Please refer to this report for further details.

## 7.8. Traffic, Access and Parking

A traffic impact assessment has been prepared by Trafficworks and concludes that the proposed traffic, access and parking arrangements for the development are acceptable, subject to the following recommendations:

- that specific areas be identified on the site plan to be dedicated to car and truck parking, vehicle manoeuvring and materials storage during the construction phase.
- that detailed design of the new site entry driveway incorporate the relevant aspects of SD 265 of the IDM

Please refer to this report for a complete assessment of matters pertaining to traffic access and parking.

## 7.9. Stormwater Management

As per the recommendations of the Solar Energy Facilities Design and Development Guideline, drainage and stormwater plans will be incorporated within an environmental management plan, which may be required by permit condition. The subject site is not located within a flooding area, nor does it traverse any waterways. The development will generally be designed to maintain the quality of stormwater within and exiting the site, and it is anticipated that the development will impose some stormwater management measures, although not of a significant scale as majority of the groundcover on the site will be retained.

#### 7.10. General Provisions

Clauses 65.01 of the East Gippsland Planning Scheme identifies that prior to determining an application the Responsible Authority must consider the directions of this Clause. The contents of this report herein clearly demonstrate consistency with outcomes of these considerations.

The proposal represents a carefully crafted design response that has provided due consideration to the site's opportunities and constraints to deliver a development outcome that is not only responsive to the directions and aspirations of planning policy, but also its existing physical context.

The proposal represents an efficient use of land zoned for agricultural purposes contributing to the promotion of sustainable development and the transition to a low carbon economy. The proposed design is responsive and sympathetic to the established character of its surrounds, can be suitably serviced by infrastructure, minimises the impact on any biodiversity values and appropriately manages impacts associated with natural hazard risk.

Accordingly, the proposal represents an acceptable response to the directions of this Clause.

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## 8. Conclusion

This Planning Report seeks approval for use and development of land for a renewable energy facility (solar), associated utility installations, and the removal of native vegetation. The subject land is described as Lot 1 in PS516537 and is located at 910 Princes Highway, Bairnsdale.

The proposal deserves the support of DELWP because:

- · it complies with the standards and objectives outlined within the East Gippsland Planning Scheme;
- it represents orderly planning of large farming allotments in an area that minimises impacts on more sensitive land:
- it proposes a site responsive design which integrates with the existing topography and ensures the
  development does not significantly impact the amenity of the area;
- it proposes treatments such as perimeter landscape plantings and screenings to minimise conflicts with adjoining sensitive interfaces;
- · access can be easily obtained through connections to the surrounding road network and
- existing infrastructure connections, including to a conveniently located distribution line, can be easily extended with minimal works required;
- it contributes to the sustainability of the shire through providing an alternative renewable energy source;
- it contributes towards the state objective to reduce emissions by 28-33 per cent by 2025 and 45-50 per cent by 2030;
- it will have a positive economic effect through providing work and contracting opportunities to local businesses, and through indirect effects such as accommodation, hardware stores, or food premises';

In light of the above considerations, it is our opinion that the proposal is appropriate from a planning point of view and is in the public interest. The proposed development warrants support by DELWP.

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## Appendix A: Title Details

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## Appendix B: Plans

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## Appendix C: Acoustic Impact Assessment

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# Appendix D: Agricultural Impact Assessment Report

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## Appendix E: Bushfire Management Statement

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## Appendix F: Glint and Glare Assessment

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## Appendix G: Native Vegetation Assessment Report

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## Appendix H: Traffic Impact Assessment

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## Appendix I: Visual Impact Assessment

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## Appendix J: Cultural Heritage Management Plan

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Operational Noise Emission Assessment Proposed Solar Farm 910 Princes Highway, Bairnsdale, VIC

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C/o- Habitat Planning

Association of Australasian Acoustical Consultants

19 October 2023





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5892R001.LB.231018	2	19 October 2023	LB	RH	RH	DO

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### **GLOSSARY**

#### NOISE

Noise is produced through rapid variations in air pressure at audible frequencies (20 Hz - 20 kHz). Most noise sources vary with time. The measurement of a variable noise source requires the ability to describe the sound over a particular duration of time. A series of industry standard statistical descriptors have been developed to describe variable noise, as outlined in **Section 2** below.

#### NOISE DESCRIPTORS

 $L_{eq}$  – The sound pressure level averaged over the measurement period. It can be considered as the equivalent continuous steady-state sound pressure level, which would have the same total acoustic energy as the real fluctuating noise over the same time period.

 $L_{Aeq(15min)}$  – The A-weighted average equivalent sound level over a 15-minute period.

L<sub>A90</sub> – The A-weighted noise level that has been exceeded for 90% of the measurement duration. This descriptor is used to describe the background noise level.

RBL – Rating Background Level. The overall single-figure background level representing each assessment period (day/evening/night) over the whole monitoring period (as opposed to over each This copied document to be made available 24hr period used for assessment background level). This is the level used for assessment purposes.

### its consideration and review as

dB – Decibels. The fundamental punit offsophid a Behisodefined as the logarithm of the ratio of the sound pressure squared over the reference to the most common usage of the Decibel of the purpose which may breach any referenced to the nominal threshold of human hearing. For sound in air and other gases, dB(SPL) is relative to 20 micropascals (µPa) = 2×10<sup>-5</sup> Pa, the quietest sound a human can hear.

### **A-WEIGHTING**

"A-weighting" refers to a prescribed amplitude versus frequency curve used to "weight" noise measurements in order to represent the frequency response of the human ear. Simply, the human ear is less sensitive to noise at some frequencies and more sensitive to noise at other frequencies. The A-weighting is a method to present a measurement or calculation result with a number representing how humans subjectively hear different frequencies at different levels.

### NOISE CHARACTER, NOISE LEVEL AND ANNOYANCE

The perception of a given sound to be deemed annoying or acceptable is greatly influenced by the character of the sound and how it contrasts with the character of the background noise. A noise source may be measured to have only a marginal difference to the background noise level but may be perceived as annoying due to the character of the noise.

Acoustic Dynamics' analysis of noise considers both the noise level and sound character in the assessment of annoyance and impact on amenity.



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### 1 INTRODUCTION

#### 1.1 EXECUTIVE SUMMARY

Acoustic Dynamics is engaged by **Habitat Planning** on behalf of **Bison Energy** to conduct an assessment of operational noise emission associated with the proposed solar farm and battery energy storage system (BESS) located at 910 Princes Highway, Bairnsdale, Victoria.

This document provides an assessment of noise emission resulting from various noise sources associated with the operation of the proposed solar farm at the potentially most affected sensitive receiver locations.

This assessment is prepared in accordance with the various acoustic requirements of:

- (a) East Gippsland Shire Council;
- (b) Environment Protection Authority (EPA) Victoria; and
- (c) Australian Standards.

Note. This report has been updated to address a request for information relating to additional sensitive receiver locations and the cumulative impacts associated with adjacent operations (Bairnsdale Power Station Taris Parkside CTIPROSE TOMBET MIND made available

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1.2 DESCRIPTION OF PROPOSAMenning process under the

Planning and Environment Act 1987.

The subject proposal is for the sold proposal

The boundaries of the site are shared with other FZ-zoned lots, with residences located on some of these lots. The closest sensitive receivers are located at:

- [R<sub>1</sub>]: 175 Bairnsdale-Dargo Road;
- [R<sub>2</sub>]: 135 Bairnsdale-Dargo Road;
- [R<sub>3</sub>]: 125 Bairnsdale-Dargo Road
- [R<sub>4</sub>]: 107 Bairnsdale-Dargo Road;
- [R₅]: 870 Princes Highway;
- [R<sub>6</sub>]: 21 Merry Street;
- [R<sub>7</sub>]: 25 Bengworden Road; and
- [R<sub>8</sub>]: 20 Bengworden Road.

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Compliance at the assessed sensitive receiver locations ensures compliance at all other receivers located further away.

The proposed solar farm is shown in the Location Map, Aerial Image and Drawings presented within **Appendix A**. The various noise sources and operations associated with the proposal are expected to include:

- Mechanical plant and equipment; and
- · Vehicle movements.

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#### 1.3 SCOPE

Acoustic Dynamics has been engaged to provide an acoustic assessment suitable for submission to the relevant authorities.

The scope of the assessment is to include the following:

- Review local council planning instruments, state guidelines, federal legislation and standards relevant to noise emission at the subject site;
- Determine noise limits for the assessment of operational noise impacts;
- Perform relevant calculations and noise modelling associated with the operations of the development to determine noise emission at nearby sensitive receiver locations; and
- Provide recommendations for design measures to be incorporated to achieve compliance with the relevant noise limits and reduce potential noise impacts at nearby receiver locations.

## 2 ASSESSMENT CRITERIA AND STANDARDS

Acoustic Dynamics has conducted a review of the local council, state government and federal legislation that is applicable to poise emission assessment of the legislation are presented belowes the most retired which have been used in this assessment of the subject development are summarised below.

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2.1 PLANNING SCHEME detailed for any purpose which may breach any

Acoustic Dynamics advises that Clause 19.05 the planning scheme includes the following relevant noise assessment policy:

"13.05 NOISE

13.05-1S Noise management



## Objective

To satisfy the management of noise effects on sensitive land uses.

### Strategy

Ensure that development is not prejudiced and community amenity and human health is not adversely impacted by noise emissions.

Minimise the impact on human health from noise exposure to occupants of sensitive land uses (residential use, child care centre, school, education centre, residential aged care centre or hospital) near the transport system and other noise emission sources through suitable building siting and design (including orientation and internal layout), urban design and land use separation techniques as appropriate to the land use functions and character of the area.

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### Policy guidelines

Consider as relevant:

The noise requirements in accordance with the Environment Protection Regulations under the Environment Protection Act 2017.

### Policy guidelines

Consider as relevant

- Environment Protection Regulations under the Environment Protection Act 2017
- Noise Limit and Assessment Protocol for the Control of Noise from Commercial, Industrial and Trade Premises and Entertainment Venues (Publication 1826.2, Environment Protection Authority, March 2021)
- Environment Reference Standard (Gazette No. S 245, 26 May 2021)
- Passenger Rail Infrastructure Noise Policy (Victorian Government, 2013)
- VicTrack Rais Qovelopment Noterfacts Guidelines il VicTrack, 2019)"

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PROTECONE REPAIR PROTECTION A part of a planning process under the 2.2 ENVIRONMENT

Planning and Environment Act 1987.

2.2.1 ENVIRONMENT PROTECTION PROTECTION ASCITO LIBERT SEED OF ANY

purpose which may breach any

From 1 July 2021, new environment protection egislation – the Environment Protection Act 2017 (incorporating amendments as at 1 July 2021), provides a legislative framework for the assessment and control of noise impacts.

Part 3.2 of the Act provides the following detail regarding the environmental noise obligations of all Victorians:

### "25 General environmental duty

1) A person who is engaging in an activity that may give rise to risks of harm to human health or the environment from pollution or waste must minimise those risks, so far as reasonably practicable."

Part 7.6 of the Act provides the following detail regarding the control of unreasonable and aggravated noise:

"Part 7.6—Control of unreasonable and aggravated noise

166 Unreasonable noise

A person must not, from a place or premises that are not residential premises—

- a) emit an unreasonable noise; or
- b) permit an unreasonable noise to be emitted.

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Section 3 of the Act provides a definition of unreasonable noise:

#### "unreasonable noise means noise that-

- a) is unreasonable having regard to the following
  - i. its volume, intensity or duration;
  - ii. its character:
  - iii. the time, place and other circumstances in which it is emitted;
  - iv. how often it is emitted;
  - v. any prescribed factors; or
- b) is prescribed to be unreasonable noise;"

#### 2.2.2 ENVIRONMENT PROTECTION REGULATION 2021

Part 5.3 of the *Environment Protection Regulations* (2021) provides the following detail regarding the assessment of commercial and industrial noise impacts:

"113 Prediction, measurement, assessment and analysis of noise must be in accordance with Noise Protocol

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A person who conducts a prediction, measurement, assessment or analysis of noise within a noise sensitive area for the purpose of phanning or these measurement, assessment or analysis of noise within a noise sensitive area for the purpose of phanning or these measurement, assessment or analysis of noise within a noise within a noise sensitive area for the purpose of enabling assessment or analysis of noise within a noise sensitive area for the purpose of enabling assessment or analysis of noise within a noise sensitive area for the purpose of enabling assessment or analysis of noise within a noise sensitive area for the purpose of enabling assessment or analysis of noise within a noise sensitive area for the purpose of phanning or the purpose of phanning or the purpose of the

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2.2.3 INDUSTRIAL NOISE LIMITS copyright

In Victoria, industry compliance with noise limits is regulated by the Noise limit and assessment protocol for the control of noise from commercial, industrial and trade premises and entertainment venues (Noise Protocol, EPA Publication 1826.4) and is mandatory under the Environment Protection Act 2017 and Environment Protection Regulations 2021.

The Noise Protocol sets noise limits which are determined based on the purpose of the local land zones at a given noise generation and receiver area and are used to exemplify the reasonable amenity expectations for the area.

To establish the operational noise limits at the subject site, limits were derived as per the prescribed methodology in accordance with the Noise Protocol ("2. Noise limits – Rural area method"). Acoustic Dynamics advises that the noise generating property and all nearby receiving properties are within the Farming Zone (FZ) with no intervening zones.

Following the general procedures outlined in the EPA's Noise Protocol, a summary of relevant noise limits is presented in **Table 2.1** below.



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**Table 2.1 Summary of Determined Noise Limits for Nearest Sensitive Receivers** 

Location	Assessment Period	Day of the Week	Noise Limit [dB(A)]
Nearest Residential Receiver(s)	Day	Mon to Sat (except public holidays): 7am - 6pm	L <sub>eq(30minute)</sub> ≤ 46
	Evening	Mon to Sat: 6pm to 10pm	
		Sun and public holidays: 7am to 10pm	L <sub>eq(30minute)</sub> ≤ 41
	Night	10pm to 7am	L <sub>eq(30minute)</sub> ≤ 36

The Noise Protocol states that the measured or predicted noise level associated with the operation of mechanical plant associated with the subject development shall be presented as an L<sub>Aeq</sub> noise level. Where required, the emitted noise level is to be corrected for noise character, tonality and duration and is to be presented as the effective noise level (L<sub>eff</sub>).

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2.3 SLEEP DISTURE ANCE OBJECTIVE ose of enabling its consideration and review as

part of a planning process under the

Acoustic Dynamics advises than sleep addition between a dometric such and the potential for sleep disturbance to occur depends with the left of the area of the residential receiver, and the number of events that occur. In lieu of applicable victorian legislation or guidelines, the NSW Environmental Protection Agency's document "Noise Guide for Local Government" can be used as guidance in Victoria although it is not a mandatory policy.

The NSW EPA has investigated overseas and Australian research on sleep disturbance. The assessment of noise for sleep disturbance relies on the application of a screening that indicates the potential for this to occur. The EPA's *Noise Guide for Local Government (NGLG) 2013* provides the following guidance for such a screening test:

"Currently, there is no definitive guideline to indicate a noise level that causes sleep disturbance and more research is needed to better define this relationship. Where likely disturbance to sleep is being assessed, a screening test can be applied that indicates the potential for this to occur. For example, this could be where the subject noise exceeds the background noise level by more than 15 dB(A). The most appropriate descriptors for a source relating to sleep disturbance would be  $L_{A1(1 \text{ minute})}$  (the level exceeded for 1% of the specified time period of 1 minute) or  $L_{Amax}$  (the maximum level during the specified time period) with measurement outside the bedroom window."



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In addition to the above, the EPA has previously published the following additional information relating to findings of significant research carried out for sleep disturbance:

"Maximum internal noise levels below 50-55 dBA are unlikely to cause awakening reactions... One or more noise events per night, with maximum internal noise levels of 65-70 dBA, are not likely to affect health and wellbeing significantly."

In accordance with the guidelines detailed above, the following sleep disturbance objective has been applied for this project:

L<sub>Amax</sub> ≤ **55 dB** 

## 3 ASSESSMENT METHODOLOGY

Acoustic modelling was undertaken using noise modelling software (CadnaA Version 2023) to predict operational noise levels generated by the development.

CadnaA calculates environmental noise propagation according to the applicable international and ISO standards, including the ISO 9613 algorithm.

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Within our calculations and accounting and accounting the forthe sole purpose of enabling and accounting and accounting the forthe sole purpose of enabling and account and account and account and account ac

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- Airborne noise losses toue to unstance and ground topography;
- Losses due to direction and diffraction;
- Increases due to reflections; and
- Acoustic shielding.

### 3.1 MODELLING ASSUMPTIONS

The following assumptions were made regarding the noise model configuration:

- 1. The noise-generating mechanical systems are to be non-enclosed and situated towards the centre of the site, as indicated in the site plans;
- 2. The site and mechanical plant will operate 24 hours a day; and
- 3. Vehicle access will consist of one staff vehicle visiting the site once a week.

## 3.2 NOISE SOURCES AND OPERATIONS

Acoustic Dynamics has established and assessed the following noise sources and operations associated with the development.

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The noise data presented in **Table 3.1** has been established based on information provided by the proponent, short-term measurements, or referenced from our database of nearfield measurements at similar developments.

**Table 3.1 Associated Noise Sources and Operations** 

Source	Quantity	Sound Pressure Level @ 1m [dB(A)]
Mechanical Equipment		
Hithium Container Battery Energy Storage System (or equivalent)	72	75
SCS 3600 UP(-US) Inverter and SCMVP4600 Switch/Transformer	18	81
Vehicle Movements		
Car pass-by	1	78

### 3.3 ADJACENT OPERATIONS

Noise emission from the adjacent commercial/industrial operations (i.e. Bairnsdale Power Station and Parkside Timber Mill) has been considered within this assessment. Regulation 119 of the Environment Protection Regulations provides the following relevant information:

its consideration and review as "119 Cumulative noisepart of a planning process under the Planning and Environment Act 1987.

- 1) If 2 or more commercial, moust not be used for any commercial, moust not and process (whether existing or proposed) emit, or are likely to emit, noise that contributes to the effective noise level, a person in management or control of one or more of those premises must take all reasonable steps to ensure that the contribution from each of the premises, when combined, does not exceed the noise limit for the noise sensitive area.
- 2) (For the purposes of subregulation (1), what constitutes a reasonable step must be determined in accordance with the Noise Protocol."

### 3.3.1 PARKSIDE TIMBER MILL

Based on a review of Google business information, the timber mill operates weekdays, between 8:00am and 4:00pm. We assume that the timber mill does not exceed the daytime noise limit, and as such, given that noise from the solar farm is predicted to be more than 10 dB lower than the daytime noise limit, the cumulative noise contribution from the two sites is not expected to increase existing noise levels, or exceed the daytime noise limit.

## 3.3.2 BAIRNSDALE POWER STATION

Acoustic Dynamics has been provided with the following information from Bison Energy in relation to the future usage of the Bairnsdale power station:

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## **ADVERTISED**

"Historically, the Alinta owned gas peaker has been fired up to support the East Gippsland grid majority in school holidays etc when an influx of holiday makers travel from Melbourne to the Lakes Entrance area and also a little at 2am in deep winter periods to support a large amount of residential electric hot water tanks/ systems to start heating up before peoples morning uses (showers, washing etc).

So literally the population (either increase in demand or hot water load demand) causes a massive increase on the grid and creates a supply shortage therefore triggering a 'demand response' requirement by Ausnet, which means the grid needs a boost (to date from the gas peaker).

Though due to the cost of gas and social responsibility by Ausnet/ AEMO they've redacted the 'services agreement' with Alinta to supply for demand/grid response as we committed to supporting and developing an equivalent output sized demand response BESS to take this role.

What this means is now Ausnet will call on the Bairnsdale BESS to take this role and the gas peaker won't be turning on, nor can it anyway as the grid will be at max capacity. So whether the gas peaker wants to turn on or the battery wants to ramp up they can't do it at the same time due to very limited capacity in that part of the East Gippsland Ausnet network. It's literally one or the other, it's physically not possible to have both running at the same time."

In relation to cumulative a blustic impacts from the solantarm aid the power station, this means there will not be any, as either the power stall bir of the BEESS will respond to peak grid demand, however the operation will be non-concurrent part of a planning process under the

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The cumulative noise impact has been assessed to the potentially most affected point at the adjacent sensitive receiver properties and presented in Table 3.2 below.

**Table 3.2 Nearest Sensitive Receiver Locations** 

**RECEIVERS** 

3 4

Receiver	Location	Direction
R <sub>1</sub>	175 Bairnsdale-Dargo Road	North
R <sub>2</sub>	135 Bairnsdale-Dargo Road	North
R <sub>3</sub>	125 Bairnsdale-Dargo Road	North east
R <sub>4</sub>	107 Bairnsdale-Dargo Road	North east
R <sub>5</sub>	870 Princes Highway	East
R <sub>6</sub>	21 Merry Street	South east
R <sub>7</sub>	25 Bengworden Road	South
R <sub>8</sub>	20 Bengworden Road	West

Acoustic Dynamics advises that by achieving compliance with the nearest sensitive receiver locations, compliance will also be achieved at all other sensitive receiver locations further away.

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# 4 OPERATIONAL NOISE EMISSION ASSESSMENT

The calculated maximum noise emission levels at the nearest receiver locations against the relevant noise limits are presented below. It is advised that by achieving compliance with the nearest sensitive receiver locations, compliance will also be achieved at all other receiver locations.

The assessment location for **external noise emission** is defined as the most affected point on or within any sensitive receiver property boundary. Examples of this location may be:

- 1.5m above ground level;
- On a balcony at 1.5m above floor level; and
- Outside a window on the ground or higher floors, at a height of 300mm below the head of the window.

### 4.1 EXTERNAL NOISE EMISSION

The calculated maximum **external** noise emission levels at the nearest receiver locations are presented against the relevant noise emission criteria in **Table 4.1** below.

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The calculated maximum noise flevels independent of the consideration and review as its consideration and review as

part of a planning process under the

Planning and Environment Act 1987.

Table 4.1 Calculated Maximum External Noises in Servels at Sensitive Receiver Locations

Receiver	Relevant Assessment Period	ose which may l NGB&right Source	Maximum  L <sub>Aeq(30min)</sub> External Noise  Level [dB]	L <sub>Aeq(30min)</sub> Noise Limit [dB]	Complies?
<b>R</b> <sub>1</sub> 175 Bairnsdale- Dargo Rd	Night <sup>1</sup> (10pm to 7am)	Solar Farm	28	36	Yes
<b>R₂</b> 135 Bairnsdale- Dargo Rd	Night¹ (10pm to 7am)	Solar Farm	29	36	Yes
<b>R₂</b> 125 Bairnsdale- Dargo Rd	Night <sup>1</sup> (10pm to 7am)	Solar Farm	28	36	Yes
<b>R₄</b> 107 Bairnsdale- Dargo Rd	Night¹ (10pm to 7am)	Solar Farm	27	36	Yes
<b>R</b> ₅ 870 Princes Hwy	Night <sup>1</sup> (10pm to 7am)	Solar Farm	31	36	Yes
<b>R</b> <sub>6</sub> 21 Merry St	Night¹ (10pm to 7am)	Solar Farm	30	36	Yes

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Receiver	Relevant Assessment Period	Noise Source	Calculated Maximum L <sub>Aeq(30min)</sub> External Noise Level [dB]	L <sub>Aeq(30min)</sub> Noise Limit [dB]	Complies?
<b>R</b> <sub>7</sub> 25 Bengworden Rd	Night <sup>1</sup> (10pm to 7am)	Solar Farm	33	36	Yes
<b>R</b> <sub>8</sub> 20 Bengworden Rd	Night <sup>1</sup> (10pm to 7am)	Solar Farm	29	36	Yes

Note: 1) Compliance with the night-time limit will ensure compliance with the less stringent day time and evening periods.

Acoustic Dynamics advises the calculated **external** noise emission levels are conservatively based on **maximum capacity** operations at the development during the night time period. Acoustic Dynamics advises that such a scenario is unlikely to occur and noise levels are likely to be below those calculated for the majority of the time.

# Acoustic Dynamics advises that the use of the site, the eby achieve compliance with the use of the site, the Lamax objective. Acoustic Dynamics advises that the noise levels provided above achieve compliance with the Lamax objective. Laeq(30min) requirement. To objective. This conied document to he made available se events associated with the use of the site, the eby achieve compliance with the Laeq(30min) requirement. To objective. The document must not be used for any purpose which may breach any copyright

The calculated noise emission levels associated with the operations of the proposed development indicate the following:

- Noise emission resulting from the use and operations of the proposed development is predicted to comply with the relevant noise limits when assessed at the nearest sensitive receivers;
- Cumulative noise impacts associated with the concurrent operation of the Parkside Timber Mill and the solar farm is **predicted to comply** with the relevant noise limits when assessed at the nearest sensitive receivers
- 3. There is low risk of acoustic disturbance to the nearest sensitive residential receivers;
- To ensure the assessment is conducted in a conservative manner, noise emission has been assessed as a worst-case scenario (i.e. all noise generating activities and noise sources occurring simultaneously and at maximum capacity);
- Generally, noise emission associated with the operation of the facility is predicted to be lower than the calculations presented.

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### **6 RECOMMENDATIONS**

Acoustic Dynamics advises that the predicted maximum noise emission associated with the operation of the proposed mechanical plant is predicted to **comply** following implementation of the following recommendations.

- The selected battery energy storage systems must not exceed sound power level (SWL) 83 dB(A), or 75 dB(A) at 1 metre (e.g. Hithium Container Battery Energy Storage System, or equivalent);
- The selected inverters must not exceed sound power level (SWL) 92 dB(A), or 83 dB(A) at 1 metre (e.g. SCS 3600 UP(-US) Inverter and SCMVP4600 Switch/Transformer);
- 3. An acoustic barrier is required along the southern and south western perimeter of the plant, to a height of 4 metres and at a maximum distance of 10 metres from the plant;
- 4. The acoustic barrier should be constructed to the following specification:
  - i. Be constructed of a material with a minimum surface density of 15 kg/m², such as:
    - Hepphylogkwordicument to be made available
    - A double layer Colorbond (Gustami Blue Orb® or equivalent) barrier(s);
    - A minimulits 9 minital trick icompressed wild re-cement sheeting on a timber or steel steel and a planning process under the
    - Masonty (prick or concrete) construction;
  - ii. Have no gaps between barrier panels can be adequately seel and at the ground (gaps between panels can be adequately seeled using a flexible mastic sealant);
  - iii. Be lined internally (side facing mechanical plant) with a suitably weather resistant and durable outdoor acoustic absorption material (such as Stratocell Whisper or equivalent);
- Where appropriate, materials used are to be certified by a locally recognised (qualified) and accepted professional for suitability (structural, wind loading, mechanical, or other) for the intended use; and
- All mechanical equipment should be regularly maintained and serviced to maintain low mechanical noise emission levels.

# 7 CONCLUSION

Acoustic Dynamics has conducted an acoustic assessment of operational noise emission associated with the proposed solar farm located at Barnawartha North.

A review of the applicable local council, state government, federal legislation and international standards was conducted. Noise levels were assessed in accordance with the requirements of:

- (a) East Gippsland Shire Council; and
- (b) Environment Protection Authority Victoria.

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The assessment predicted noise impacts at nearby sensitive receiver locations. Noise modelling was conducted using assumed **worst-case** operational scenarios in **Section 5**.

# Acoustic Opinion

Further to our review of the relevant acoustic criteria and requirements, and our calculations, Acoustic Dynamics advises that the proposed development can be designed to comply with the relevant acoustic criteria of East Gippsland Shire Council, EPA Victoria.

It is our opinion that the acoustic risks associated with the proposal can be adequately controlled and the amenity of neighbouring properties and residents can be satisfactorily protected.

We trust that the above information meets with your present requirements and expectations. Please do not hesitate to contact us on 03 7015 5112 should you require more information.



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# APPENDIX A - LOCATION MAP, AERIAL IMAGE AND DRAWINGS

# A.1 LOCATION MAP (COURTESY OF GOOGLE MAPS)



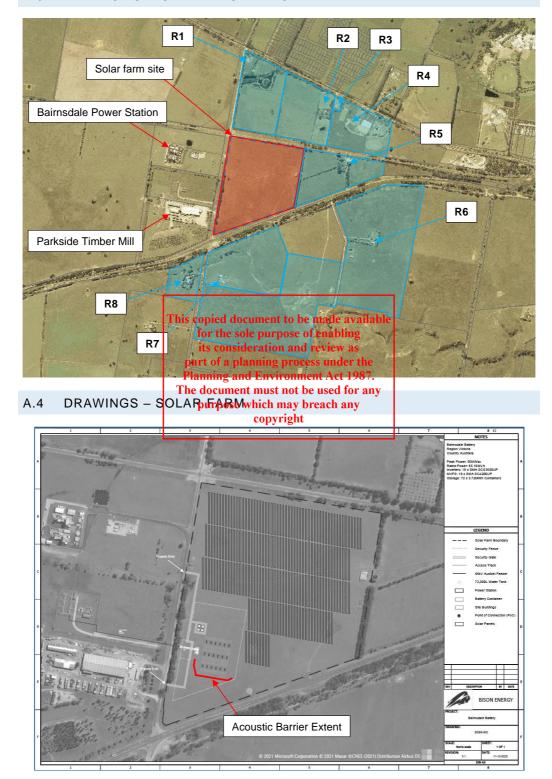


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ACOUSTIC DYNAMICS - EXCELLENCE IN ACOUSTICS

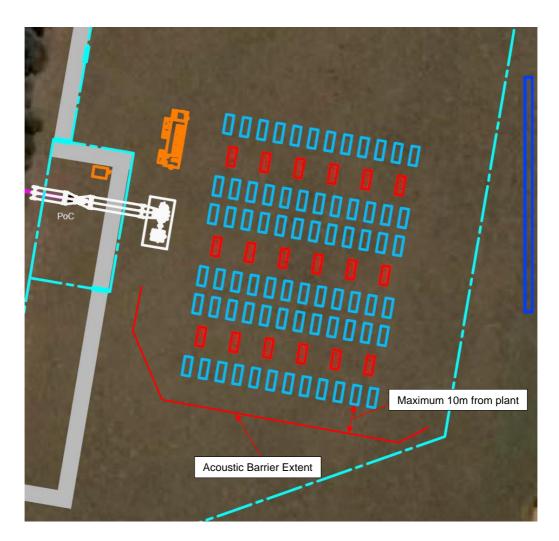


# A.3 NEAREST SENSITIVE RECEIVERS



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# ADVERTISED PLAN

Agricultural Assessment Report Bairnsdale Solar Farm and Battery Energy Storage System

Prepared: J Shovelton

Revised July 2023

### **Document control and status**

Revision	Status	Date	Author	Reviewed	Approved	Recipient
1	Draft	13/02/23	J Shovelton			
2	Draft 2	16/02/23	J Shovelton	S O'Brien		
3	Final	01/06/23	J Shovelton		J Shovelton	S O'Brien
4	Revised	17/7/23	J Shovelton			S O'Brien

Meridian Agriculture Pty Limited ABN 69 093 095 875 ACN 093 095 875 96 Harbours Rd Yendon VIC 5323 This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987.

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# Agricultural Assessment Report Bairnsdale Solar Farm and BESS

# **Executive Summary**

This Agricultural Assessment Report examines the agricultural productivity of the proposed Bairnsdale solar farm and battery energy storage system (BESS) to be located on the north eastern corner of the Princes Highway and Power Station Road intersection, and the impact of its construction on a range of agricultural considerations.

The site proposed for the solar farm and BESS totals 20.73ha of which approximately 3.5ha will be covered by the footprint of the batteries and a further 10 or so hectares for the solar panel arrays. The site has previously been used exclusively for grazing. The soils in this location are classed as soils of low to moderate fertility with significant subsoil constraints that limit their ability to be highly productive. The soil types are not considered to be suitable for long term cropping and so they would be likely to remain as pastures for grazing.

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# **Background**

An agricultural assessment of the site of the Bairnsdale solar farm and BESS has been requested by Habitat Consulting Pty Ltd on behalf of BE Pro BD Pty Ltd. This report has been informed by the requirements of the "Solar Energy Facilities, Design and Development Guidelines", Victorian Government (2019)<sup>1</sup>.

The requirements outlined in the Guidelines are to:

- protect strategically important agricultural and primary production land from incompatible land use,
- protect productive agricultural land that is of strategic significance to a local area or in a regional context, and
- avoid the loss of productive agricultural land without considering the impact of the loss on the agricultural sector and its consequential effect on other sectors.

Specifically the report covers the following aspects:

• the impact on the loss of the site if it has high quality soils, particularly soils that are niche to a type of crop or other agricultural activity,

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East Gippsland Shire Council - Agenda Council Meeting - Tuesday 6 February 2024

 $<sup>^1\</sup> https://www.planning.vic.gov.au/\__data/assets/pdf\_file/0028/428275/Solar-Energy-Facilities-Design-and-Development-Guideline-August-2019.pdf$ 

- the potential loss of reliable, accessible water (such as irrigated areas) and its impact at a local or regional scale.
- the impact of fragmentation and a change of land use to non-agriculture activity on local and regional productivity and output,
- the impact of a change of land use on recent and/or current efforts to modernise and reform agricultural activity in the area,
- whether the land has specifically been set aside or defined for agricultural use and development in a planning scheme or other strategic document,
- whether the change in land use is to the detriment of a government's previous or existing investment and support for the site or the area, and
- whether the proposed solar energy facility can co-locate with other agricultural activity, to help diversify farm income without reducing productivity.
- Assess the cumulative impact of this solar farm development with other solar farms in the vicinity.

The proposed site (shown in Figure 1) is located approximately 4km west of the Bairnsdale town centre, on the northern side of the Princes Highway. It is bounded by the Melbourne - Bairnsdale railway line on the northern boundary, and Power Station Road on the west. The Bairnsdale power station and the Auswest Timber Mill are located on the western side of Power Station Road and are adjacent to the proposed solar farm and BESS site.

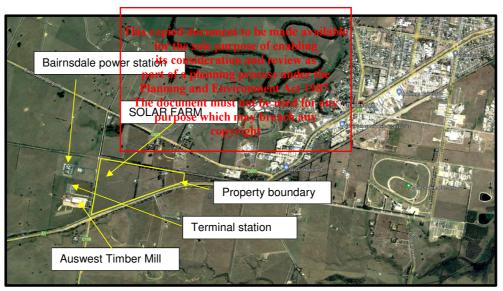


Figure 1 Location of Bairnsdale solar farm and BESS.

The green shaded area in Figure 2 shows the area to be leased for the solar farm and BESS adjacent to Power Station Road. Figure 3 shows the BESS and solar panel configuration.

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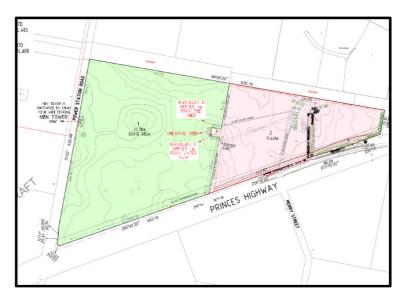


Figure 2. Lease area for solar farm and BESS showing site topography

The area occupied by the by the BESS will be approximately 3.5ha leaving a residual of approximately 17.2ha. The biological section of this area. for the sole purpose of enabling



Figure 3 Bairnsdale solar farm and BESS design.

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# **Site Characteristics**

The site is gently undulating, as shown by the contour lines in Figure 2, with a slight rise in the middle of the site.

Figure 4 shows the site view from the Princes Highway and Figure 5, the site view from Power Station Road.



Figure 4. Solar farm and BESS site location, from Princes Highway



Figure 5. Solar farm and BESS site location from Power Station Road

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# Geology, and Soils

The soils at the site are derived from recent sediments and are located on old stream terraces. The soil and landform associations for the Bairnsdale area are shown in Figure 6.



Figure 6. Soils of the Bairnsdale area. (\*\state solar farm and BESS site)

This copied document to be made available. The soils at the site belong to the Briagalangus oil association (Br). The soils are texture contrast soils. The surface soils are light textured spile (fine sapple loging in other with a bleached subsurface layer. This bleached apart analymater lagging mesculting in the last of soil structure and the ability to hold nutrients.

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Medium to heavy clays occur at variable depthen but generally before 50cm. Strong mottling occurs in the deeper subsoils. Mottling (variable colouring of the clay layer) is also associated with seasonal waterlogging.

The surface soils are strongly to moderately acidic with decreasing acidity with depth. The subsoils are sodic to highly sodic resulting in poor soil structure and rooting depth restriction. The loss of soil structure coupled with the sandy nature of the soils results in a low water holding capacity. These soils respond to light rains when the soil is dry. However because of their low water storage capacity, plants quickly suffer moisture stress if follow-up rains don't occur.

In their natural state these soils would have been deficient in phosphorus, nitrogen, sulphur and molybdenum as well as being strongly acidic. Some soils in this soil association would also be likely to be deficient in potassium. The current nutrient status of soils will be a reflection of recent management and fertilizer history and it would be expected that, at least the phosphorus and sulphur levels would have improved through the addition of fertilizers. Soil acidity would have increase since clearing for agriculture and may or may not have been addressed through the addition of lime.

In summary, the soils at the proposed site are of inherent moderate to poor quality with significant subsoil limitations.

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# **Agricultural Use**

Historical images indicate that, for the last 20 years, the site appears to have been used only for grazing. While not a complete time record, the historical images show no evidence of pasture resowing or cropping having taken place during this period.

While irrigated vegetable production occurs along the Mitchell River Flats to the north of the site, it would not be feasible for water to be diverted from the river to irrigate this or nearby land and so the site would remain as a dryland farm.

# **Agricultural Assessment**

The size of the site needs to be kept in context. It is a small area - total of 20.73ha. Of this will approximately 10ha will be used for the solar farm and 3.5ha for the BESS.

# Strategic importance of land

The site has no strategic importance. It is zoned FZ1 and the area is not specifically mentioned in any planning scheme as being of high value agricultural land nor has the land been subject to government programs that would limit the ability of the facility to proceed. Further, the property is close to the peri-urban area of Bairnsdale and has industrial premises on its western boundary.

# **Agricultural Productivity**

Stock Productivity

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from the predicted carrying capacity and then are acted the

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The length of growing season can be used to provide an estimate of potential stock carrying capacity<sup>2</sup> of an area. The growing season is a function of rain and its distribution. Realisation of this potential depends on the consistent good agrondmy and husbandry and the absence of inherent soil constraints.

Based on the rainfall data for the area, the likely average growing season is around six months for the property. This equates to a potential stocking rate of around 11 Dry Sheep Equivalents<sup>3</sup> (DSE) /ha.

For a cattle operation this would equate to a maximum of thirteen breeding cows for whole site.

Based on the most recently available benchmarking data4 the area would have likely returned an average gross margin of approximately \$462/ha. Note however that since these data were reported, there have been major reductions in the sale price of stock which would reduce the gross margin.

Overhead costs such as rates, insurance, power, etc. need to be deducted from these gross margin figures to arrive at net farm income, out of which financing costs, capital purchases, etc.,

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<sup>&</sup>lt;sup>2</sup> Saul G.R and Kearney, G.A (2003) Potential carrying capacity of grazed pastures in southern Australia, Department of Natural Resources and Environment, Victoria.

<sup>&</sup>lt;sup>3</sup> Dry Sheep Equivalent is a standard animal (non lactating/non pregnant 50 kg sheep) that is used to compare carrying capacity, profitability, etc., between different stock types. For example, one breeding ewe is equivalent to two DSE over a year and a cow and calf is equivalent to 17 DSE over a year.

<sup>&</sup>lt;sup>4</sup> https://agriculture.vic.gov.au/about/agriculture-in-victoria/livestock-farm-monitor-project#h2-0

would need to be paid. The scale of these costs generally result in only a marginal positive cash return in good years for most small to medium scale farmers.

It should be noted that East Gippsland is notorious for its variable seasons, where prolonged periods on low rainfall have been interspersed with periods of above average rainfall often falling within a narrow period. This seasonal variability has a major effect on farm incomes.

The loss of the number of stock potentially carried on the site (maximum thirteen cows) is insignificant in relation to the State's cattle herd of 1.4 million head.<sup>5</sup>

### Crop Productivity

While there is no evidence of a history of cropping, limited cropping would be possible. Potential crop yields can be inferred from the growing season rainfall (GSR). In simple terms, growing season rainfall (mm) is a combination of a 50% discount of the rain falling from February to April, plus the rainfall from May to October. This figure is multiplied by a factor of 20 to give the potential yield of wheat and by 10 to give the potential yield for canola.

Rainfall data for this location indicates that the average growing season rainfall for the last 20 years has been approximately 360 mm. This equates to a potential yield of 7.2 t/ha for wheat and 3.6 t/ha for canola. These figures assume excellent agronomy and absence of subsoil impediments. Data from a recent survey of the economics of grain production in Victoria indicated a conversion factor of 80% of potential yield is a realistic outcome. However the sodicity and drainage constraints of the consideration appropriate of average yields of 4 t/ha wheat and 2 t/ha for canola would be more realistic consideration and review as

part of a planning process under the Based on 50% price deciles righ wheat of \$280/h, thet of \$280/h, thet of \$280/h, thet of \$1120/ha if the site was cropped with wheat of the power, that these soils are not suited to continuous cropping and the site may not

be attractive to cropping contractors. copyright

The latest available data for cropping<sup>9</sup> indicates average variable costs of \$273/ha to give a gross margin of \$847/ha for wheat. Again the return to the farmer would be reduced by the cost of overheads, depreciation and finance costs.

If the total area of 20.7ha was removed from agricultural production on average would result in the potential loss of approximately 82t wheat/year to the State or 41t canola/year. As with the livestock figures, these are insignificant numbers when compared to the State's predicted production for 2022-23 of 3,813,000t wheat and 990,000t canola<sup>10</sup> and their loss would not have a material impact on the local economy.

# **Agrovoltaic considerations**

The pasture around the solar farm and BESS will require management to reduce fire risk over summer. If grazing was to be considered, sheep would be the preferable enterprise.

Meridian Agriculture

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East Gippsland Shire Council - Agenda Council Meeting - Tuesday 6 February 2024

 $<sup>^{5}\</sup> https://agriculture.vic.gov.au/\__data/assets/pdf\_file/0012/699285/Beef-Fast-Facts-June-2021-Final.pdf$ 

<sup>&</sup>lt;sup>6</sup> https://www.longpaddock.qld.gov.au/silo/point-data/ - -38.30 147.05

<sup>&</sup>lt;sup>7</sup> Cropping Zone Management Guideline Victorian High Rainfall. GRDC (2017)

<sup>8</sup> https://mecardo.com.au/percentiles-november-2022/

<sup>&</sup>lt;sup>9</sup> The integration of technical data and profit drivers for more informed decisions, GRDC

<sup>10</sup> https://www.agriculture.gov.au/abares/research-topics/agricultural-outlook/australian-crop-report/victoria Bairnsdale Solar Farm and BESS. Agricultural Assessment

# Impact on agricultural use of land

When the solar farm and BESS are decommissioned, there will be no residual detrimental impact on the productivity of the site. Soil fertility will decline over time, but this can be corrected through the addition of suitable amendments, if deemed appropriate by the owner.

# Cumulative impacts.

The documentation of solar farms by Planning Victoria<sup>11</sup> lists a planning application for a 50 MW farm at Perry Bridge 32km to the south west.

There are unlikely to be any cumulative effects on agriculture from the establishment of a solar farm and BESS at this density of infrastructure development.

# Conclusion

The proposed Bairnsdale solar farm and BESS, 4 km west of Bairnsdale, will cover a total area of 20.7ha.

The site has been used for grazing, with no evidence of cropping in the immediate past.

The soils are of moderate to low quality which limits their potential for high productivity.

The loss of production from the diversion of this land to a solar farm and BESS will have an insignificant impact on the State's agricultural production and is unlikely to impact on the activities of surrounding farming properties.

J Shovelton Senior Consultant Meridian Agriculture

17 July 2023

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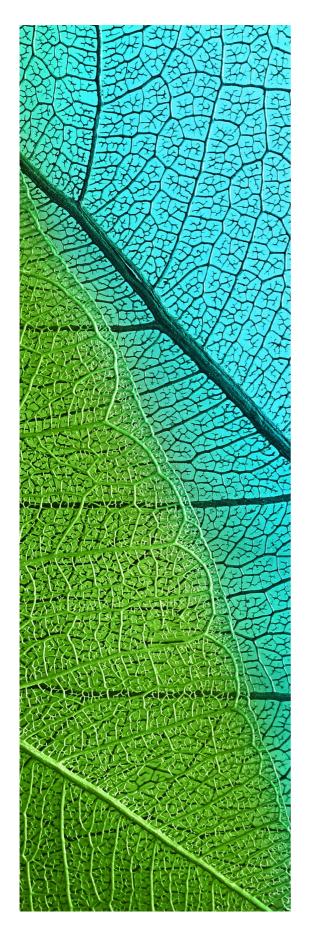
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Bairnsdale Solar Farm and BESS. Agricultural Assessment

Meridian Agriculture

<sup>&</sup>lt;sup>11</sup> https://www.planning.vic.gov.au/permits-and-applications/specific-permit-topics/solar-energy-facilities/solar-energy-projects



# 910 Princes Hwy Solar Farm, Bairnsdale

**Bushfire Planning Report** 

# **Prepared for Bison Energy**

March 2023 Report No. 22340.02 (1.0)

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Report No. 22340.02 (1.0)

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# 1. Executive summary

Site details				
Municipality:	East Gippsland Shire			
Subject Site:	910 Princes Highway			
Site Area:	20.73 hectares			
Zoning:	Farming Zone (FZ1)			
Overlays:	Design and Development Overlay – Schedule 7 (DD07)  Vegetation Protection Overlay – Schedule 1 (VP01)			
Existing Buildings and Works:	Vegetated block, no existing structures or works			
Summary of Prop	oosal and recommended bushfire mitigation measures			
Development Plan:	Construction of a Solar Farm			
Fire Break requirements:	20 metres around the perimeter of the Solar Farm in accordance with fire break requirements for solar farms including a 10m wide non-vegetated area.  copied document to be made available			
Water Supply requirements for solar farm:	for the sole purpose af compline static water supply its consideration and review as art of a planning process under the			
Water Supply requirements for	Reting and Water supply or where there is no reticulated water available:  document must not be used for any A quantity no less than 288,000L or as per the provisions for Open Yard Protection of AS 2419.1-2005 Nowing for a period of no less than four hours at 201/8, Whichever is the greater. The quantity of static fire water storage is to be calculated from the number of hydrants required to flow from AS 2419.1-2005, Table 3.3.			

Bison Energy engaged Nature Advisory Pty Ltd to prepare a Bushfire Planning Report for a proposed development of a solar farm on a 20.73-hectare parcel of land at 910 Princes Highway, Bairnsdale, zoned Farming Zone – Schedule 1 in the East Gippsland Planning Scheme. The land is within a designated Bushfire Prone Area (BPA).

This report demonstrates how the application meets the requirements of Clause 13.02-1S *Bushfire* of the State Planning Provisions, and includes the following components:

- A bushfire hazard site assessment, that describes bushfire hazards within 150 metres of the
  proposed subdivision in accordance with the planning permit application requirements of Clause
  44.06-3. The description of the hazards has been prepared in accordance with the Australian
  Standards AS 3959:2018, Construction of buildings in bushfire prone areas (Standards Australia
  2018); and
- Bushfire planning measures relevant to solar farms have been outlined, in accordance with the Design Guidelines and Model Requirements – Renewable Energy Facilities (CFA, 2022); and
- A bushfire hazard landscape assessment, including a plan that describes the bushfire hazards in the general locality more than 150 metres from the site.





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During the site assessment, classified vegetation in the form of grassland and woodland was recorded in the study area. Grassland, comprising large paddocks, occupied the majority of the site and study area. Some of the grassland in the west section of the study area is maintained at a low threat state by a neighbouring power facility. Woodland occurred within a rail reserve along the northern boundary of the study area and a strip of eucalypt woodland to the south on the opposite side of the Princes Highway. Slope was recorded under each of these areas of classified vegetation.

A solar farm and associated infrastructure (as shown in Appendix 1) is proposed for the majority of the property, excluding areas required to be undeveloped for setbacks under the DDO1 overlay.

A 20-metre wide fire break is required around the perimeter of the site in accordance with the Design Guidelines for Renewable Energy Facilities (CFA 2022). Although woodland vegetation was recorded within the study area, this was not considered to pose a sufficiently significant threat to warrant a larger separation distance (see Section 3.2). The vegetation within the fire breaks is to be managed to a low-threat state (i.e., grass slashed to a maximum height of 10 centimetres) and is to include a 10m wide non-vegetated area (see Section 4.2.4).

This report was prepared by a team from Nature Advisory, comprising Merinda Day-Smith (Botanist), Nhung Thi Hong Nguyen (Senior GIS Analyst), Dr Kate Callister (Senior Ecologist & Project Manager) and Chris Armstrong (Senior Botanist & Project Manager).



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# 2. Sources of information and policy context

### 2.1. Existing information

The reports, planning scheme and development plans relating to the study area listed below were reviewed.

- VicPlan (DTP 2023a);
- Victoria Planning Provisions (DTP 2022b);
- Australian Standards AS 3959:2018, Construction of buildings in bushfire-prone areas (Australian Standards 2018);
- Regional Bushfire Planning Assessment for the Gippsland Region (DPCD 2012);
- East Gippsland Planning Scheme; and
- Design Guidelines and Model Requirements Renewable Energy Facilities (CFA 2022).

#### 2.2. Definitions

# 2.2.1. Site and study area

The term 'site' is used herein to refer to the land proposed for subdivision at 910 Princes Highway. The term 'study area' refers to area up to 150 metres from the site (see Figure 1).

#### 2.2.2. Classified vegetation

For the purposes of a Bushfire Hazard site assessment areas of vegetation within 150m of the site area which were considered to pose a bushfire the sum of the site area which were considered to pose a bushfire the sum of the site area which were considered to pose a bushfire the sole purpose of enabling in Table 2.3 of AS 3959:2018. These hazards are grouped as either:

part of a planning process under the

Planning and Environment Act 1987.

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- Forest;
- Woodland:
- Shrubland:
- Scrub;
- Mallee/Mulga;
- Rainforest; or
- Grassland.

Non-vegetated areas and those considered 'low-threat', as defined in Section 2.2.3.2 of AS 3959:2018, are excluded from consideration as potential bushfire hazards and therefore do not influence BAL determination.

#### 2.3. Field methodology

The field assessment was conducted on the 6<sup>th</sup> February 2023. During this assessment, the site was inspected on foot and the surrounding study area observed from the site and surrounding roads and access tracks.

Sites in the study area found to contain classified vegetation were mapped. Mapping was undertaken through a combination of aerial photograph interpretation and ground-truthing using a hand-held ArcGIS Collector® (Esri).

### 2.4. Precautionary approach

Wherever appropriate, a precautionary approach has been adopted in the discussion of implications. That is, where insufficient evidence is available on the predicted behaviour of fire in a wildfire event, it is



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assumed both that the most severe fire behaviour could take place and that unmanaged immature vegetation could reach mature heights. The implications under legislation and policy are considered accordingly.

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# 3. Bushfire hazard assessment

#### 3.1. Bushfire hazard site assessment

### 3.1.1. Site description

The site consists of 20.73 hectares of private land located at 910 Princes Highway, Bairnsdale, approximately 232 kilometres east of Melbourne CBD (Figure 1). It is bordered by the Princes Highway to the south, Power Station Road to the west, a VicTrack rail reserve to the north and private pasture to the east.

The property comprised a grazing paddock with cattle yards in the east and two small dams central to the southern portion of the study area. These dams were fed and connected by a network of drainage lines. Vegetation largely comprised non-native pasture grasses with planted windrows of non-indigenous natives and non-native species along the western and eastern fence lines as well as a vegetated rail reserve on the northern property boundary. The landscape is gently undulating and elevation varies little across the site and surrounds with a slightly elevated point at the centre of the property. The shape of the land parcel is rectangular. It is approximately 580m at the longest point north to south and 440m east to west. The surrounding area largely supports pasture paddocks and other large-scale agricultural operations in all directions.

The site is currently zoned Farming Zone in the East Gippsland planning scheme.

Photographs of the site and study area are provided in Section 3.2.

#### 3.1.2. Classified vegetation, slopes and BAL assessment

During the field assessment, two classified vegetation classes were identified as per the classification methods in the Australian Standard AS 3959:2018. Classified vegetation is represented in Figure 1 and comprised:

- Grassland Covering the majority of the site as well as surrounding paddocks within the study area.
- Woodland –Sparse treed vegetation along a rail reserve to the north of the property and eucalypt woodland along the southern side of Princes Highway.

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### 3.2. Vegetation classification zones

The following distinct bushfire hazards were recorded within the study area. Where vegetation has been excluded from further consideration as a bushfire threat, the applicable clause from AS3595 is indicated.

Zone

1 Photo
1

Vegetation Classification or Exclusion Clause

Class G - Grassland

Description/Justification for classification

Unmanaged grassland of exotic pasture species, occupying the majority of the site.

O°/upslope.

Zone 2, 3, 4, 5 Photo 2

**Vegetation Classification or Exclusion Clause** 

Class G - Grassland

### Description/Justification for classification

Unmanaged grassland of exotic pasture species, located on paddocks surrounding the site. Grassland south and north of the site is separated by a major road (Princes Highway) and a rail line. 0-5° downslope.

Note: Grassland is also located west of the site area, however it is actively managed to a low threat state by the neighbouring power station.

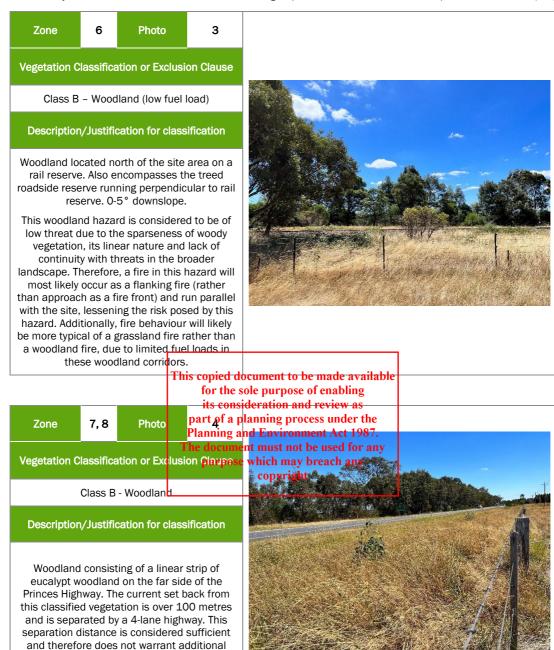


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### 3.3. Fire Break requirements

protection measures. 0-5° downslope.

A 20-metre wide fire break is required around the perimeter of the site in accordance with the Design Guidelines for Renewable Energy Facilities (CFA 2022). Although a heightened threat of woodland vegetation was recorded to the north (within the rail reserve) and to the south (neighbouring property south of Princes Highway) of the site, they were not considered to pose a sufficiently significant threat to





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warrant a larger separation distance (see Section 3.2). The vegetation within the fire breaks is to be managed to a low-threat state (i.e., grass slashed to a maximum height of 10 centimetres) and is to include a 10m wide non-vegetated area (see Section 4.2.4).

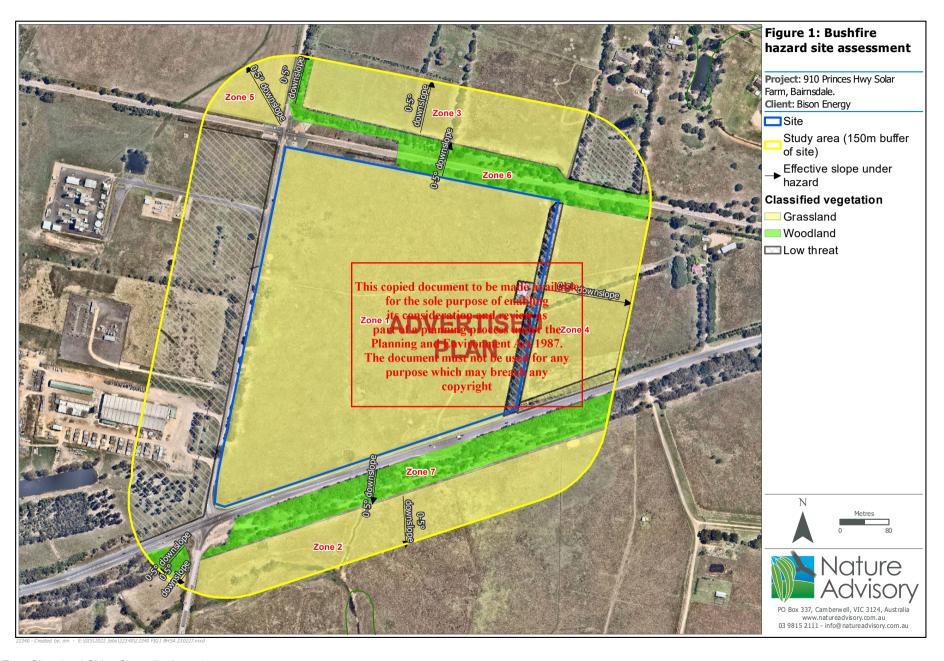
If any of the vegetation within the development footprint is not cleared prior to the commencement of construction, interim fire breaks will be required around solar farm infrastructure facing hazards on site. This is required to protect workers and infrastructure during the construction process and must be created and maintained in a low-fuel state, until this threat is removed by the final development layout.

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#### 3.4. Bushfire hazard landscape assessment

#### 3.4.1. Hazards in the landscape

The surrounding area to the east supports extensive residential and commercial development, associated with the town of Bairnsdale. This area represents minimal fire risk to the site. Meanwhile, areas to the south, west and north support paddocks of pasture grasses and semi-rural dwellings. These areas in an unmanaged condition may present a bushfire hazard to the site in the form of grassfires.

The study area lies within a broader landscape Type Two as defined in the BMO technical guide (DELWP 2017) and includes the following:

- Grassland vegetation extends more than 150m from the site in the form of paddocks. In an
  unmanaged state it presents a risk of grassfire. However, grassland vegetation is separated from the
  site by wide roads and highways so it is unlikely to result in neighbourhood-scale destruction except
  in catastrophic conditions. There is also linear treed vegetation on roadsides.
- There is potential for bushfire to approach from multiple aspects; however, many egress routes are available including the Princes Highway adjacent to the site. As this major egress route is readily available to Bairnsdale, this can provide a safe evacuation route to an area of low threat during a bushfire scenario.

The site is not in proximity to any 'identified areas' of bushfire hazard listed in the *Regional Bushfire Planning Assessment* for the Gippsland area (DPCD 2012).

Examination of historical fire records (DEECA 2023) shows that the site burnt during a significant bushfire event in 1978. No other fires within the site have been recorded. Numerous planned burns have occurred throughout the region within allows on the planned burns have occurred throughout the region within the finithmising the phreat of hards and education from bushfire. Areas where planned burns have occurred in the site burnt during a significant burns in the community. This demonstrates CFA's commitment to finithmising the phreat of hards and education from bushfire. Areas where planned burns have occurred finithmising the phreat of hards and education from bushfire. Areas where planned burns have occurred finithmising the phreat of hards and education from bushfire. Areas where planned burns have occurred throughout the region within the site burnt to the community. This demonstrates CFA's commitment to finithmising the phreat of hards are planned from the site burnt during a significant burns have occurred throughout the site burnt to the community. This demonstrates CFA's commitment to finithmising the phreat of hards are planned from the site burnt during a significant burns have occurred throughout the site burnt to the community. This demonstrates CFA's commitment to finithmising the phreat of hards are planned from the site burnt during a significant burnt burnt to the community. This demonstrates the community and the site burnt during a significant burnt burnt burnt from the community and the site burnt during a significant burnt burnt burnt from the community. This demonstrates the community and the community and the site burnt during a significant burnt burnt burnt burnt from the community and the community and the site burnt during a significant burnt burnt

Refer to Figure 2 for a map presenting the tends is a present of the second sec

### 3.4.2. Likely bushfire scenarios

In Victoria, the most severe weather conditions for bushfire are hot dry winds from the northwest, that change direction to the southwest after a cool change. The sudden shift in wind direction can cause a rapid change in bushfire direction and behaviour. However, the threat from a bushfire can approach in all directions.

The most likely bushfire scenario would be from grass fires within and adjacent to the site, arising from either ember attack or ignition risks from operational activities. These fires may travel along retained areas of grassland within and around the site. However, the presence of a maintained 20 m wide fuel break will limit the potential for fire spreading into the facility from a bushfire in the landscape or from the facility into the surrounding landscape.

### 3.5. Egress to built-up areas

The proposed solar farm will provide two vehicular egress routes. All roads are single-carriageway roads, with Princes Highway and Bairnsdale-Dargo Rd being sealed and Power Station Rd being partially sealed. These roadways could provide the following egress routes to nearby built-up areas or away from potential fire risk in the event of extreme bushfire behaviour (Figure 2):

- Bairnsdale 3.3 kilometres to the east via Princes Highway.
- Lindenow 11.9 kilometres to the north west via Power Station Rd and Bairnsdale-Dargo Rd.





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Each of these egress routes would involve travelling on roads that traverse low risk areas such as paddocks, semi-rural and residential areas. Treed vegetation is very sparse along all routes.

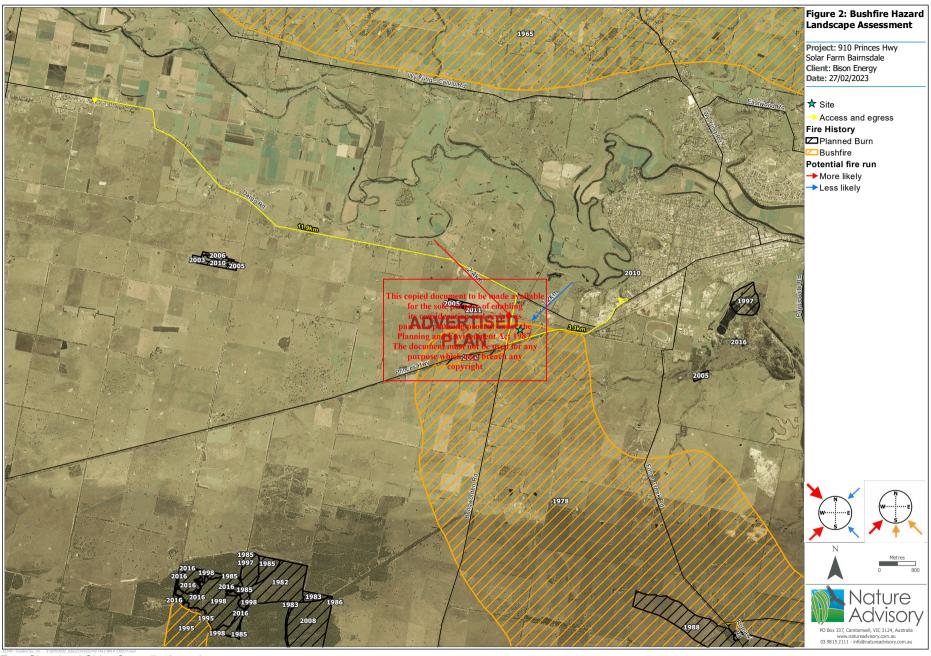
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# Attachment 5.1.2.7



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# 4. Risk management

This section provides an analysis of site risks and associated management strategies in accordance with Section 5 of the Design Guidelines and Model Requirements for Renewable Energy Facilities (CFA 2022). This will serve to inform the design of the facility.

#### 4.1. Risk analysis

Table 1: Risks, associated consequences and mitigation measures

Risk	Potential consequences	Mitigation measures
Electrical/Battery fault   Localised fires within the immediate site  Spread of fire into the surrounding		<ul> <li>Regular maintenance of electrical/battery storage infrastructure</li> </ul>
		<ul> <li>Report any issues relating to infrastructure faults or unsafe work practices</li> </ul>
	<ul><li>landscape</li><li>Damage to solar farm infrastructure.</li></ul>	<ul> <li>Ensure staff have reviewed the bushfire management plan and received appropriate training. I.e., familiarisation of egress routes and emergency meeting points</li> </ul>
	■ Risk of injury and	■ Maintenance of water supply requirements
	death	<ul> <li>Maintenance of fire breaks around infrastructure, particularly the battery storage facility.</li> </ul>
	This conied de	Ensure that the CFA are familiar with the site layout (i.e. vehicle access, water supplies, infrastructure, etc.)     between to be made available.
Bushfire/Grassfire in landscape	Fire spreading if to the ssite from neighticutions hazards part of a p  Damage to sclamains a infrastructure document.	okEpsuppostaff ranchieviewed the bushfire management plan deart occaived exponentiate training. I.e., familiarisation of landfinesproutes and temptagency meeting points of Marktenance of the 108 fire breaks around the nt parameter for tracking rany which may breach any Maintenance of water supply requirements copyright  • Ensure that the CFA are familiar variables. It is a considered to the construction of the construction
		vehicle access, water supplies, infrastructure, etc.)

#### 4.2. Risk management strategies

The following risk management strategies are transcribed from Section 6.2. of the Design Guidelines and Model Requirements for Renewable Energy Facilities (CFA 2017), where relevant to the proposal.

# 4.2.1. Emergency vehicle access

The provision of adequate access for emergency services must be considered, to enable an effective response and management of onsite fires. The CFA identifies the following requirements as the minimum expectations for emergency vehicle access:

- Construction of a four metre perimeter road within the perimeter fire break.
- Roads must be of all-weather construction and capable of accommodating a vehicle of fifteen tonnes
- Constructed roads should be a minimum of four metres in trafficable width with a four metre
  vertical clearance for the width of the formed road surface.
- The average grade should be no more than 1 in 7 (14.4% or 8.1°) with a maximum of no more than 1 in 5 (20% or 11.3°) for no more than fifty metres.
- Dips in the road should have no more than a 1 in 8 (12.5% or 7.1°) entry and exit angle.





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- Roads must incorporate passing bays at least every 600 metres, which must be at least twenty
  metres long and have a minimum trafficable width of six metres. Where roads are less than 600
  metres long, at least one passing bay must be incorporated.
- Road networks must enable responding emergency services to access all areas of the facility, including fire service infrastructure, buildings, and battery energy storage systems and related infrastructure.
- The provision of at least two but preferably more access points to the facility, to ensure safe and efficient access to and egress from areas that may be impacted or involved in fire. The number of access points must be informed through a risk management process.

#### 4.2.2. Firefighting water supply

In the event of a fire, emergency services must have safe and effective access to a sufficient water supply. The location of firefighting access points and the quantity of water must be established through a comprehensive risk management process.

The CFA identifies the following requirements for onsite water supplies:

- Water access points must be clearly identifiable and unobstructed to ensure efficient access.
- Static water storage tank installations must comply with AS 2419.1-2005: Fire hydrant installations – System design, installation and commissioning.
- The static water storage tank(s) must be an above-ground water tank constructed of concrete or steel
- The static water storage tank(s) must be capable of being completely refilled automatically or manually within 24 hours copied document to be made available
- The static water storage tanks must be positioned at least ten mistresn biology attribution and must be positioned at least ten mistresn biology attribution and must be positioned at least ten mistresn biology attribution and must be positioned at least ten mistresn biology attribution and must be positioned at least ten mistresn biology attribution and must be positioned at least ten mistresn biology attribution and must be positioned at least ten mistresn biology attribution and must be positioned at least ten mistresn biology attribution and must be positioned at least ten mistresn biology attribution and must be positioned at least ten mistresn biology attribution and must be positioned at least ten mistresn biology attribution and must be positioned at least ten mistresn biology attribution and must be positioned at least ten mistresn biology attribution and must be positioned at least ten mistresn biology attribution and must be positioned at least ten mistresn biology attribution and must be positioned at least ten mistresn biology attribution and must be positioned at least ten mistresn biology attribution and must be positioned at least ten mistresn biology attribution and must be positioned at least ten mistresn biology attribution and must be positioned at least ten mistresn biology attribution and must be provided by the pro
- The hard-suction point must be shown and being the deciment of the configuration of the required suction hydraulic performance. Adapters that may be required to match the connection are: 125mm, 100mm, 90mm, 75mm, 65mm Storz tree adapters (Figure 3) with a matching blank end cap to be provided.
- The hard-suction point must be positioned within four (4) metres to a hardstand area and provide a clear access for emergency services personnel.
- An all-weather road access and hardstand must be provided to the hard-suction point. The hardstand must be maintained to a minimum of 15 tonne GVM, eight (8) metres long and six (6) metres wide or to the satisfaction of the CFA.
- The road access and hardstand must be kept clear at all times.
- The hard-suction point must be protected from mechanical damage (eg. bollards) where necessary.
- Where the access road has one entrance, a ten (10) metre radius turning circle must be provided at the tank
- An external water level indicator must be provided to the tank and be visible from the hardstand area.
- Signage (Figure 3) indicating 'FIRE WATER' and the tank capacity must be fixed to each tank. It should comply with AS 2419.1-2005, Section 5.4.5: Fire hydrant tank signs.
- Signage (Figure 3) must be provided at the front entrance to the facility, indicating the direction
  to the static water tank. It should be fade resistant, fixed to a rigid post in contrasting lettering,
  white sign writing on red background, with a circle reflective marker and 'W' in 150mm upper
  case lettering.





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150mm full-bore isolation valve

125mm, 100mm, 90mm, 75mm, 65mm Storz tree adapters.



Model requirements identified by the CFA as being specific to solar energy facilities include:

- The fire protection system for solar energy facilities must incorporate at least one (1) x 45,000L static water tank for every 100ha.
- A fire water tank must be located at the primary vehicle access point to the facility, and elsewhere in consultation with CFA.
- Fire water must be provided to cover buildings, control rooms, substations and grid connections, in consultation with CFA.
- Additional fire protection systems or equipment required under any Australian Standards for dangerous goods must be provided as prescribed.

For facilities with battery energy storage systems, the fire protection system must include at a minimum:

A fire hydrant system that meets the requirements of AS 2419.1-2005: Fire hydrant installations, Section 3.3: Open Yard Protection, and Table 3.3: Number of Fire Hydrants Required to Flow Simultaneously for Protected Open Yards. Except, that fire hydrants must be provided and located so that every part of the battery energy storage system is within reach of a 10m hose stream issuing from a nozzle at the end of a 60m length of hose connected to a fire hydrant outlet.





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If no reticulated water is available, a fire water supply in static storage tanks can be utilised if the following are included:

- The fire water supply must be of a quantity no less than 288,000L or as per the provisions for Open Yard Protection of AS 2419.1-2005 flowing for a period of no less than four hours at 20L/s, whichever is the greater.
- The quantity of static fire water storage is to be calculated from the number of hydrants required to flow from AS 2419.1-2005, Table 3.3. (E.g., For battery installations with an aggregate area of over 27,000m2, 4 hydrant outlets are required to operate at 10L/s for four hours, which equates to a minimum static water supply of 576kL.)
- Fire hydrants must be provided and located so that every part of the battery energy storage system is within reach of a 10m hose stream issuing from a nozzle at the end of a 60m length of hose connected to a fire hydrant outlet.
- The fire water supply must be located at vehicle entrances to the facility, at least 10m from any infrastructure (electrical substations, inverters, battery energy storage systems, buildings).
- The fire water supply must be reasonably adjacent to the battery energy storage system and shall be accessible without undue danger in an emergency (e.g., Fire water tanks are to be located closer to the site entrance that the battery energy storage system).
- The fire water supply must comply with AS 2419.1-2005: Fire hydrant installations Section 5: Water storage.

#### 4.2.3. Onsite vegetation

Any vegetation existing within or adjacent to the site must be considered for its potential to contribute to fire hazard. Therefore, vegetation in the hazard so that the potential for ignition of infrastructure or retained vegetation its consideration and review as

The fire risk resulting from onsite vegetation has in the fire risk resulting from onsite vegetation has in the fire risk resulting from onsite vegetation has in the fire risk resulting from onsite vegetation has in the fire risk resulting from onsite vegetation has in the fire risk resulting from onsite vegetation has in the fire risk resulting from onsite vegetation has in the fire risk resulting from onsite vegetation has in the fire risk resulting from onsite vegetation has in the fire risk resulting from onsite vegetation has in the fire risk resulting from onsite vegetation has in the fire risk resulting from onsite vegetation has in the fire risk resulting from onsite vegetation has in the fire risk resulting from onsite vegetation has a fire risk resulting from the fire risk resul

- Vegetation removal.
- Planning and Environment Act 1987. The document must not be used for any
- Separation from nearby infrastructwiff cheasy fire a dreads), in accordance with prescribed defendable space requirements. copyright

- Trees must not overhang or touch any elements of the solar farm.
- Regular maintenance of fire breaks.

### 4.2.4. Fire breaks

Fire breaks must be utilised to provide a barrier to the movement of fire, as well as assisting in emergency vehicle access. Figure 6 shows the location of firebreaks recommended for the facility.

An effective fire break must be non-combustible (e.g. concrete/road base) and free of vegetation and obstructions at all times.

The width of fire breaks must be a minimum of 10m, and at least the distance where radiant heat flux (output) from the surrounding vegetation does not create the potential for ignition of on-site infrastructure. See Figure 4 for an example of a fire break for a solar facility.

A fire break must be established and maintained around the following solar farm areas:

- The perimeter of the facility, commencing from the boundary of the facility or from the vegetation screening inside the property boundary.
- The perimeter of control rooms, electricity compounds, battery storage systems, substations and all other buildings on site.





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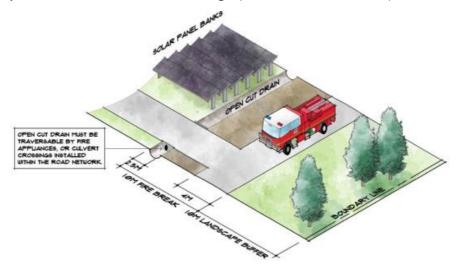


Figure 4. Example fire break requirements for a solar facility (CFA 2022)

#### 4.2.5. Battery storage systems

At present, an Australian standard has not been established to mitigate risks for large scale battery storage systems. Therefore, the CFA advises that the current version of the *UL* 9540: Energy Storage System Requirements and FM Global Property Loss Prevention Data Sheet 5-33 (2020) Electrical Energy Storage Systems should be used in the design and operation of battery energy storage systems.

When siting battery storage system system system so the solution and review as system system system solution and review as system solutions and review as system solutions.

- part of a planning process under the
  A layout of site infrastructure and Environment Act 1987.
  - o Considers the safety of comerge newsterp the eased for any
  - o Minimises the potential for grassfife and for bushfife to impact the battery energy storage system.
  - Minimises the potential for fires in battery containers/enclosures to impact on-site and offsite infrastructure.
- Located so as to be reasonably adjacent to a site vehicle entrance (suitable for emergency vehicles).
- Located so that the site entrance and any fire water tanks are not aligned to the prevailing wind direction (therefore least likely to be impacted by smoke in the event of fire at the battery energy storage system).

Furthermore, energy storage systems must be:

- Provided with in-built detection and suppression systems. Where these systems are not provided, measures to effectively detect and/or suppress fires within containers must be detailed within the Risk Management Plan.
- Provided with suitable ember protection to prevent embers from penetrating battery containers/enclosures.
- Provided with suitable access roads for emergency services vehicles, to and within the site, including to battery energy storage system(s) and fire service infrastructure.
- Installed on a non-combustible surface such as concrete.
- Provided with adequate ventilation.
- Provided with impact protection to at least the equivalent of a W guardrail-type barrier, to prevent mechanical damage to battery containers/enclosures.





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- Provided with enclosed wiring and buried cabling, except where required to be above-ground for grid connection.
- Provided with spill containment that includes provision for management of fire water runoff.

#### 4.2.6. Dangerous goods storage and handling

The following measures are outlined by the CFA, to ensure compliance with the *Dangerous Goods* (Storage and Handling) Regulations (2012):

- Signage and labelling compliant with the Dangerous Goods (Storage and Handling) Regulations 2012 and the relevant Australian Standards must be provided at the site entrance, dangerous goods storage locations, and storage tanks where applicable.
- Appropriate material for the clean-up of dangerous goods spills and leaks (including absorbent, neutralisers, tools, disposal containers and personal protective equipment) must be provided and available on-site.
- Training must be provided for site personnel on the hazards, safe use and emergency response for spills, leaks and fire involving dangerous goods.
- All dangerous goods stored on-site must have a current Safety Data Sheet (SDS). Safety Data Sheets must be provided within the facility's Emergency Information Book(s), in the Emergency Information Container(s).
- The requirements of the dangerous goods legislative framework, and all relevant Australian Standards must be complied with for all facilities, including facilities with battery energy storage systems.

#### 4.2.7. Additional siting considerations

The CFA requires that solar panel banks are separated by a minimum of six metres, in order to support effective firefighting responses (Figure 5Figure 5). Any modifications to separation distances must be in consultation with the CFA.

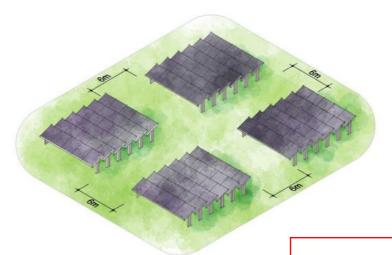


Figure 5. Solar panel bank separation diagram (CFA 2022)

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#### 4.3. Roles and responsibilities

This section outlines the responsibilities and contact details of staff with roles relating to occupational health and safety (OH&S).

Table 2: OH&S staff information

Role	Responsibilities	Contact information
Operations Manager	<ul> <li>Responsible for the implementation and maintenance of specifications detailed within this plan, including:</li> <li>Maintenance of fire breaks</li> </ul>	
	Maintenance of firefighting	
	equipment to ensure it is in working order and remains unobstructed for CFA access during an emergency	
OH&S Committee	<ul> <li>Ensure all staff members are inducted into bushfire response procedures including evacuation points and egress routes</li> </ul>	
All staff	<ul> <li>Understanding of the bushfire response procedures and can respond appropriately</li> </ul>	N/A

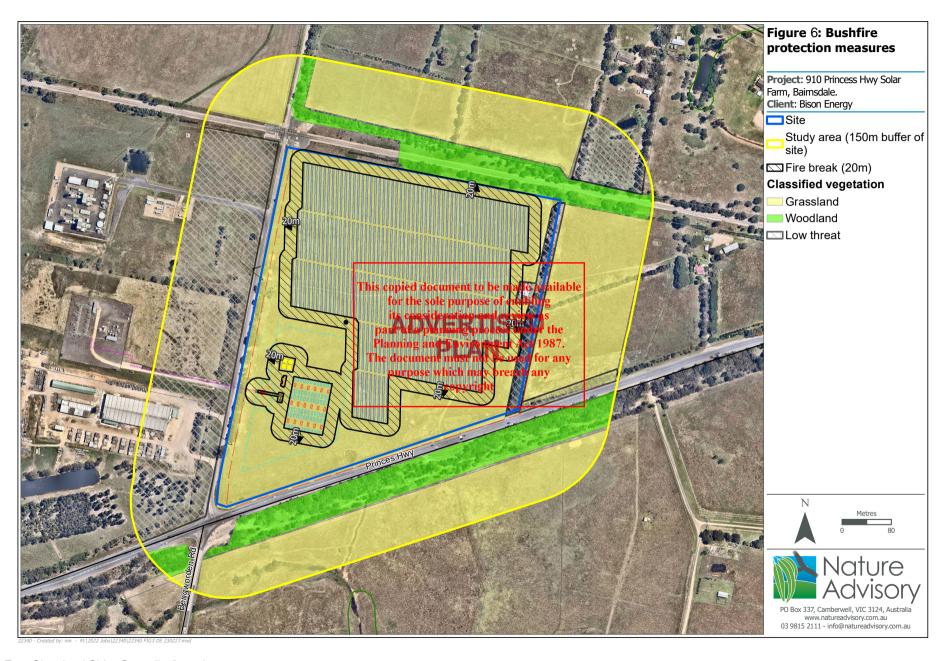
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## Attachment 5.1.2.7



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## 5. References

- CFA 2019, *Identification of street hydrants for firefighting purposes*, State of Victoria, Country Fire Authority, Burwood East.
- DELWP 2017, Planning Permit Applications Bushfire Management Overlay, Technical Guide, Department of Environment, Land, Water and Planning, East Melbourne.
- DTP 2023a, *VicPlan*, Department of Environment, Land, Water and Planning, East Melbourne, <a href="https://mapshare.vic.gov.au/vicplan/">https://mapshare.vic.gov.au/vicplan/</a>>.
- DTP 2023b, *Victoria Planning Provisions*, Department of Environment, Land, Water and Planning, Melbourne, <a href="https://planning-schemes.app.planning.vic.gov.au/Victoria%20Planning%20Provisions/ordinance/">https://planning-schemes.app.planning.vic.gov.au/Victoria%20Planning%20Provisions/ordinance/>
- DPCD 2012, Regional Bushfire Planning Assessment Gippsland Region, Department of Planning and Community Development, Melbourne.
- Standards Australia 2018, Australian Standards AS 3959:2018, Construction of buildings in bushfire-prone areas, Standards Australia, Sydney.
- CFA 2022, Design Guidelines and Model Requirements: Renewable Energy Facility, State of Victoria (Country Fire Authority), Melbourne.



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Appendix 1: Solar Farm design

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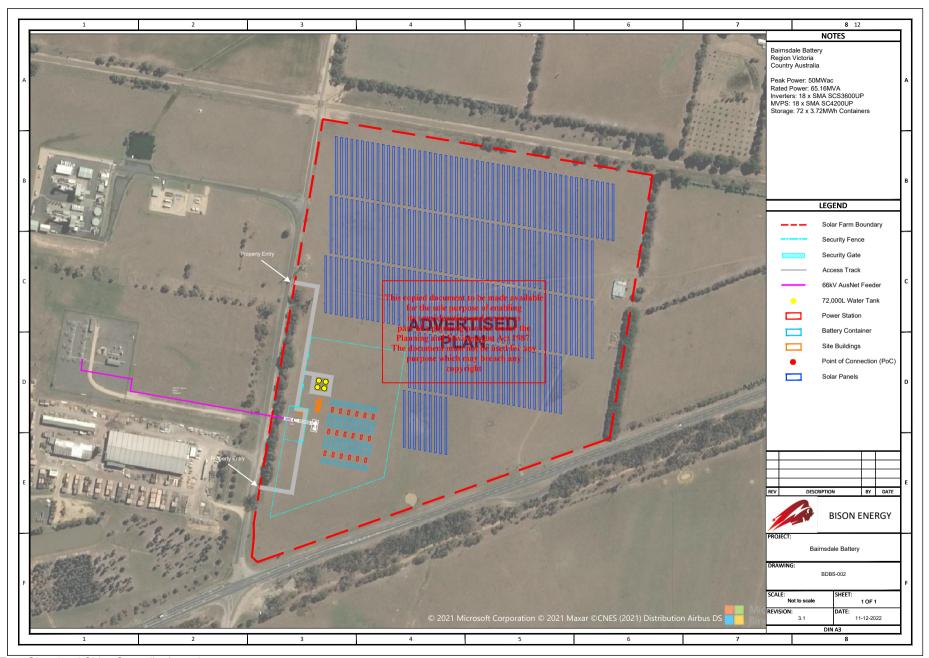
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#### Attachment 5.1.2.7





## ADVERTISED PLAN



## **BAIRNSDALE SOLAR DEVELOPMENT**

**GLINT AND GLARE ASSESSMENT REPORT** 

**FINAL ISSUE** 

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Prepared For Bison Energy Pty Ltd

May 2023

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Prepared By Environmental Ethos for Bison Energy Pty Ltd

REF NO. 23001

FINAL ISSUE: 31/05/2023

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#### **EXECUTIVE SUMMARY**

The proposed Bairnsdale Solar Development comprises of the installation and operation of a 5MW solar farm and BESS, located approximately 2km west of Bairnsdale.

The structure of the solar farm will be a single axis horizontal tracking system with PV arrays running north/south. The PV arrays will be approximately 1.2 metres high, to centroid.

This glint and glare impact assessment utilised the Solar Glare Hazard Analysis Tool (SGHAT 3.0) in conjunction with a viewshed analysis, to undertake the glare modelling which is the basis for the impact assessment methodology.

The assessment has been undertaken in accordance with the Victoria Government's Solar Energy Facilities Design and Development Guideline, including assessment of the following:

- Dwellings and roads within 1 km of the proposed facility, taking into consideration their height within the landscape;
- Aviation infrastructure including any air traffic control tower or runway approach path close to the proposed facility;
- Any other receptor to which a responsible authority considers solar reflection may be a hazard.

Based on the assumptions and parameters of this desktop assessment, including the normal operation of the solar farm with a tracking/backtracking operation and a minimum limit of 10 degree resting angle, the following results were identified:

- The SGHAT modelling identified no glare is geometrically possible affecting rural and residential dwellings within 1km of the Project, therefore no impact is likely.
- The SGHAT modelling identified no glare is geometrically possible affecting the Princes Highway, local roads, and Gippsland rail line within 1km of the Project, therefore no impact is likely.
- The SGHAT modelling identified no glare affecting the runway approach paths (within the 2 mile flight path limit) for the two runways at Bairnsdale Airport.
- The SGHAT modelling also identified no glare affecting Bairnsdale Christian College, the level railway crossing on Power Station Road, and the entrance to Bairnsdale Power Station.

Management and mitigation measures recommended in this assessment include:

 The Project Environmental Management Plan (EMP) should detail glare management measures, including the parameters detailed in this report. In addition, the EMP should detail a process for monitoring glare hazard and managing possible complaints.

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PAGE 2

#### 1. INTRODUCTION

This report has been prepared by Environmental Ethos on behalf of Bison Energy Pty Ltd to assess the potential solar glint and glare impact of the proposed Bairnsdale Solar Development (the Project), located at 910 Princes Highway, Bairnsdale, Victoria. The Project comprises of the installation and operation of a 5MW solar farm and Battery Energy Storage System (BESS).

The Project covers an area of approximately 20.73 hectares. The structure of the solar farm will be a single axis horizontal tracking system with PV arrays running north/south.

This glint and glare assessment has been undertaken in accordance with the Solar Energy Facilities Design and Development Guideline (2019)<sup>1</sup> (Development Guidelines), including assessment of the following:

- Dwellings and roads within 1 km of the proposed facility, taking into consideration their height within the landscape;
- Aviation infrastructure including any air traffic control tower or runway approach path close to the proposed facility;
- Any other receptor to which a responsible authority considers solar reflection may be a hazard.

#### 1.1. Location

The Project site is located approximately 2 kilometres (km) west of Bairnsdale, within the Shire of East Gippsland Local Government Area, refer Figure 1.

The site is zoned FZ1 Farming Zone and is currently used for grazing. The site adjoins the Bairnsdale Power Station, substation, and Bairnsdale Timber Mill.

The northern boundary of the Project site adjoins the Gippsland Rail line and the southern boundary adjoins the Princes Highway.

The closest avaition infrastructure to the Project site is Bairsdale Airport located approximately 4km to the south.

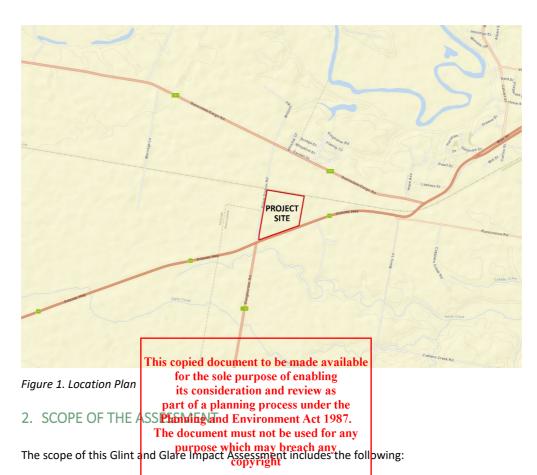


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<sup>&</sup>lt;sup>1</sup> Solar Energy Facilities Design and Development Guideline, 2019, The State of Victoria Department of Environment, Land, Water and Planning



- Description of the methodology used to undertake the study
- Assessment of the baseline conditions;
- Description of the elements of the Project with the potential to influence glare including size, height, angle and rotation of PV modules, and tracking system operation;
- Identification of the viewshed and potential visibility of the Project;
- Desktop mapping of potential glare at the location of sensitive receptors within the viewshed, based on Solar Glare Hazard Analysis and viewshed analysis;
- Assessment of the potential glare hazard affecting sensitive receptors during operation of the Project; and
- Assessment of potential mitigations measures to avoid, mitigate, or manage potential impacts.

#### 3. METHODOLOGY



#### 3.1. Glint and Glare Definitions

Glint and glare refers to the human experience of reflected light.

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This study utilises Solar Glare Hazard Analysis software developed in the USA to address policy adherence required for the 2013 U.S. Federal Aviation Administration (FAA) Interim Policy 78 FR 63276. The FAA definitions of glint and glare are as follows:

"Reflectivity refers to light that is reflected off surfaces. The potential effects of reflectivity are glint (a momentary flash of bright light) and glare (a continuous source of bright light). These two effects are referred to hereinafter as "glare," which can cause a brief loss of vision, also known as flash blindness."<sup>2</sup>

The FAA Technical Guidelines distinguishes between glint and glare according to time duration, without correlation to light intensity.

The Victorian Development Guidelines, identifies the difference between glint and glare as intensity:

"Glint can be caused by direct reflection of the sun from the surface of an object, whereas glare is a continuous source of brightness. Glare is much less intense than glint." (p23)

This differentiation is consistent with the descriptions of glint and glare as:

- Glint being specular reflection, a momentary flash of light produced as a direct reflection of the sun in the surface of an object (such as a PV panel); and
- Glare being a continuous source of brightness relative to the ambient lighting, glare is not a
  direct reflection Thitherprincipolatemathental adfleration of this begins about the sun.

Solar Glare Hazard Analysis softwares evaluates the potential impact of light produced as a direct reflection of the sun from Pymodullasy this incorpsistes twidth the Deve lopment Guidelines reference to 'glint', as the more intense typic 30 la Fredie two However, the FAA Guidelines refers to direct solar reflection from stationary objects such as fixed frame solar systems, or relatively slow moving objects such as solar tracking systems, as 'glare' spince the source of the solar reflectance occurs over a long (not momentary) duration.

For the purpose of this study the term 'glare' is used in reference to the more intense light impact of direct solar reflectivity from PV modules, (defined as 'glint' in the Development Guidelines), over potentially long duration defined as 'glare' by FAA Guidelines.

The assessment considered the potential for glare to occur throughout the year measurable in duration over 1 minute intervals.

#### 3.2. Solar glare Assessment Parameters

Solar glare assessment modelling for solar farms is based on the following factors:

- the tilt, orientation, and optical properties of the PV modules in the solar array;
- sun position over time, taking into account geographic location;
- the location of sensitive receivers (dwellings, roads, rail, and aviation facilities); and
- Screening potential of surrounding topography, vegetation and buildings.



<sup>&</sup>lt;sup>2</sup> Federal Aviation Administration, Version 1.1 April 2018, Technical Guidance for Evaluating Selected Solar Technologies on Airports

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#### 3.3. Glare Intensity Categories

The potential hazard from solar glare is a function of retinal irradiance (power of electromagnetic radiation per unit area produced by the sun) and the subtended angle (size, distance, and geometry) of the glare source.<sup>3</sup>

Glare can be broadly classified into three categories: low potential for after-image (referred to as "Green Glare" in SGHAT), potential for after-image (referred to as "Yellow Glare" in SGHAT), and potential for permanent eye damage (referred to as "Red Glare" in SGHAT), *Figure 2* illustrates the glare intensity categories used in this study.

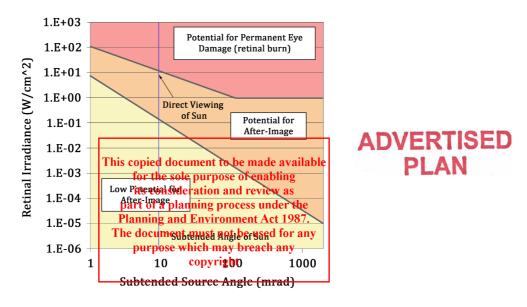


Figure 2. Ocular impacts and Hazard Ranges<sup>4</sup>

The amount of light reflected from a PV module depends on the amount of sunlight hitting the surface, as well as the surface reflectivity. The amount of sunlight interacting with the PV module will vary based on geographic location, time of year, cloud cover, and PV module orientation.  $1000W/m^2$  is generally used in most counties as an estimate of the solar energy interacting with a PV module when no other information is available. This study modelled scenarios using  $2000 W/m^2$  in order to cover potentially higher solar energy levels in Australia as compared to other parts of the world<sup>5</sup>. Flash blindness for a period of 4-12 seconds (i.e. time to recovery of vision) occurs when 7-11  $W/m^2$  (or 650-1,100 lumens/ $m^2$ ) reaches the eye<sup>6</sup>.

<sup>&</sup>lt;sup>3</sup> HO, C.K., C.M. Ghanbari, and R.B. Diver, 2011, Methodology to Assess Potential Glint and Glare hazards from Concentrated Solar Power Plants

<sup>&</sup>lt;sup>4</sup> Source: Solar Glare Hazard Analysis Tool (SGHAT) Presentation (2013) <a href="https://share.sandia.gov/phlux/static/references/glint-glare/SGHAT\_Ho.pdf">https://share.sandia.gov/phlux/static/references/glint-glare/SGHAT\_Ho.pdf</a>

<sup>&</sup>lt;sup>5</sup> Global Solar Atlas 2.0, Solar resource data: Solargis

<sup>&</sup>lt;sup>6</sup> Sandia National Laboratory, SGHAT Technical Manual

#### 3.4. Reflection and Angle of Incidence

PV modules are designed to maximise the absorption of solar energy and therefore minimise the extent of solar energy reflected. PV modules have low levels of reflectivity between 0.03 and 0.20 depending on the specific materials, anti-reflective coatings, and angle of incidence.<sup>7</sup>

The higher reflectivity values of 0.20, that is 20% of incident light being reflected, can occur when the angle of incidence is greater than 50°. *Figure 3 and 4* show the relationship between increased angles of incidence and increased levels of reflected light. Where the angle of incidence remains below 50° the amount of reflected light remains below 10%. The angle of incidence is particularly relevant to specular reflection (light reflection from a smooth surface). Diffuse reflection (light reflection from a rough surface or scattered light reflection) may also occur in PV modules, however diffuse reflection is significantly less intense than specular reflection.

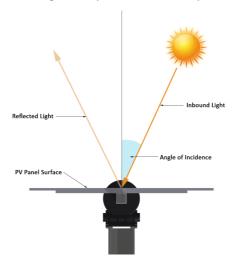


Figure 3. Angle of Incidence Relative to PV Panel Surface

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<sup>&</sup>lt;sup>7</sup> Ho, C. 2013 Relieving a Glare Problem

REF NO. 23001

BAIRNSDALE SOLAR DEVELOPMENT

GLINT AND GLARF IMPACT ASSESSMEN

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100 90 80 70 Reflectance (Percent 60 50 40 30 20 10 n 0 10 20 30 40 50 60 70 ጸበ Angle of Incidence (degrees)

Figure 4. Angles of Incidence and Increased Levels of Reflected Light (Glass (n-1.5))

In a fixed PV solar array, the angle of incidence varies as the sun moves across the sky, that is the angle of incidence are at their lowest around noon where the sun is directly overhead, and increase in the early mornings and late evenings as the incidence angles increase. If the PV array is mounted on a tracking system, this variation is reduced because the panel is rotated to remain perpendicular to the sun. Therefore a PV modular array using a tracking system has less potential to cause glare whilst it tracks the sun. *Figure 5* illustrates a PV module mounted horizontal single axis tracking system following the east to west path of the sun.

A single axis tracking system has a fixed maximum angle of rotation, once the tracking mechanism reaches this maximum angle, the PV modules position relative to the sun becomes fixed and therefore the angle of incidence increases and the potential for glare increases. Some tracking systems utilise 'backtracking' to avoid PV modules over-shadowing each other. During the backtracking procedure (early morning and late afternoon) the tracking system begins to rotate away from the sun to reduce shadow casting to adjoining PV panels, refer Figure 6. During the backtracking phase, higher angles of incidence will occur in comparison to the tracking phase, and this may increase the potential for glare.

Tracking systems operate from a set resting angle, resting angles define the final angle at the beginning and end of the backtracking cycle. Generally resting angles range between 0 and 30 degrees, depending on the type of system used and the site requirements. A slight angle (5 degrees) is commonly used to allow rain and dew to sheet off the panels, some systems use higher angles in more extreme climatic conditions. Shallow resting angles increase the angle of incidence between the sun and PV model, therefore the shallower the angle the more likely glare may occur.

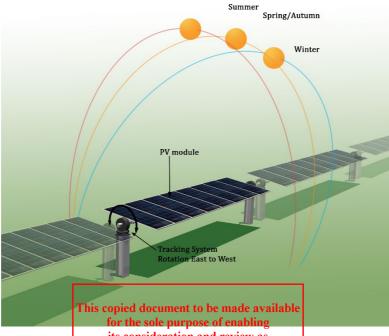


Figure 5. Diagrammatic illustration of sun position relative to PV module mounted on a horizontal part of a planning process under the single axis tracking system. Planning and Environment Act 1987.

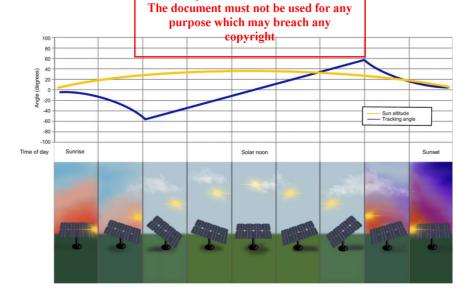


Figure 6. Diagrammatic illustration of a backtracking procedure for a horizontal single axis tracking system. (Source: ForgeSolar).

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#### 3.5. Viewshed Analysis

A desktop viewshed analysis was undertaken using ArcGIS 3D modelling. The extent of visibility of the proposed solar farm was assessed relative to the location of sensitive receptors (dwellings, roads, etc.) The desktop viewshed analysis is based on topography only and does not take into consideration existing vegetation.

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#### 3.6. Solar Glare Hazard Analysis

This assessment has utilised the Solar Glare Hazard Analysis Tool (SGHAT 3.0) co-developed by Sandi National Laboratory<sup>8</sup> and ForgeSolar (Sim Industries) (referred to as GlareGauge) to assess potential glare utilising latitude and longitudinal coordinates, elevation, sun position, and vector calculations. The PV module orientation, reflectance environment and ocular factors are also considered by the software. If potential glare is identified by the model, the tool calculates the retinal irradiance and subtended angle (size/distance) of the glare source to predict potential ocular hazards according to the glare intensity categories (refer *Section 3.3*).

The sun position algorithm used by SGHAT calculates the sun position in two forms: first as a unit vector extending from the Cartesian origin toward the sun, and second as azimuthal and altitudinal angles. The algorithm enables determination of the sun position at one (1) minute intervals throughout the year.

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The SGHAT is a high level tool and the sign of the sign of the section in the following factors:

- Gaps between PV modules; and part of a planning process under the
- Atmospheric conditions and Environment Act 1987.

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Updated SGHAT analysis now includes the iability to include (opstructions' in the modelling (such as vegetation and buildings). This feature was vegetation and buildings). This feature was vegetation and buildings. This feature was part of this assessment since detailed information on the screening height and density of existing vegetation was not available at the time of the assessment.

#### **Backtracking**

A single axis horizontal tracking system can be programed to operate a 'backtracking' procedure (refer section 3.4). Backtracking algorithms are becoming increasingly sophisticated with each system optimised dependent on individual project parameters including; distance between panels, width of each panel, incidence angle of the sun, field slope angle, and local weather (wind loading).

SGHAT software includes a backtracking feature which can be used to simulate various backtracking strategies. SGHAT also provides tracking data and plots, detailing the range of rotation over time. Whilst the backtracking feature simulates a generic operation based on the models parameters, the software may deviate from real-world backtracking behaviour due to a specific project system design, environmental conditions, and other factors. However, the backtracking feature does provide an understanding of potential glare implications of operating a backtracking procedure.

#### **Observation Point Receptor (OP)**

In SGHAT modelling the Observation Point receptor ("OP") simulates an observer at a single, discrete location, defined by a latitude, longitude, elevation, and height above ground. OPs generally define

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<sup>&</sup>lt;sup>8</sup> https://share.sandia.gov/phlux/static/references/glint-glare/SGHAT\_Technical\_Reference-v5.pdf

the location of a residential receiver (dwelling) and are subscribed a unique number in the modelling. In addition, an OP can be marked to represent an Air Traffic Control Tower ("ATCT") for aviation purposes.

#### **Route Parameters**

The assessment of potential glare impacts to route receptors, people travelling along roads and rail, includes the parameters of direction of travel (single or both directions) and field-of-view (FOV). FOV defines the left and right field-of-view of observers traveling along a route. A view angle of 90° means the observer has a field-of-view of 90° to their left and right, i.e. a total FOV of 180°, refer *Figure 7*.

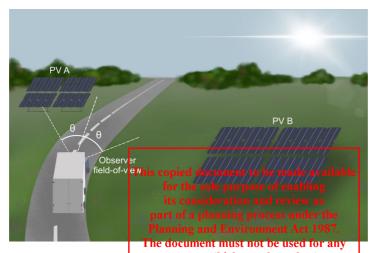


Figure 7. Diagrammatic illus**trations**eof hodos amorb Fielch of syliew relative to PV array (source: ForgeSolar).

FAA research has identified 'impairment ratings' based on simulations of glare at various angles and duration, and the effect on a pilot's ability to fly a plane<sup>9</sup>. The research identified impairment was highest when the glare source was within a FOV of 25° or less. The impact of glare fell below 'slight impairment' rating when the glare source was at an angle of 50° from the direction of travel. When the glare source was located at an angle of 90° the impairment rating reduced further.

SGHAT default parameter for FOV is 50°, this assessment used an FOV of 90°, representing a conservative assessment of potential glare hazard to drivers using roads and rail network within the vicinity of the solar farm.

#### **Flight Path Parameters**

SGHAT utilises a 2 mile flight path formula that simulates an aircraft following a straight-line approach path towards a runway, refer *Figure 8*.



 $<sup>^9\</sup> https://www.faa.gov/data\_research/research/med\_humanfacs/oamtechreports/2010s/media/201512.pdf$ 

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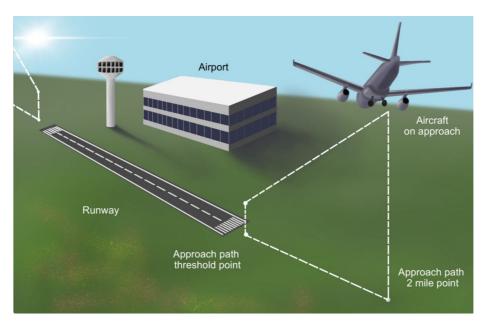


Figure 8. Diagrammatic illustration of SHGAT flight parameters (sourge: Forgesolar).

Airport specific flight parties descuered for the ingestion and review as seessment, therefore SGHAT default parameters were used in the ingestion and review as

The pilot's field of view (FOV) throng the leading pandses and within the model. The vertical FOV of the pilot, measures positive downward angles from the approach path vector. Values range from 0° to The document must not be used for any no downward restriction, and default value of beyond the corresponding FOV is mitigated pyright

Azimuthal viewing angle, left and right field-of-view of the pilot during approach, range from 0° to 180°. A view angle of 180° implies the pilot can see glare emanating from behind the plane. A view angle of 50° (default) implies the pilot has a FOV of 50° to their left and right during approach, i.e. a total FOV of 100°, refer *Figure 9*.



Figure 9. Diagrammatic illustration of Pilot's field of view (FOV) parameters (source: Forgesolar).

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#### 3.7. Hazard Assessment

Once the potential for solar glare has been identified through the viewshed analysis and SGHAT, which is based on topography only, an assessment of the likelihood of glare hazard occurring is undertaken, taking into consideration existing mitigating factors such as existing vegetation, buildings, and minor topographic variations outside the parameters of the modelling. Embedded mitigation measures, such as proposed vegetation screens to be undertaken as part of the Project, are also considered to identify residual glare potential.

Where required, additional mitigation measures, beyond those previously considered as part of the Project, are recommended to avoid, reduce or manage the identified risks.

#### 3.8. Limitations to the assessment

This desktop assessment is based on a geometric analysis of potential glare using SGHAT software modelling. The parameters of the modelling are based on the default values within the software. Where these values have been altered (generally increased), this has been noted in the assessment.

The assessment considers potential impacts of solar glare under normal operational procedures, potential impacts during construction and non-operational events have not been assessed.

Field tests has not been undertaken as part of the assessment, therefore the modelling is reliant on the algorithms contained in the software.

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SGHAT software is used under finetise sols in the daits coursider (Appendices) leans for further information refer to www.forgesolar.com/help/part of a planning process under the Planning and Environment Act 1987.

Environmental Ethos does That decision the accuracy of the SGHATIS of twee modelling. Responsibility and accountability for the accuracy of the sigh are of twee (GHATES) twee (GHATES) resides with Sims Industries d/b/a Forge Solar.

#### 4. EXISTING CONDITIONS

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The baseline is a statement of the characteristics which currently exist in the Project area. The baseline glare condition assessment takes into consideration the following:

- Characteristics of the environment that may affect the potential for glare;
- Land use and human modifications to the landscape such as roads, buildings and existing infrastructure which may influence glare and sensitivity to glare.

#### 4.1. Baseline Conditions

The Project covers an area of cleared grazing land, which is generally flat. An existing telecom tower is located on the western boundary and an existing farm shed on the eastern boundary. The Princes Highway adjoins the Project site's southern boundary, there is no screening along this boundary. Power Station Road adjoins the Project site's western boundary, this boundary is partially screened by existing vegetation. The eastern boundary is densely planted with shelterbelt trees and generally well screened. The northern boundary adjoining the Gippsland rail line is partially screened by vegetation.

The level railway crossing on Power Station Road is not screened from the Project site.

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Land use surrounding the site includes power generation, industry, and grazing. Constructed elements within the landscape include the highway, rail line, local roads, rural and residential buildings, schools and infrastructure (power lines).

Residential dwellings surrounding the Project site are generally rural properties. A residential area 500m to the north of the Project site is well screened by existing vegetation.

Bairnsdale Christian College is located approximately 450m to the north east of the Project site, the school is also screened by existing vegetation.

There are no existing features in the landscape with the potential to contribute to glare.

#### 4.2. Atmospheric Conditions

Atmospheric conditions such as cloud cover, dust and haze will impact light reflection, however these factors have not been accounted for in this glare assessment. The Bureau of Meteorology statistics for Bairnsdale Airport 4km south of the Project site (the closest BOM records for cloud cover statistics) recorded 161.2 cloudy days per year (mean number over the period 1942 to 2010)<sup>10</sup>. Since atmospheric conditions have not been factored into this assessment modelling, statistically the glare potential represents a conservative assessment.

#### 5. PROJECT DESCRIPTION

The general layout of the Project is as shown in *Figure 10*. The main elements of the solar farm with the potential to influence glare are the tilt, orientation, and optical properties of the PV modules in the solar array, and the rotational capabilities of the system. Whilst specific products are yet to be determined for the Project, the general technical properties of the main elements influencing glare are described below.

#### 5.1. PV modules

Reflectance values for the PV modules were based on the default values for smooth glass with antireflective coating contained in SGHAT, and vary dependent on the sun/module incidence angle (refer *Figure 11*).



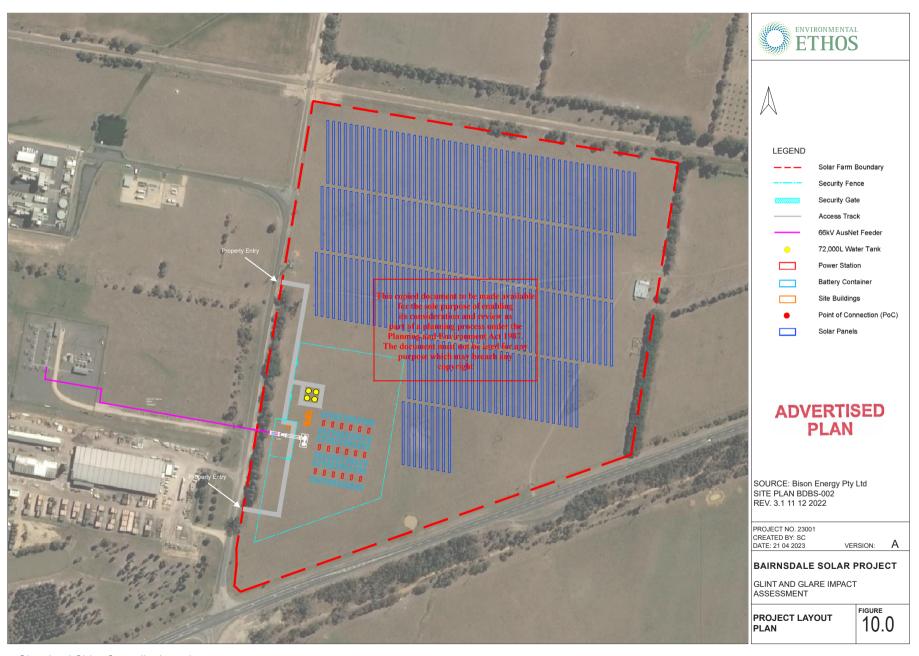
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 $<sup>^{10}\;</sup> http://www.bom.gov.au/climate/averages/tables/cw\_085279.shtml$ 

#### Attachment 5.1.2.8



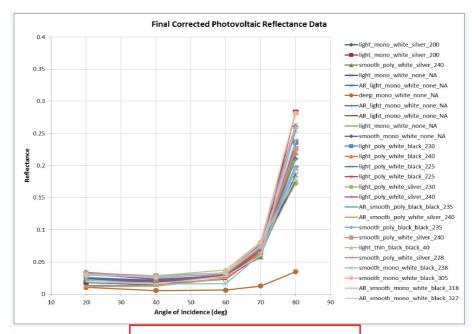


Figure 11. Photovoltaic Reflectance Data (Source Yellowhair<sup>11</sup>) for the sole purpose of enabling

## 5.2. Horizontal single axistracking syntomand review as

The Project will use a horizontal single as the part of a planning process under the rotation range of 120° (+/FIGO 00-The zenith tilthough of the panels are not tilted unpassor the bourty digrade and but remain horizontal along the plane of the tracker.

The height of the PV tracking system will depend on the final design, the current proposal is a maximum height to centroid of 1.2m and maximum height at full rotation 2.5m.

The configuration of the tracking system rows vary slightly dependent on the type of system used, generally rows are approximately 5-7 metres apart.

#### 5.3. Associated infrastructure

In addition to the PV arrays, the Project will also include a BESS, solar inverters, control/switch building, power line, and perimeter fencing. These elements do not generally create specular reflection as they comprise of non-reflective surfaces typically found in the built environment.

### 5.4. Landscape Screening

Landscape screen planting is proposed around the perimeter of the Project sufficient to provide visual screening once established.

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<sup>&</sup>lt;sup>11</sup> Yellowhair, J. and C.K. Ho. "Assessment of Photovoltaic Surface Texturing on Transmittance Effects and Glint/Glare Impacts". ASME 2015 9th International Conference on Energy Sustainability collocated with the ASME 2015 Power Conference

#### 6. DESKTOP GLARE ASSESSMENT

The aim of the desktop glare assessment is to identify if any sensitive receptors have the potential to be impacted by glare. The software modelling systems used in the desktop assessment include viewshed modelling to identify the location of sensitive receptors with line of sight to the Project, and the SGHAT to identify the potential and ocular significance of glare.

#### 6.1. Viewshed Analysis

The results of the viewshed analysis (based on topography) are shown in Figure 12.

The Digital Elevation Model (DEM) for the viewshed modelling was set as 'Finest' (> 10 m). The viewshed analysis focussed on potential visibility of the Project within 2km of the site.

Contour information for the site shows the Project site and surrounding area is generally flat. Slightly undulating terrain in the north and east provides partial screening in these direction.

24 residential receivers were assessed within 1km of the Project, and a further 4 assessed at approximately 1.5km from the Project. Residential receiver locations shown in Figure 12 are consist with the observation points (OP) in the glare modelling. The residential area to the north of the Project is screened by vegetation, however a small number of dwellings were identified in the viewshed model as potentially objective partially objective based on terrain alone. Whilst this area is unlikely to have line of big the objective opening on the project as selected to test in the glare model in the opening of the open

part of a planning process under the
In addition, the school
(OP8).

part of a planning process under the
to the anothly east of the Project Asitel 9853. also considered in the modelling
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Two other observation points were included in the glare modelling based on their sensitivity to potential glare and visual exposure to the Project site, these included:

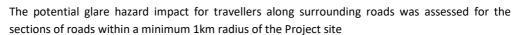
- Level railway crossing on Power Station Road (OP30)
- Intersection of Power Station Road and Bairnsdale Power Station access road (OP31)

The following roads and rail line pass through the viewshed and these were included in the glare modelling (both directions of travel) as follows:

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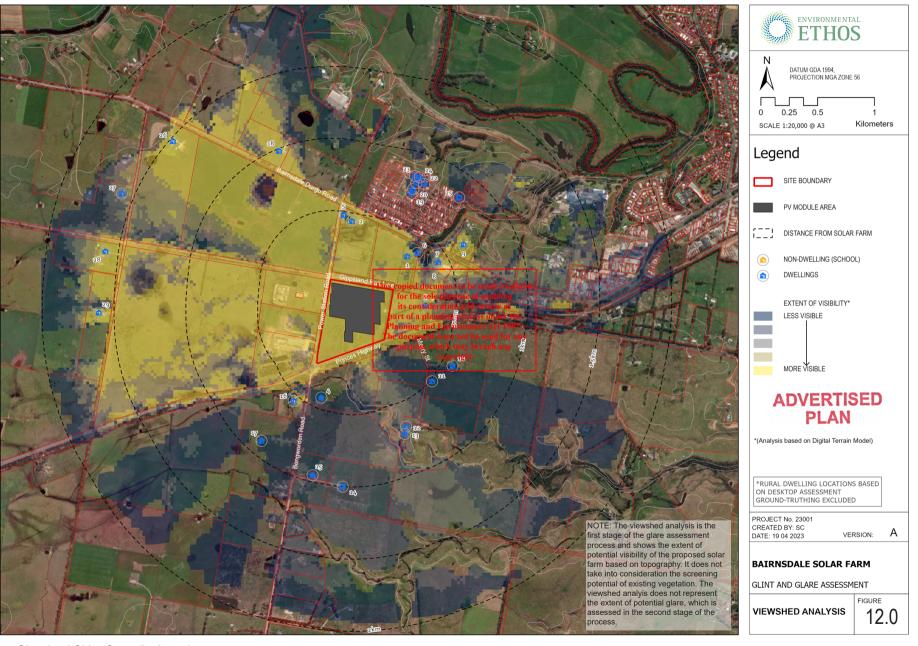
- · Princes Highway
- Railway Line
- Power Station Road
- · Bairnsdale Dargo Road
- Bengworden Road
- Merry Street



Bairnsdale Airport has two runways RWY04/22 and RWY 13/31, both were included in the glare modelling. The Airport does not have an air traffic control tower.

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#### Attachment 5.1.2.8



East Gippsland Shire Council - Agenda Council Meeting - Tuesday 6 February 2024

#### 6.2. Solar Glare Hazard Analysis

The parameters used in the SGHAT model are detailed in Table 1.

Table 1. Input data for SGHAT Analysis – Single Axis Tracking System

SGHAT Model Parameters	Values
Time Zone	UTC +10
Axis Tracking	Horizontal Single Axis
Backtracking	Shade (flat land)
Tilt of tracking axis	0 (Parallel to ground)
Orientation of tracking axis	0
Offset angle of module	0
Module Surface material	Smooth glass with anti-reflective coating (ARC)
Maximum tracking angle	60 degrees
Resting (Stowing) angle	10 degrees
Reflectivity	Vary with sun
Correlate slope error with surface type?	Yes
Slope error	8.43 mrad
Height of panels above grounding copied documen	nt to be made available <sup>1</sup> 2m to centroid
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SGHAT modelling includes tracking and backtracking operations based on generic parameters. The maximum rotation angle of the highest system was set at 10° (being the Tikedlangheatt which the backtracking process starts and finishes during daylight hours).

its consideration and review as some and the minimum resting angle that the tracking system was set at 10° (being the Tikedlangheatt which the backtracking system which may breach any copyright

The general alignment of the rotation angle over time is plotted in the Component Data File. An outline of the typical rotation angles for the model's tracking/backtracking data for summer and winter solstice is outlined in *Figures 13 and 14*.

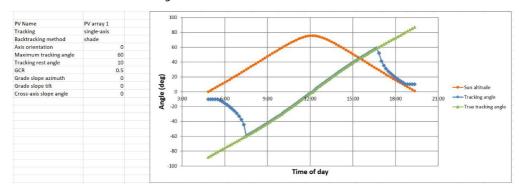


Figure 13. Tracking/backtracking angle per time slot – mid summer



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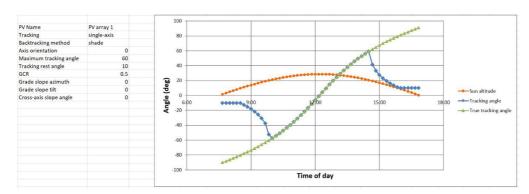


Figure 14. Tracking/backtracking angle per time slot – mid winter

#### 6.3. Solar Glare Hazard Analysis Tool (SGHAT) Results

The assessment outcomes for the SGHAT modelling are detailed in *Appendix A and B*, and outlined in *Table 2*.

All observation point locations and numbers shown in *Figure 12* are consist with the glare modelling results provided in the appendices and detailed in *Table 2*.

Table 2. SGHAT Assessment Results – Horizontal Single Axis Tracking System
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	ve Recefor the sole purpose		lare Potential
Observation Points OP1 t	o OP28 - Rural and residential part of a planning pro		No Glare
Observation Point OP8 - S	Planning and Environ School he document must not	ment Act 1987. be used for any	No Glare
Observation Point OP30 -	Level rapwrposeswhich may	breach any	No Glare
Observation Point OP31 - Station	Entry to Bairnsdale Power righ	t	No Glare
Princes Highway			No Glare
Railway Line			No Glare
Power Station Road			No Glare
Bairnsdale Dargo Road			No Glare
Bengworden Road			No Glare
Merry Street			No Glare
Bairnsdale Airport runwa	ys RWY04/22 and RWY 13/31		No Glare

The SGHAT modelling identifies that under normal operation of the solar farm, based on the model parameters and limits detailed in this report, no glare hazard is geometrically possible, refer Appendix A and B.

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## 7. MANAGEMENT AND MITIGATION MEASURES

The SGHAT modelling identified that under normal operation of the solar farm tracking system, with a backtracking operation and minimum limit of 10 degree resting angle, no additional mitigation measures are required to manage the potential impacts of glare on receivers.

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The Project Environmental Management Plan (EMP) should detail glare management measures required to avoid impacts to receivers, including the tracking and backtracking parameters detailed in this report. In addition, monitoring of glare hazard potential is required and a process for managing complaints, including rectification, should be included in the Project EMP.

The Project includes landscape planting to the perimeter of the site which will provide screening between the solar farm and surrounding sensitive receivers. Monitoring of glare hazard potential would no longer be required once the screen planting is sufficiently established to block line of sight to the solar farm.

#### 8. SUMMARY

In summary, based on the assumptions and parameters of this desktop assessment, the following results were identified:

- The viewshed modelling identified the site and surrounding area as generally flat with slightly undulating terrain in the north and east providing partial screening in these directions.
- 24 residential receivers were assessed within 1km of the Project, and a further 4 assessed at approximately 1.5km from the Project site.
- Additional sensitive receivers assessed in the glare modelling included Bairnsdale Christian College, the level railway crossing on Power Station Road, and the entrance to Bairnsdale Power Station.
- The Princes Highway, Gippsland Rail line, and four local roads were also assessed in the glare modelling.
- The two runways at Bairnsdale Airport located approximately 4km to the south of the Project site were assess in terms of potential glare affecting the 2 mile flight paths to the runways.
- Glare (SGHAT) modelling identified that under normal operation of the solar farm with a
  tracking/backtracking operation and a minimum limit of 10 degree resting angle (being the
  fixed angle at which the backtracking process starts and finishes during daylight hours), no
  potential glare hazard impacts were identified as affecting rural/residential receivers, the
  Princes Highway and local roads, railway line, and Bairnsdale Airport flight paths.
- The Project EMP should detail glare management measures required to avoid impacts to sensitive receptors, including the parameters and limits detailed in this report regarding the tracking system operation. In addition, monitoring of glare hazard potential is required and a process for managing complaints, including rectification, should be included in the Project EMP.



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## **APPENDIX A:**

## SOLAR GLARE HAZARD ANALYSIS RESULTS

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# ADVERTISED PLAN

## FORGESOLAR GLARE ANALYSIS

Project: BairnsdaleSF

Site configuration: BairnsdaleSF\_Update

Created 23 Mar, 2023
Updated 21 Apr, 2023
Time-step 1 minute
Timezone offset UTC10
Site ID 87117.15292
Category 1 MW to 5 MW
DNI peaks at 2,000.0 W/m^2
Ocular transmission coefficient 0.5
Pupil diameter 0.002 m
Eye focal length 0.017 m
Sun subtended angle 9.3 mrad
PV analysis methodology V2



## Summary of Results No glare predicted

PV Array	This copied document to be made availab	o <mark>le</mark> Annual Yel	low Glare	Energy
	its consideration and review as	min	hr	kWh
PV array 1	part of a planning process under the Planning and Environment Act 1987. tracking the document must not be used for any	0	0.0	-
	purpose which may breach any			

Total annual glare received by each receptor; may include cupile ate times of glare from multiple reflective surfaces.

Receptor	Annual Gr	een Glare	Annual Ye	llow Glare
	min	hr	min	hr
Bairnsdale Dargo Road	0	0.0	0	0.0
Merry St	0	0.0	0	0.0
Power Station and Bengworden Rds	0	0.0	0	0.0
Princes Highway	0	0.0	0	0.0
Railway Line	0	0.0	0	0.0
RWY 04	0	0.0	0	0.0
RWY 13	0	0.0	0	0.0
RWY 22	0	0.0	0	0.0
RWY 31	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0



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Receptor	Annual Gr	Annual Green Glare		llow Glare
	min	hr	min	hr
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
OP 20	0	0.0	0	0.0
OP 21	0	0.0	0	0.0
OP 22	0	0.0	0	0.0
OP 23	0	0.0	0	0.0
OP 24	0	0.0	0	0.0
OP 25	0	0.0	0	0.0
OP 26	0	0.0	0	0.0
OP 27	0	0.0	0	0.0
OP 28	0	0.0	0	0.0
OP 29	0	0.0	0	0.0
OP 30	0	0.0	0	0.0
OP 31	0	0.0	0	0.0

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## **Component Data**

## **PV** Arrays

Name: PV array 1

Axis tracking: Single-axis rotation

Backtracking: Shade Tracking axis orientation: 0.0° Max tracking angle: 60.0° Resting angle: 10.0° Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (m)	Height above ground (m)	Total elevation (m)
1	-37.842232	147.567870	36.04	1.20	37.24
2	-37.842771	147.572040	34.17	1.20	35.37
3	-37.843468	147.572044	34.55	1.20	35.75
4	-37.843453	147.571715	34.52	1.20	35.72
5	-37.844875	147.571710	36.46	1.20	37.66
6	-37.844831	147.571270	35.72	1.20	36.92
7	-37.845534	147.571273	35.35	1.20	36.55
8	-37.845356	147.569528	32.51	1.20	33.71
9	-37.846052	147.569525	33.83	1.20	35.03
10	-37.845968	147.568873	33.38	1.20	34.58
11	-37.845289	147.568869	33.41	1.20	34.61
12	-37.845295	147.568926	33.27	1.20	34.47
13	-37.844514	147.568924	34.48	1.20	35.68
14	-37.844339	147.567732	37.75	1.20	38.95
15	-37.843655	147.567719	36.84	1.20	38.04
16	-37.843664	147.567804	36.86	1.20	38.06
17	-37.842891	147.567784	36.41	1.20	37.61
18	-37.842909	147.567883	36.49	1.20	37.69



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## **Route Receptors**

Name: Bairnsdale Dargo Road Path type: Two-way Observer view angle: 90.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (m)	Height above ground (m)	Total elevation (m)
1	-37.843361	147.588358	33.26	2.40	35.66
2	-37.843022	147.586641	33.00	2.40	35.40
3	-37.842700	147.584302	32.79	2.40	35.19
4	-37.842548	147.582650	33.00	2.40	35.40
5	-37.841141	147.579024	33.40	2.40	35.80
6	-37.838820	147.572844	34.03	2.40	36.43
7	-37.836447	147-566771	ed docu <sup>35,00</sup> t to be n	nade availatie	37.40
8	-37.835413	147.564132	the sole purpose of	anabling 2.40	35.59
9	-37.832871	147.557523	35.11	2.40	37.51
10	-37.830905	147.552309	of a planning process	eview as	31.28

Name: Merry St Path type: Two-way Observer view angle: 90.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (m)	Height above ground (m)	Total elevation (m)
1	-37.850987	147.574752	30.35	2.40	32.75
2	-37.849386	147.575085	33.01	2.40	35.41
3	-37.848175	147.575364	33.39	2.40	35.79
4	-37.847378	147.575428	32.24	2.40	34.64
5	-37.847053	147.575153	32.32	2.40	34.72
6	-37.845291	147.574423	34.40	2.40	36.80





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Name: Power Station and Bengworden Rds

Path type: Two-way
Observer view angle: 90.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (m)	Height above ground (m)	Total elevation (m)
1	-37.837286	147.568745	34.33	2.40	36.73
2	-37.837947	147.568488	33.70	2.40	36.10
3	-37.838896	147.568338	33.97	2.40	36.37
4	-37.840116	147.568069	33.58	2.40	35.98
5	-37.840980	147.567833	32.31	2.40	34.71
6	-37.841776	147.567619	33.35	2.40	35.75
7	-37.842056	147.567597	34.98	2.40	37.38
8	-37.843403	147.567308	36.45	2.40	38.85
9	-37.844231	147.567109	37.65	2.40	40.05
10	-37.846063	147.566696	34.92	2.40	37.32
11	-37.847055	147.566460	36.18	2.40	38.58
12	-37.847538	147.566331	36.04	2.40	38.44
13	-37.848351	147.566181	36.00	2.40	38.40
14	-37.850350	147.565731	35.43	2.40	37.83
15	-37.852570	147.565216	36.57	2.40	38.97
16	-37.854383	147.564797	36.36	2.40	38.76

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Name: Princes Highway
Path type: Two-way
Observer view angle: 90.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (m)	Height above ground (m)	Total elevation (m)
1	-37.843505	147.588583	33.90	2.40	36.30
2	-37.844072	147.587832	32.88	2.40	35.28
3	-37.844564	147.587124	32.68	2.40	35.08
4	-37.844818	147.586405	33.71	2.40	36.11
5	-37.844801	147.585439	33.82	2.40	36.22
6	-37.844530	147.583669	32.70	2.40	35.10
7	-37.844386	147.582092	34.88	2.40	37.28
8	-37.844225	147.579946	34.00	2.40	36.40
9	-37.844369	147.578122	33.00	2.40	35.40
10	-37.844699	147.576406	34.89	2.40	37.29
11	-37.844962	147.575354	35.31	2.40	37.71
12	-37.845936	147.571986	36.31	2.40	38.71
13	-37.846843	147.568885	35.11	2.40	37.51
14	-37.847580	147.566331	36.04	2.40	38.44
15	-37.848342	147.564218	36.61	2.40	39.01
16	-37.849461	147.558242	36.80	2.40	39.20
17	-37.850037	147.554637	37.00	2.40	39.40
18	-37.851528	147.549015	38.48	2.40	40.88

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Name: Railway Line Path type: Two-way Observer view angle: 90.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (m)	Height above ground (m)	Total elevation (m)
1	-37.843996	147.588701	34.17	3.00	37.17
2	-37.844259	147.587049	32.85	3.00	35.85
3	-37.844216	147.585879	34.00	3.00	37.00
4	-37.843793	147.582532	34.01	3.00	37.01
5	-37.843064	147.577007	34.53	3.00	37.53
6	-37.842759	147.574786	35.34	3.00	38.34
7	-37.842420	147.571975	34.25	3.00	37.25
8	-37.841946	147.568359	35.00	3.00	38.00
9	-37.841844	147.567651	33.70	3.00	36.70
10	-37.841336	147,564046 This copi	ed document to be r	nade available	38.92
11	-37.840870	147.560259	the sole purpose of	anabling 3.00	39.95
12	-37.839895	147.552856	36.43	3.00	39.43
13	-37.839692	147 551504	37 55	eview as	40.55
14	-37.839531	147.550088 Plann	of a planning processing and Environmen	s under the	40.81

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## Flight Path Receptors

Name: RWY 04
Description:
Threshold height: 15 m
Direction: 55.0°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°



Point	Latitude (°)	Longitude (°)	Ground elevation (m)	Height above ground (m)	Total elevation (m)
Threshold	-37.890363	147.564331	50.75	15.24	65.99
Two-mile	-37.906946	147.534285	56.00	178.68	234.67





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Name: RWY 13 Description: Threshold height: 15 m

Direction: 145.0°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°



Point	Latitude (°)	Longitude (°)	Ground elevation (m)	Height above ground (m)	Total elevation (m)
Threshold	-37.883431	147.565747	50.20	15.24	65.44
Two-mile	-37.859747	147.544711	38.97	195.15	234.12

Name: RWY 22 Description: Threshold height: 15 m Direction: 235.0° Glide slope: 3.0° This copied document to Pilot view restricted? Yes for the sole purpo Vertical view: 30.0° its consideration a Azimuthal view: 50.0° part of a planning pr **Planning and Enviro** The document must no purpose which ma copyright Ground elevation (m) Point Latitude (°) ongitude (°) Height above ground (m) Total elevation (m) -37.884724 147.574568 49.71 64.95 Threshold 15.24 Two-mile -37.868141 147.604611 30.21 203.43 233.64

Name: RWY 31
Description:
Threshold height: 15 m
Direction: 325.0°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°



Point	Latitude (°)	Longitude (°)	Ground elevation (m)	Height above ground (m)	Total elevation (m)
Threshold	-37.889705	147.571292	49.49	15.24	64.73
Two-mile	-37.913389	147.592330	41.00	192.42	233.42





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## **Discrete Observation Point Receptors**

Name	ID	Latitude (°)	Longitude (°)	Elevation (m)	Height (m)
OP 1	1	-37.840634	147.573840	33.41	1.50
OP 2	2	-37.838401	147.569495	33.84	1.50
OP 3	3	-37.843693	147.575313	35.75	1.50
OP 4	4	-37.849414	147.567078	34.86	1.50
OP 5	5	-37.838049	147.568841	34.14	1.50
OP 6	6	-37.840428	147.574762	31.80	1.50
OP 7	7	-37.840987	147.576350	33.77	1.50
OP 8	8	-37.841389	147.576645	34.44	1.50
OP 9	9	-37.839912	147.578386	33.75	1.50
OP 10	10	-37.847408	147.577442	33.22	1.50
OP 11	11	-37.848413	147.575814	33.74	1.50
OP 12	12	-37.851270	147.573785	30.18	1.50
OP 13	13	-37.851580	147.573723	29.64	1.50
OP 14	14	-37.855005	147.568761	33.13	1.50
OP 15	15	-37.854348	147.566323	35.61	1.50
OP 16	16	-37.849620	147.564926	36.49	1.50
OP 17	17	-37.852127	147.562396	36.16	1.50
OP 18	18	-37.834024	147.563756	34.46	1.50
OP 19	19	-37.836901	147.574023	30.77	1.50
OP 20	20	-37.836460	147.574313	30.55	1.50
OP 21	21	-37.836045	147.574592	29.95	1.50
OP 22	22	-37.836202	147.574882	29.52	1.50
OP 23	23	-37.835473	147.574013	30.77	1.50
OP 24	24	-37.835604	147.574318	30.35	1.50
OP 25	25	-37.836926	147.577950	29.98	1.50
OP 26	26	-37.833523	147.555307	37.00	1.50
OP 27	27	-37.836749	147.551284	36.10	1.50
OP 28	28	-37.840300	147.549910	38.81	1.50
OP 29	29	-37.844163	147.549556	39.04	1.50
OP 30	30	-37.841805	147.567645	33.46	2.40
OP 31	31	-37.843056	147.567276	36.05	2.40

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## **Glare Analysis Results**

## Summary of Results No glare predicted

PV Array	Tilt	Orient	Annual Gr	een Glare	Annual Yel	low Glare	Energy
	۰	٥	min	hr	min	hr	kWh
PV array 1	SA tracking	SA tracking	0	0.0	0	0.0	-

Total annual glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual G	Green Glare	Annual Yellow Glare		
	min	hr	min	hr	
Bairnsdale Dargo Road	0	0.0	0	0.0	
Merry St	0	0.0	0	0.0	
Power Station and Bengworden Rds	0	0.0	0	0.0	
Princes Highway	This copie	d documeNtOto be made av	ailable	0.0	
Railway Line		he sole puppose of enabling		0.0	
RWY 04	0 its c	onsideration and review as	0	0.0	
RWY 13	o part of	a planning process under	the 0	0.0	
RWY 22	OThe door	ng and Environment Act 19 Iment must not be used for	8/.	0.0	
RWY 31	0 purr	oose which may breach any	, 0	0.0	
OP 1	0	copŷøight	0	0.0	
OP 2	0	0.0	0	0.0	
OP 3	0	0.0	0	0.0	
OP 4	0	0.0	0	0.0	
OP 5	0	0.0	0	0.0	
OP 6	0	0.0	0	0.0	
OP 7	0	0.0	0	0.0	
OP 8	0	0.0	0	0.0	
OP 9	0	0.0	0	0.0	
OP 10	0	0.0	0	0.0	
OP 11	0	0.0	0	0.0	
OP 12	0	0.0	0	0.0	
OP 13	0	0.0	0	0.0	
OP 14	0	0.0	0	0.0	
OP 15	0	0.0	0	0.0	
OP 16	0	0.0	0	0.0	
OP 17	0	0.0	0	0.0	
OP 18	0	0.0	0	0.0	
OP 19	0	0.0	0	0.0	
OP 20	0	0.0	0	0.0	
OP 21	0	0.0	0	0.0	



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Receptor	Annual Gr	een Glare	Annual Yellow Glare	
	min	hr	min	hr
OP 22	0	0.0	0	0.0
OP 23	0	0.0	0	0.0
OP 24	0	0.0	0	0.0
OP 25	0	0.0	0	0.0
OP 26	0	0.0	0	0.0
OP 27	0	0.0	0	0.0
OP 28	0	0.0	0	0.0
OP 29	0	0.0	0	0.0
OP 30	0	0.0	0	0.0
OP 31	0	0.0	0	0.0

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## PV: PV array 1 no glare found

Receptor results ordered by category of glare

Receptor	Annu	al Green Glare	Annual Yellow Glare	
	min	hr	min	hr
Bairnsdale Dargo Road	0	0.0	0	0.0
Merry St	0	0.0	0	0.0
Power Station and Bengworden Rds	0	0.0	0	0.0
Princes Highway	0	0.0	0	0.0
Railway Line	0	0.0	0	0.0
RWY 04	0	0.0	0	0.0
RWY 13	Phis co	pied document <sup>o</sup> to be made avai	lable	0.0
RWY 22		or the sole puppose of enabling	0	0.0
RWY 31		s consideration and review as	0	0.0
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OP 2	OThe d	ning and Environment Act 198	<sup>7</sup> • 0	0.0
OP 3	O n	locument must not be used for a urpose which may breach any	0	0.0
OP 4	0	copyright	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
OP 20	0	0.0	0	0.0
OP 21	0	0.0	0	0.0
OP 22	0	0.0	0	0.0
OP 23	0	0.0	0	0.0
OP 24	0	0.0	0	0.0



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Receptor	Annual Gr	Green Glare Ann		nnual Yellow Glare	
	min	hr	min	hr	
OP 25	0	0.0	0	0.0	
OP 26	0	0.0	0	0.0	
OP 27	0	0.0	0	0.0	
OP 28	0	0.0	0	0.0	
OP 29	0	0.0	0	0.0	
OP 30	0	0.0	0	0.0	
OP 31	0	0.0	0	0.0	

## PV array 1 and Bairnsdale

## **Dargo Road**

Receptor type: Route
No glare found

## PV array 1 and Merry St

Receptor type: Route
No glare found

# PV array 1 and Power Station and Bengworden Rds

Receptor type: Route
No glare found

## PV array 1 and Princes

## Highway

Receptor type: Route
No glare found

## PV array 1 and Railway Line

Receptor type: Route
No glare found

## PV array 1 and RWY 04

Receptor type: 2-mile Flight Path
No glare found

## PV array 1 and RWY 13

Receptor type: 2-mile Flight Path **No glare found** 

## PV array 1 and RWY 22

Receptor type: 2-mile Flight Path

No glare found

## PV array 1 and RWY 31

Receptor type: 2-mile Flight Path **No glare found** 

PV array 1 and OP 1
Receptor type: Observation Point
No glare found

## PV array 1 and OP 2

Receptor type: Observation Point **No glare found** 

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## PV array 1 and OP 3

Receptor type: Observation Point No glare found

## PV array 1 and OP 4

Receptor type: Observation Point **No glare found** 

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## PV array 1 and OP 5

Receptor type: Observation Point No glare found

#### PV array 1 and OP 7

Receptor type: Observation Point **No glare found** 

## PV array 1 and OP 9

Receptor type: Observation Point No glare found

## PV array 1 and OP 11

Receptor type: Observation Point No glare found

## PV array 1 and OP 13

Receptor type: Observation Point **No glare found** 

## PV array 1 and OP 15

Receptor type: Observation Point **No glare found** 

## PV array 1 and OP 17

Receptor type: Observation Point **No glare found** 

## PV array 1 and OP 19

Receptor type: Observation Point No glare found

## PV array 1 and OP 21

Receptor type: Observation Point **No glare found** 

## PV array 1 and OP 23

Receptor type: Observation Point **No glare found** 

## PV array 1 and OP 6

Receptor type: Observation Point No glare found

#### PV array 1 and OP 8

Receptor type: Observation Point **No glare found** 

## PV array 1 and OP 10

Receptor type: Observation Point **No glare found** 

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## PV array 1 and OP 12

Receptor type: Observation Point No glare found

#### PV array 1 and OP 14

Receptor type: Observation Point **No glare found** 

## PV array 1 and OP 16

Receptor type: Observation Point **No glare found** 

## PV array 1 and OP 18

Receptor type: Observation Point

No glare found

#### PV array 1 and OP 20

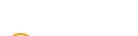
Receptor type: Observation Point **No glare found** 

## PV array 1 and OP 22

Receptor type: Observation Point **No glare found** 

## PV array 1 and OP 24

Receptor type: Observation Point **No glare found** 



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## PV array 1 and OP 25

Receptor type: Observation Point **No glare found** 

## PV array 1 and OP 27

Receptor type: Observation Point No glare found

## PV array 1 and OP 29

Receptor type: Observation Point No glare found

## PV array 1 and OP 31

Receptor type: Observation Point **No glare found** 

## PV array 1 and OP 26

Receptor type: Observation Point No glare found

## PV array 1 and OP 28

Receptor type: Observation Point No glare found

## PV array 1 and OP 30

Receptor type: Observation Point **No glare found** 

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## **Assumptions**

"Green" glare is glare with low potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.

"Yellow" glare is glare with potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.

Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.

The algorithm does not rigorously represent the detailed geometry of a system; detailed features such as gaps between modules, variable height of the PV array, and support structures may impact actual glare results. However, we have validated our models against several systems, including a PV array causing glare to the air-traffic control tower at Manchester-Boston Regional Airport and several sites in Albuquerque, and the tool accurately predicted the occurrence and intensity of glare at different times and days of the year.

Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare. This primarily affects V1 analyses of path receptors.

Random number computations are utilized by various steps of the annual hazard analysis algorithm. Predicted minutes of glare can vary between runs as a result. This limitation primarily affects analyses of Observation Point receptors, including ATCTs. Note that the SGHAT/ForgeSolar methodology has always relied on an analytical, qualitative approach to accurately determine the overall hazard (i.e. green vs. yellow) of expected glare on an annual basis.

The analysis does not automatically consider obstacles (either man-made or natural) between the observation points and the prescribed solar installation that may obstruct observed glare, such as trees, hills, buildings, etc.

The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)

The variable direct normal irradiance (DNI) feature (if selected) scales the user-prescribed peak DNI using a typical clear-day irradiance profile. This profile has a lower DNI in the mornings and evenings and a maximum at solar noon. The scaling uses a clear-day irradiance profile based on a normalized time relative to sunrise, solar noon, and sunset, which are prescribed by a sun-position algorithm and the latitude and longitude obtained from Google maps. The actual DNI on any given day can be affected by cloud cover, atmospheric attenuation, and other

The ocular hazard predicted by the tool depends on a number of environmental, optical, and human factors, which can be uncertain. We provide input fields and typical ranges of values for these factors so that the user can vary these parameters to see if they have an impact on the results. The speed of SGHAT allows expedited sensitivity and parametric analyses.

The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.

Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid based on aggregated research data. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.

Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.

Refer to the Help page at www.forgesolar.com/help/ for assumptions and limitations not listed here.

Default glare analysis parameters and observer eye characteristics (for reference only):

Analysis time interval: 1 minuteOcular transmission coefficient: 0.5

Pupil diameter: 0.002 metersEye focal length: 0.017 meters

• Sun subtended angle: 9.3 milliradians

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GLINT AND GLARE IMPACT ASSESSMENT

## **APPENDIX B:**

## SOLAR GLARE HAZARD ANALYSIS - AVIATION REPORT

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## FORGESOLAR GLARE ANALYSIS

Project: BairnsdaleSF

Site configuration: BairnsdaleSF\_Update

Analysis conducted by Sian Crawford (sian@environmentalethos.com.au) at 02:32 on 21 Apr, 2023.

## U.S. FAA 2013 Policy Adherence

The following table summarizes the policy adherence of the glare analysis based on the 2013 U.S. Federal Aviation Administration Interim Policy 78 FR 63276. This policy requires the following criteria be met for solar energy systems on airport property:

- No "yellow" glare (potential for after-image) for any flight path from threshold to 2 miles
- No glare of any kind for Air Traffic Control Tower(s) ("ATCT") at cab height.
- Default analysis and observer characteristics (see list below)

ForgeSolar does not represent or speak officially for the FAA and cannot approve or deny projects. Results are informational only.

COMPONENT	STATUS	DESCRIPTION
Analysis parameters	PASS	Analysis time interval and eye characteristics used are acceptable
2-mile flight path(s)	PASS	Flight path receptor(s) do not receive yellow glare
ATCT(s)	N/A	No ATCT receptors designated

Default glare analysis parameters and observer eye characteristics (for reference only):

- Analysis time interval: 1 minute
- Ocular transmission coefficient: 0.5
- Pupil diameter: 0.002 meters
- Eye focal length: 0.017 meters
- Sun subtended angle: 9.3 milliradians

FAA Policy 78 FR 63276 can be read at https://www.federalregister.gov/d/2013-24729





## **ADVERTISED PLAN**

## **SITE CONFIGURATION**

## **Analysis Parameters**

DNI: peaks at 2,000.0 W/m^2 Time interval: 1 min Ocular transmission coefficient: 0.5 Pupil diameter: 0.002 m Eye focal length: 0.017 m Sun subtended angle: 9.3 mrad Site Config ID: 87117.15292 Methodology: V2



## PV Array(s)

Name: PV array 1 Axis tracking: Single-axis rotation Backtracking: Shade

Tracking axis orientation: 0.0° Max tracking angle: 60.0° Resting angle: 10.0° **Ground Coverage Ratio**: 0.5

Rated power: Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun Slope error: correlate with material

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Vertex	Latitude (°)	Longitude (°)	Ground elevation (m)	Height above ground (m)	Total elevation (m)
1	-37.842232	147.567870	36.04	1.20	37.24
2	-37.842771	147.572040	34.17	1.20	35.37
3	-37.843468	147.572044	34.55	1.20	35.75
4	-37.843453	147.571715	34.52	1.20	35.72
5	-37.844875	147.571710	36.46	1.20	37.66
6	-37.844831	147.571270	35.72	1.20	36.92
7	-37.845534	147.571273	35.35	1.20	36.55
8	-37.845356	147.569528	32.51	1.20	33.71
9	-37.846052	147.569525	33.83	1.20	35.03
10	-37.845968	147.568873	33.38	1.20	34.58
11	-37.845289	147.568869	33.41	1.20	34.61
12	-37.845295	147.568926	33.27	1.20	34.47
13	-37.844514	147.568924	34.48	1.20	35.68
14	-37.844339	147.567732	37.75	1.20	38.95
15	-37.843655	147.567719	36.84	1.20	38.04
16	-37.843664	147.567804	36.86	1.20	38.06
17	-37.842891	147.567784	36.41	1.20	37.61
18	-37.842909	147.567883	36.49	1.20	37.69



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## Flight Path Receptor(s)

Name: RWY 04 Description:

Threshold height: 15 m
Direction: 55.0°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°



Point	Latitude (°)	Longitude (°)	Ground elevation (m)	Height above ground (m)	Total elevation (m)
Threshold	-37.890363	147.564331	50.75	15.24	65.99
Two-mile	-37.906946	147.534285	56.00	178.68	234.67

Name: RWY 13 Description:

Threshold height: 15 m

Direction: 145.0° Glide slope: 3.0° Pilot view restricted? Yes

Vertical view: 30.0° Azimuthal view: 50.0° This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987.

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Point	Latitude (°)	Longitude (°)	Ground elevation (m)	Height above ground (m)	Total elevation (m)
Threshold	-37.883431	147.565747	50.20	15.24	65.44
Two-mile	-37.859747	147.544711	38.97	195.15	234.12

Name: RWY 22

Description:

Threshold height: 15 m

Direction: 235.0°
Glide slope: 3.0°

Pilot view restricted? Yes Vertical view: 30.0° Azimuthal view: 50.0°



Point	Latitude (°)	Longitude (°)	Ground elevation (m)	Height above ground (m)	Total elevation (m)
Threshold	-37.884724	147.574568	49.71	15.24	64.95
Two-mile	-37.868141	147.604611	30.21	203.43	233.64



Name: RWY 31 Description:

Threshold height: 15 m Direction: 325.0° Glide slope: 3.0° Pilot view restricted? Yes Vertical view: 30.0° Azimuthal view: 50.0°



Point	Latitude (°)	Longitude (°)	Ground elevation (m)	Height above ground (m)	Total elevation (m)
Threshold	-37.889705	147.571292	49.49	15.24	64.73
Two-mile	-37.913389	147.592330	41.00	192.42	233.42

## **Discrete Observation Receptors**

Name	ID	Latitude (°)	Longitude (°)	Elevation (m)	Height (m)
OP 1	1	-37.840634	147.573840	33.41	1.50
OP 2	2	-37.838401	147.569495	33.84	1.50
OP 3	3	37.843693	1,47.575313	35.75	1.50
OP 4	4	1 his copied do	147.567078	available	1.50
OP 5	5	-37.838049	147.568841	34.14	1.50
OP 6	6	-37.840428	leration and review	31,80	1.50
OP 7	7	- <b>part of a pla</b>	94/.5/6350	er the 33.77	1.50
OP 8	8	Planning an	147.576645	1987. <sub>34,44</sub>	1.50
OP 9	9	The documen		for any 33.75	1.50
OP 10	10	-37.84740pose	which may breach a	any 33,22	1.50
OP 11	11	-37.848413	copyright <sub>814</sub>	33.74	1.50
OP 12	12	-37 851270	147 573785	30 18	1.50
OP 13	13	-37.851580	147.573723	29.64	1.50
OP 14	14	-37.855005	147.568761	33.13	1.50
OP 15	15	-37.854348	147.566323	35.61	1.50
OP 16	16	-37.849620	147.564926	36.49	1.50
OP 17	17	-37.852127	147.562396	36.16	1.50
OP 18	18	-37.834024	147.563756	34.46	1.50
OP 19	19	-37.836901	147.574023	30.77	1.50
OP 20	20	-37.836460	147.574313	30.55	1.50
OP 21	21	-37.836045	147.574592	29.95	1.50
OP 22	22	-37.836202	147.574882	29.52	1.50
OP 23	23	-37.835473	147.574013	30.77	1.50
OP 24	24	-37.835604	147.574318	30.35	1.50
OP 25	25	-37.836926	147.577950	29.98	1.50
OP 26	26	-37.833523	147.555307	37.00	1.50
OP 27	27	-37.836749	147.551284	36.10	1.50
OP 28	28	-37.840300	147.549910	38.81	1.50
OP 29	29	-37.844163	147.549556	39.04	1.50
OP 30	30	-37.841805	147.567645	33.46	2.40
OP 31	31	-37.843056	147.567276	36.05	2.40





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## **Assumptions**

"Green" glare is glare with low potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.

"Yellow" glare is glare with potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.

Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.

Glare analyses do not account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographic obstructions.

Several calculations utilize the PV array centroid, rather than the actual glare spot location, due to V1 algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare.

The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)

Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ

Glare vector plots are simplified representations of analysis data. Actual glare emanations and results may differ.

The glare hazard determination relies on several approximations including observer eye characteristics, angle of view, and typical blink response time. Actual results and glare occurrence may differ.

Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid based on aggregated research data. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.

Refer to the Help page at www.forgesolar.com/help/ for assumptions and limitations not listed here.

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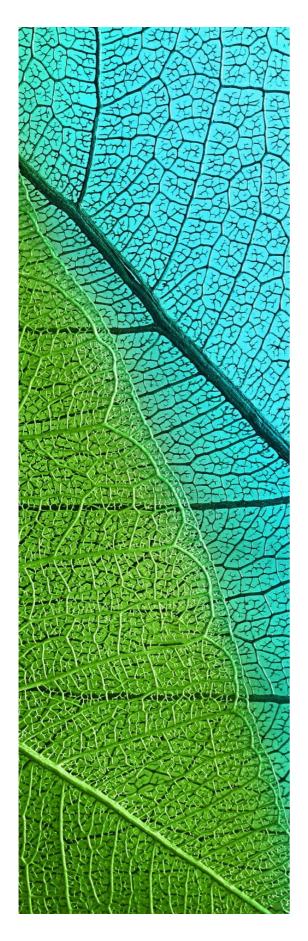


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# ADVERTISED PLAN

# 910 Princes Hwy, Bairnsdale

## Native Vegetation Assessment

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## **Prepared for Bison Energy**

March 2023 Report No. 22340.01 (1.0)



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Report No. 22340.01 (1.0)

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## 1. Executive summary

Nature Advisory Pty Ltd undertook a native vegetation assessment of an approximately 20.73-hectare area of private land at 910 Princes Hwy, Bairnsdale. A solar farm is proposed to be constructed on the site.

This report presents the information relevant to native vegetation on the property to accompany a planning permit application under Clause 52.17 of the East Gippsland Planning Scheme, in accordance with the *Guidelines for the removal, destruction or lopping of native vegetation* (DELWP 2017a), herein referred to as 'the Guidelines'.

The study area comprised a grazing paddock as well as the roadside reserves of Princes Hwy and Power Station Rd. Vegetation largely comprised non-native pasture grasses with planted windrows of non-indigenous natives and non-native species. Native vegetation in the study area was limited to concentrations of rushes in wetter depressions, aquatic species in dams, two large scattered trees and some native grasses and herbs growing along the road side of Power Station Rd.

The following native vegetation was recorded in the study area:

- Six patches of native vegetation, totalling 0.647 hectares; and
- Two large scattered trees.

The proponent proposes to remove 0.383 hectares of native vegetation in patches with no large trees.

The application site lies within Location 1. Based on the extent of native vegetation, the number of large trees, and the location category in the original statement and Climate Action (DEECA).

This would not trigger a referral to the Department of the properties of the consideration and review as

A Native Vegetation Removal NVR) report for this proposed is provided in Appendix 7.

Offsets required to compensate for the proposed removal of native vegetation from the study area are:

- 0.055 general habitat units, with the work of the control of the con
  - A minimum strategic biodiversity value (SBV) of 0.364
  - Located within the East Gippsland CMA boundary or the East Gippsland Shire Council.

Under the Guidelines all offsets must be secured prior to the removal of native vegetation.

The offset target for the current proposal will be achieved via a third-party offset.

The table below summarises the compliance of the information in this report with the application requirements of the *Guidelines for the removal, destruction or lopping of native vegetation* (DELWP 2017a).

	Application requirement	Response
1.	Information about the native vegetation to be removed.	See Section 5.2.
2.	Topographic and land information relating to the native vegetation to be removed.	See Section 4.1 and Figure 1.
3.	Recent, dated photographs of the native vegetation to be removed.	See Appendix 5.





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	Application requirement	Response
4.	Details of any other native vegetation approved to be removed, or that was removed without the required approvals, on the same property or on contiguous land in the same ownership as the applicant, in the five-year period before the application for a permit is lodged.	Not applicable.
5.	An avoid and minimise statement.	See Section 6.3.
6.	A copy of any Property Vegetation Plan contained within an agreement made pursuant to section 69 of the <i>Conservation, Forests and Lands Act 1987</i> that applies to the native vegetation to be removed.	Not applicable.
7.	Where the removal of native vegetation is to create defendable space, a written statement explaining why the removal of native vegetation is necessary.  This statement is not required when the creation of defendable space is in conjunction with an application under the Bushfire Management Overlay.	Not applicable.
8.	If the application is under Clause 52.16, a statement that explains how the proposal responds to the Native Vegetation Precinct Plan considerations (at decision guideline 8).	Not applicable.
9.	An offset statement providing evidence that an offset that meets the offset requirements for the native vegetation to be removed has been identified and can be secured in accordance with the Guidelines.	See Section 6.7.





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## 2. Introduction

Nature Advisory Pty Ltd undertook a native vegetation assessment of an approximately 20.73-hectare area of private land at 910 Princes Hwy, Bairnsdale. A solar farm is proposed to be constructed on the site.

This investigation was commissioned to provide information on the extent and condition of native vegetation in the study area according to Victoria's *Guidelines for the removal, destruction or lopping of native vegetation* (DELWP 2017a), herein referred to as 'the Guidelines'. Potential impacts on flora and fauna matters listed under the Victorian *Flora and Fauna Guarantee Act* 1988 and the Commonwealth *Environment Protection and Biodiversity Conservation Act* 1999 have been considered as part of a review of existing information and field investigation; no relevant implications were identified under either Act.

Specifically, the scope of the investigation included the following:

- Existing information on the flora and native vegetation of the study area and surrounds was reviewed and included:
  - DEECA's Native Vegetation Information Management system (NVIM); and
  - DEECA's NatureKit.
- A site survey was conducted and involved the following:
  - Characterisation and mapping of native vegetation on the site, as defined in Victoria's
     Guidelines for the removal, destruction or lopping of native vegetation (the 'Guidelines');
  - Assessment of native vegetation in accordance with the Guidelines, including habitat hectare assessment and/or scattered tree assessment; and
  - Compilation of a flora species list for the site.

This investigation was undertaken by a team from Nature Advisory comprising Merinda Day-Smith (Botanist), Emma Wagner (GIS Analyst), Nhung Thi Hong Nguyen (Senior GIS Analyst), Chris Armstrong (Senior Botanist & Project Manager) and Dr Kate Callister (Senior Ecologist & Project Manager).





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## 3. Definitions, methods, and assessment process

#### 3.1. Definitions

#### 3.1.1. Study area

The study area for this investigation is defined as private land at the address of 910 Princes Hwy, Bairnsdale and the adjacent roadside reserves of Princes Hwy and Power Station Rd.

#### 3.1.2. Native vegetation

Native vegetation is currently defined in Clause 73.01 of all Victorian planning schemes as 'plants that are indigenous to Victoria, including trees, shrubs, herbs and grasses'. The Guidelines (DELWP 2017a) further classify native vegetation as belonging to two categories:

- Patch; or
- Scattered tree.

The definitions of these categories are provided below, along with the prescribed DEECA methods of assessment. Further details on definitions of patches and scattered trees are provided in Appendix 1.

#### Patch

A patch of native vegetation is defined as one of the following:

- An area of vegetation where at least 25 per cent of the total perennial understorey plant cover is native; or
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- Any area with three of more thatine sanopy processive harding drip line of at least one other itree in side or and manifestation.
- part of a planning process under the

  Any mapped wetland in high the first wetland system (NETECA 2022b).

  Part of a planning process under the available in DEECA's Native Vegetation Information Management (NYIM) system (PEECA 2022b).

Patch condition is assessed using the nabitat nectare method (Parkes et al. 2003; DSE 2004b) whereby components of the patch (e.g. tree canopy, understorey and ground cover) are assessed against an Ecological Vegetation Class (EVC) benchmark. The score effectively measures the percentage resemblance of the vegetation to the original condition.

The NVIM system (DEECA 2022b) provides modelled condition scores for native vegetation to be used in certain circumstances.

#### Scattered tree

A scattered tree is defined as:

A native canopy tree that does not form part of a patch.

Scattered trees are counted and mapped, the species identified and the circumference at 1.3 m above the ground is recorded.



<sup>&</sup>lt;sup>1</sup> A native canopy tree is a mature tree (i.e. able to flower) that is taller than three metres and normally found in the upper layer of the relevant vegetation type.

<sup>&</sup>lt;sup>2</sup> The drip line is the outermost boundary of a tree canopy (leaves and/or branches) where the water drips onto the ground.



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#### Tree Protection Zone

A Tree Protection Zone (TPZ) is defined as the area around the base of a tree, with a radius of 12 times that tree's diameter at breast height (DBH). The maximum TPZ is 15 metres, while a minimum of 2 metres applies. Dead trees are treated in the same manner.

## 3.2. Field methods

The field assessment was conducted on 6<sup>th</sup> February 2023. During this assessment, the study area was surveyed on foot.

Sites in the study area found to support native vegetation or with potential to support listed matters were mapped through a combination of aerial photograph interpretation and ground truthing using ArcGIS Collector (accurate to approximately 5 metres).

Whilst this assessment was not designed to provide an exhaustive inventory of flora species in the study area, all efforts were made to schedule the site assessment at a time of year when most of the native vegetation life forms are likely to be present. The summer timing of the survey and condition of vegetation was considered suitable to ascertain the extent and condition of native vegetation.

#### 3.3. Planning permit and application requirements

State planning provisions are established under the *Victorian Planning and Environment Act* 1987. Clause 52.17 of all Victorian Planning Schemes states the following:

A permit is required to remove, destroy or lop native vegetation, including dead native vegetation.

A permit is not required if the quality in a permit is not required if the quality in a permit is not required if the quality in a permit is not required if the quality in a permit is not required if the quality in a permit is not required if the quality in a permit is not required if the quality in a permit is not required if the quality in a permit is not required if the quality in a permit is not required if the quality in a permit is not required if the quality in a permit is not required if the quality in a permit is not required if the quality in a permit is not required if the quality in a permit is not required in a permit is not

- If an exemption in Cl. 52.17-10 pecifical pystoles that that a permit is not required.
- If a native vegetation prequact planplameisponding southle lather is incorporated into the planning scheme and listed in the scheme and listed in the scheme must not be used for any
- If the native vegetation is specified in anschedule to Clip 2,17.

## 3.3.1. Application requirements

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Any application to remove, destroy or lop native vegetation must comply with the application requirements specified in the Guidelines (DELWP 2017a).

When assessing an application, Responsible Authorities are also obligated to refer to Clause 12.01-2S *Native vegetation management* in the Planning Scheme that, in addition to the Guidelines, refers to the following:

- Assessor's handbook applications to remove, destroy or lop native vegetation (DELWP 2018a).
- Statewide biodiversity information maintained by DEECA.

The application of the Guidelines (DELWP 2017a) is explained further in Appendix 1.

## 3.3.2. Referral to DEECA

Clause 66.02-2 of the Planning Scheme determines the role of DEECA in the assessment of native vegetation removal permit applications. If an application is referred, DEECA may make certain recommendations to the responsible authority in relation to the permit application.

Any application to remove, destroy or lop native vegetation must be referred to DEECA if any of the following apply:

• The impacts to native vegetation are in the Detailed assessment pathway;





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- A property vegetation plan applies to the site; or
- The native vegetation is on Crown land that is occupied or managed by the responsible authority.

# ADVERTISED PLAN



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## 4. Existing information and results

## 4.1. Site description, zoning and overlays

The study area for this investigation (Figure 1) constituted approximately 21.4 hectares of private and public land located at Bairnsdale, approximately 232km east of Melbourne and bordered by the Princes Hwy to the south, Power Station Rd to the west, a VicTrack rail reserve to the north and private pasture to the east.

The study area supported alluvial sediments comprising sand loam in a gently undulating landscape. The study area contained a grazing pasture with a cattle yard in the east and two small, largely empty dams in the centre-south section with drainage running between them. The roadside reserves also had drainage trenches dug along their length.

The study area and surrounds has a history of grazing and agriculture since European settlement. Land use has remained largely unchanged with the exception of the expansion of the Bairnsdale township to the east and a power station to the west.

Vegetation in the study area was dominated by non-native pasture grasses in the grazing paddock including African Love-grass, Brown-top Bent and Cocksfoot. Some broadleaf weeds were present including Spear Grass, Hairy Hawkbit and Ribwort. The western edge of the paddock supported planted non-indigenous native and non-native species including Giant Honey-myrtle, Blue Gum, Radiata Pine and Sugar Gum. One large remnant Gippsland Red-gum was located near the eastern fence line. Native vegetation in the grazing paddock consisted of large clusters of rushes growing in wetter depressions, aquatic pondweed in the dams rankd species we continued species will be species and Kangaroo Grass on the northern and eastern fringes of the paddock purpose of enabling

The Princes Hwy roadside comprised in prised in year in the princes Hwy roadside comprised in year in the princes Hwy roadside comprised in year in the princes Hwy roadside comprised in year in the princes in cluding Paspalum, Toowoomba Canary Grass and Drain flat sedge as well as equipose the prince of the comprised in the prince of th

The study area lies within the Gippsland Plain bioregion and falls within the East Gippsland catchment and East Gippsland local government area.

## 4.1.1. Zoning

The study area is currently zoned Farming Zone (FZ1) in the East Gippsland Planning Scheme.

The purpose of this zoning is to provide for the use of land for agriculture and to ensure that non-agricultural uses, including dwellings, do not adversely affect the use of land for agriculture. Also to encourage use and development of land based on comprehensive and sustainable land management practices and infrastructure provision.

The study area is located in a bushfire prone area.

## 4.1.2. Overlays

The following planning overlays are applicable to the study area:

 Design and Development Overlay – Schedule 7 (DDO7) – The purpose of this overlay is to ensure development in the Highway corridor in non-urban areas is managed to minimise adverse effects on





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the safe and efficient flow of traffic along the highways. This may relate to the current investigation because the decision guidelines assess the potential impact of the use or development on significant vegetation in the highway corridor.

- Vegetation Protection Overlay Schedule 1 (VPO1) The purpose of this overlay is to ensure that development of access to private land, and road maintenance and construction activities occur so as:
  - To conserve areas of vegetation with high conservation value by minimising the extent of vegetation loss.
  - To conserve and enhance fauna habitat and habitat corridors by minimising the extent of vegetation loss and encouraging regeneration of indigenous species.
  - To preserve existing trees and other vegetation where it contributes to high landscape and aesthetic values.

Implications of the proposal under these overlays are provided in Section 0.

### 4.2. Native vegetation

Pre-1750 (pre-European settlement) vegetation mapping administered by DEECA was reviewed to determine the type of native vegetation likely to occur in the study area and surrounds. Information on Ecological Vegetation Classes (EVCs) was obtained from published EVC benchmarks. These sources included:

- Relevant EVC benchmarks for the Gippsland Plain bioregion (DSE 2004a);
- NatureKit (DEECA 2023a). for the sole purpose of enabling

its consideration and review as part of a planning process under the

4.2.1. Species recorded

During the field assessment 47 plant species were recorded, of wrich 20 (42%) were indigenous and 27 (58%) introduced or non-indigenous in origin. A full list of flora species observed is provided in Appendix 4. Planted vegetation within the study area has not begin included in the species list.

#### 4.2.2. Patches of native vegetation

Pre-European EVC mapping (DEECA 2023a) indicated that the study area and surrounds would have supported Plains Grassy Woodland/Gilgai Wetland Mosaic (EVC 259), and Plains Grassy Woodland (EVC 55) prior to European settlement based on modelling of factors including rainfall, aspect, soils and remaining vegetation.

Evidence on site, including floristic composition and soil characteristics suggested that Plains Grassy Woodland (EVC 55), was present in the form of highly degraded, derived grassland scattered across the grazing paddock and Power Station Road reserve (Figure 1). A description of this EVC is provided within the EVC benchmarks in



<sup>&</sup>lt;sup>3</sup> A bioregion is defined as "a geographic region that captures the patterns of ecological characteristics in the landscape, providing a natural framework for recognising and responding to biodiversity values". In general bioregions reflect underlying environmental features of the landscape (DNRE 1997).



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## Appendix 6.

Six patches (herein referred as habitat zones) comprising the abovementioned EVC, were identified in the study area (Table 1). This totalled an area of 0.647 hectares of native vegetation in patches and included no large trees.

Table 1: Description of habitat zones in the study area

Habitat Zone	EVC	Description
		These habitat zones comprised concentrated areas of Rush ( <i>Juncus sp.</i> ) which represents now highly degraded Plains Grassy Woodland (EVC 55) within the grazing paddock.
		No trees or shrubs were present.
A, B, C	Plains Grassy Woodland (EVC 55	Weed cover was high (50-70%), occupying all inter-tussock spaces and comprised largely of African Love-grass, Brown-top Bent and Paspalum. Introduced broadleaf weeds Spear Thistle and Hairy Hawkbit were also present.
	woodiand (EVC 55)	HZs B and C also incorporated small dams which were largely dry at the time of the survey. These dams supported some other native aquatic and semi-aquatic plants such as Pondweed, Spike Sedge and Common Water Ribbons.
	1	This Notice in contracted across abainstice grazing paddock, however, the afgratice of the constitute a patch under other designation of a planning process under the
		Planage gabith mies no emprised 1963s of native vegetation growing along The help drainagent restrono to Powed Stationy Road that represented degraded Plains Gress help of ENCISTINY  No large trees were present in the patches.
	_	All HZs were dominated by native grasses: Spear Grass, Wallaby Grass and Kangaroo grass. Weed cover varied across HZs and was dominated by Toowoomba Canary-grass, Cocksfoot, Brown-top Bent and Paspalum.
D, E, F	Plains Grassy Woodland (EVC 55	For HZs D and F weed cover was moderate to low with inter-tussock spaces revealing bare ground and bryophytes.
		Habitat zone E supported two small Burgan shrubs as well as a few small immature Gippsland Red-gum trees. Weed cover was higher in HZ E and generally supported higher standing biomass due to the dominance of Kangaroo Grass. Within drainage trenches some native herbs were present including Branched Goodenia, Kidney Weed, Small St John's Wort and Cudweed. Bryophytes were also present.
		Litter cover was moderate comprising material from nearby planted Eucalypts.

The Vegetation Quality Assessment (VQA) results for these habitat zones are provided in Table 2. More detailed habitat scoring results are presented in Appendix 2. Details of large trees in patches are provided in Appendix 3.





Table 2: Summary of Vegetation Quality Assessment results

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Habitat Zone	EVC	Area (ha)	Condition score (out of 100)	No. of large trees in HZ
А	Plains Grassy Woodland (EVC 55)	0.173	11	0
В	Plains Grassy Woodland (EVC 55)	0.135	11	0
С	Plains Grassy Woodland (EVC 55)	0.210	15	0
D	Plains Grassy Woodland (EVC 55)	0.041	19	0
E	Plains Grassy Woodland (EVC 55)	0.083	17	0
F	Plains Grassy Woodland (EVC 55)	0.004	16	0
	Total	0.647		0

#### 4.2.3. Scattered trees

Scattered trees recorded in the study area would have once comprised the canopy component of Plain Grassy Woodland (EVC 55).

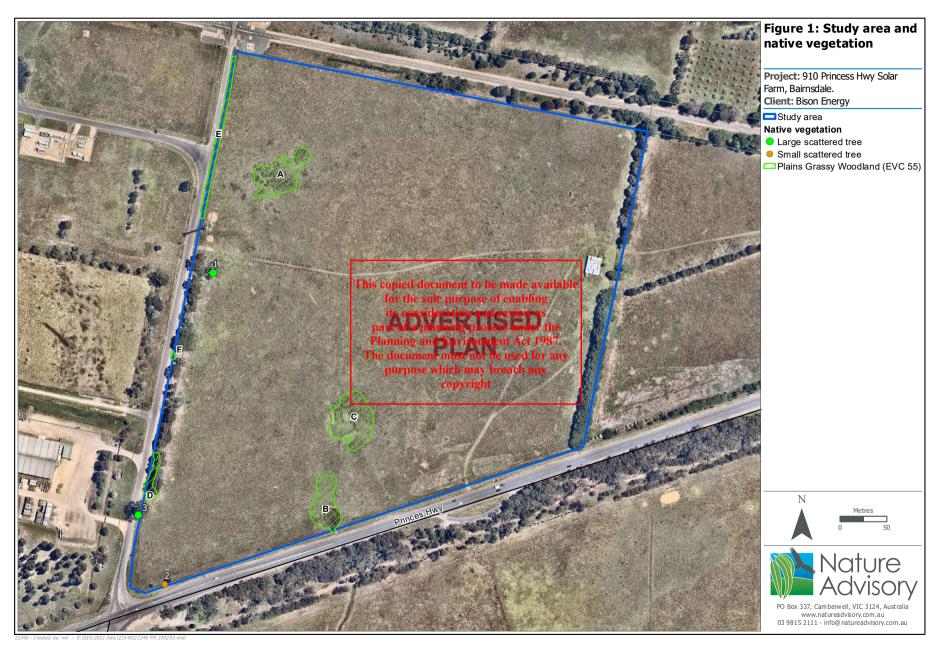
Four scattered trees occurred in the study area (Figure 1), including the following:

- Two large scattered trees (≥ 80-centimetre DBH); and
- Two small scattered trees (< 80-centimetre DBH).</li>

Details of all scattered trees recorded are listed in Appendix 3.







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## 5. Assessment of impacts

## 5.1. Proposed development

The current proposal will involve the construction of a solar farm with associated infrastructure including access tracks, battery storage facility and power pipelines.

To determine the extent of impacts to native vegetation, the proposed design plan was overlaid with the native vegetation mapped as part of this investigation. Based on this plan, native vegetation impacted by the following was considered removed:

- Direct removal:
  - Native vegetation within all proposed building envelopes including removed vegetation to accommodate roads and pipelines.
- Consequential removal:
  - Native vegetation within 10 metres of all proposed building envelopes.
  - Native vegetation required to be removed for the creation of defendable space.
  - Trees with the more than 10% of their TPZ encroached.

#### 5.2. Proposed native vegetation removal

The current proposal footprint will result in the loss of a total extent of 0.383 hectares of native vegetation as represented in Figure 2 and documented in the Native Vegetation Removal (NVR) report provided by DEECA (Appendix 7).

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This comprised the following:

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0.383 hectares of native well generation and plant the model generation and part has been five the second secon

The native vegetation to be removed is not in an area mapped as an endangered EVC.

We understand that that no native vegetation has been approved for removal on the property within the last five years.

Photographs of native vegetation proposed for removal are provided in Appendix 6Appendix 5.

## 5.3. Design recommendations

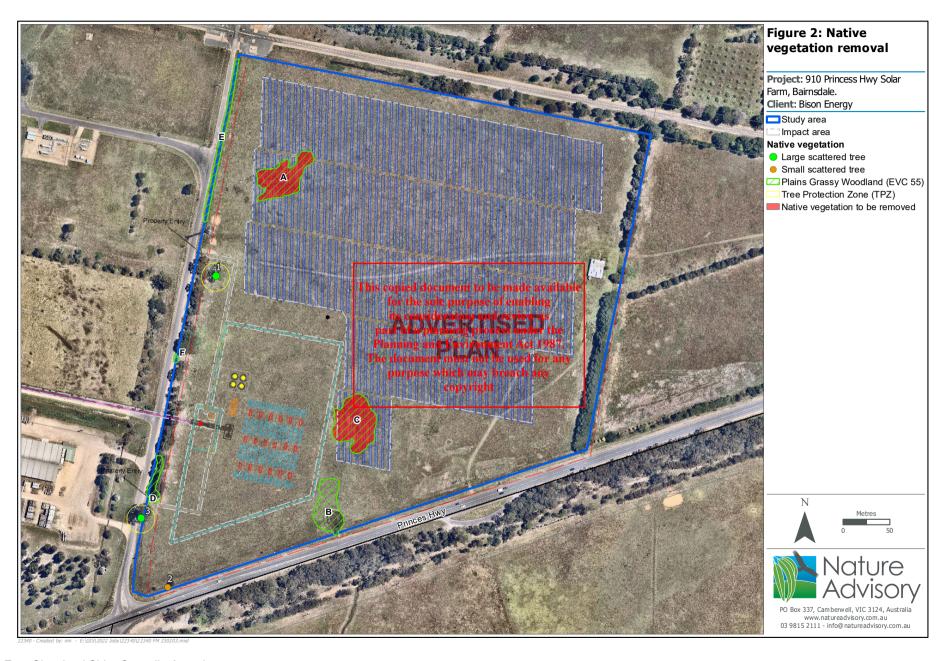
The following design recommendations are provided to avoid/minimise impacts on native vegetation, and flora and fauna habitats:

- Two large scattered trees were recorded within the study area. The initial battery layout impacted one of these trees. Updates to the layout have enabled retention of this tree.
- Native vegetation along Power Station Road is of higher quality and impacts should be avoided. The disjunct nature of the patches makes it possible to avoid entirely if current driveways are used. In addition to this, efforts should be made to limit the spread of weeds in this area.

Further mitigation recommendations to mitigate impacts to native vegetation during construction are provided in Appendix 9.







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## 6. Implications under legislation and policy

## 6.1. Clause 12.01 of the of the Planning Scheme

The proposal must satisfy the principles underpinning Cl. 12.01 which aim to protect and enhance Victoria's biodiversity. The principles involve avoiding habitat fragmentation, creating wildlife corridors, conserving biodiversity, and protecting threatened species. The current condition of the property is highly degraded and fragmented leaving little opportunity to implement these principles. However, the development plan retains the highest ecological values of the site by the protection of the two large trees and roadside native vegetation. These trees will continue to provide habitat for common bird species and potentially arboreal mammals. The only vegetation to be removed is highly degraded and of little ecological value

#### 6.2. Clause 52.17 of the Planning Scheme

A permit for the proposed removal of native vegetation is required under Cl. 52.17 of the State Planning Provisions.

## 6.2.1. Exemptions

Exemptions listed in Cl. 52.17-7 relevant to the study area are:

- Planted vegetation: Native vegetation that is to be removed, destroyed or lopped that was either
  planted or grown as a result of direct seeding. This exemption does not apply to native vegetation
  planted or managed with public funding for the purpose of land protection or enhancing
  biodiversity.

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- Regrowth: Native vegetation of the solopher of
  - Less than 10 years old; her document must not be used for any purpose which may breach any
  - Austral Bracken (Pteridium esculentար)yoight
  - Within the boundary of a timber production plantation, as indicated on a Plantation
     Development Notice or other documented record and has established after the plantation; or
  - Less than ten years old at the time of a property vegetation plan being signed by the Secretary to DEECA (as constituted under Part 2 of the Conservation, Forests and Lands Act 1987) and is shown on that plan as being 'certified regrowth'; and on land that is to be used or maintained for cultivation or pasture during the term of that plan.

This exemption does not apply to land where native vegetation has been destroyed or otherwise damaged as a result of flood, fire or other natural disaster.

The clearing along both sides of the fence when combined must not exceed 4 metres in width, except where land has already been cleared 4 metres or more along one side of the fence, then up to 1 metre can be cleared along the other side of the fence.

## 6.3. Avoid and minimise statement

In accordance with the Guidelines, all applications to remove native vegetation must provide an avoid and minimise statement that describes any efforts undertaken to avoid the removal of, and minimise the impacts to biodiversity and other values of native vegetation, and how these efforts focused on areas of native vegetation that have the highest value. Efforts to avoid and minimise impacts to native vegetation in the current application are presented as follows:





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- Strategic level planning The Vegetation Protection Overlay partially covering the study area is
  designed to protect significant vegetation corridors at a landscape level. The design plan is design
  to have no impact on vegetation covered by this overlay.
- Site level planning The proposed development has been designed to avoid and minimise
  impacts to native vegetation by avoiding any impact on higher quality vegetation. Additionally, the
  design plan has been adjusted for the retention of all large trees and higher quality native
  vegetation.

## 6.4. Modelled species important habitat

The current proposal footprint will not have a significant impact on any habitat for any rare or threatened species as determined in Appendix 7.

#### 6.5. Assessment pathway

The assessment pathway is determined by the location category and extent of native vegetation as detailed for the study area as follows:

- Location Category: Location 1
- Extent of native vegetation: A total of 0.383 hectares of native vegetation (including no large trees).

Based on the extent of native vegetation removal being <0.5 hectares, not including any large trees, and being in Location 1, the Guidelines stipulate that the proposal is to be assessed under the **Basic** assessment pathway, as determined by the following matrix:

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Table 3: Assessment pathway matrix for the sole purpose of enabling

part of a plan	ration and review as ning process under th	ng process under the cation Category		
Extent of native vegetat <mark>e anning and E</mark> The document m	Environment Act 198 must noPbetigsed for a	ny Location 2	Location 3	
	nich may breach any copyright <sub>Basic</sub>	Intermediate	Detailed	
< 0.5 hectares and including one or more large trees	Intermediate	Intermediate	Detailed	
≥ 0.5 hectares	Detailed	Detailed	Detailed	

This proposal would not trigger a referral to DEECA based on the above criteria.

## 6.6. Offset requirements

Offsets required to compensate for the proposed removal of native vegetation from the study area are:

- 0.383 general habitat units, with following offset attribute requirements:
  - A minimum strategic biodiversity value (SBV) of 0.364
  - Located within the East Gippsland CMA boundary or the East Gippsland Shire Council.

Under the Guidelines all offsets must be secured prior to the removal of native vegetation.

#### 6.7. Offset statement

The offset target for the current proposal will be achieved via a third-party offset.





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An online search of the *Native Vegetation Credit Register* (DEECA 2023c) has shown that the required offset is currently available for purchase from a native vegetation credit owner.

Evidence that the required offset is available is provided in Appendix 8. The required offset would be secured following approval of the application to remove native vegetation.

#### 6.8. Zoning

The design plan accommodates the current zoning (FZ1) of the East Gippsland Planning Scheme as the proposed use will not affect surrounding agricultural land use or vegetation.

## 6.9. Overlays

Design and Development Overlay – Schedule 7 (DDO7) – The design plan adheres to the overlay by applying the appropriate setbacks from significant surrounding features as well as avoiding any impact physically or visually to the vegetation along the Princes Hwy corridor.

Vegetation Protection Overlay – Schedule 1 (VPO1) – The design plan adheres to the overlay by avoiding any impact on significant vegetation and minimising impact on native vegetation covered by the overlay.

#### 6.10. CaLP Act

The Catchment and Land Protection Act 1994 (CaLP Act) requires that landowners (or a third party to whom responsibilities have been legally transferred) must eradicate regionally prohibited weeds and prevent the growth and spread of regionally controlled weeds.

Property owners who do not eradicate regionally prohibited weeds or prevent the growth and spread of regionally controlled weeds for which they are responsible, may be issued with a Land Management Notice or Directions Notice that requires specific control work to be undertaken.

In accordance with the *Catchment and Land Protection Act* 1994, the noxious weed species listed below, that were recorded in the study area, must be controlled.

- African Love-grass (C)
- Spear Thistle (C)
- Blackberry (C)
- St John's Wort (C)

Precision control methods that minimise off-target kills (e.g. spot spraying) should be used in environmentally sensitive areas (e.g. within or near native vegetation, waterways, etc.).





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# 7. References

- DAWE 2022a, *EPBC Act Protected Matters Search Tool*, Department of the Environment and Energy, Canberra, viewed 10 February 2023, <a href="https://www.environment.gov.au/epbc/pmst/index.html">https://www.environment.gov.au/epbc/pmst/index.html</a>.
- DAWE 2022b, Species Profile and Threats Database, Department of Agriculture, Water and the Environment, Canberra, https://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl.
- DELWP 2017a, Guidelines for the removal, destruction or lopping of native vegetation, Department of Environment, Land, Water and Planning, East Melbourne.
- DELWP 2017b, Flora and Fauna Guarantee Act 1988 Protected Flora List, June 2017, Department of Environment, Land, Water and Planning, East Melbourne.
- DELWP 2018, Assessor's Handbook Applications to remove, destroy or lop native vegetation (Version 1.1, dated October 2018), Department of Environment, Land, Water and Planning, East Melbourne.
- DELWP 2021, Flora and Fauna Guarantee Act 1988 Threatened List, October 2021, Department of Environment, Land, Water and Planning, East Melbourne.
- DEECA 2023a, *NatureKit*, Department of Environment, Land, Water and Planning, East Melbourne, viewed 10 February 2023, <a href="https://www.environment.vic.gov.au/biodiversity/naturekit">https://www.environment.vic.gov.au/biodiversity/naturekit</a>.
- DELWP 2023b, Native Vegetation Information Management, Department of Environment, Land, Water and Planning, https://www.environment.east Melbourne, viewed 10 February 2023, https://www.environment.east Melbourne, viewed 2003, https://www.environment.east Melbourne, viewe
- DEECA 2023c, Online Search of the Avative Vagatation Credit Registere Department of Environment, Land, Water and Planning, East Melbourge di Ewed 40 February 2023, https://nvcr.delwp.vic.gov.au.
- DELWP 2022d, Browse Planning Schemes, Department of Environment, Land, Water and Planning, East Melbourne, viewed 10 February 2023, copyright
- Department of Natural Resources and Environment (DNRE) 1997, Victoria's Biodiversity Directions in Management, Department of Environment, Land, Water and Planning, East Melbourne.
- DEPI 2013, *Permitted clearing of native vegetation*: Biodiversity assessment guidelines (dated September 2013), Department of Environment, Land, Water and Planning, East Melbourne.
- Department of Sustainability and Environment (DSE) 2004a, Ecological Vegetation Class (EVC) Benchmarks by Bioregion, Department of Environment, Land, Water and Planning, East Melbourne.
- Department of Sustainability and Environment (DSE) 2004b, *Native Vegetation: sustaining a living landscape, Vegetation Quality Assessment Manual guidelines for applying the Habitat Hectare scoring method (Version 1.3)*, Department of Environment, Land, Water and Planning, East Melbourne.
- Department of Sustainability and Environment (DSE) 2006, Ministerial Guidelines for Assessment of Environmental Effects under the Environmental Effects Act 1978, Department of Environment, Land, Water and Planning, East Melbourne.
- Department of Sustainability and Environment (DSE) 2009, *Advisory List of Threatened Invertebrate Fauna*, Department of Environment, Land, Water and Planning, East Melbourne.





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- Department of Sustainability and Environment (DSE) 2013, *Advisory List of Threatened Vertebrate Fauna in Victoria*, Department of Environment, Land, Water and Planning, East Melbourne.
- Parkes D, Newell G & Cheal D 2003, Assessing the Quality of Native Vegetation: The 'habitat hectares' approach, *Ecological Management and Restoration* 4:29 38.
- Scientific Advisory Committee (SAC) 2015, Flora and Fauna Guarantee Act 1988 Threatened List: Characteristics of Threatened Communities, Department of Environment, Land, Water and Planning, East Melbourne.

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Appendix 1: Details of the assessment process in accordance with the Guidelines for the removal, destruction or lopping of native vegetation (DELWP 2017a)

### Purpose and objective

Policies and strategies relating to the protection and management of native vegetation in Victoria are defined in the State Planning Policy Framework (SPPF). The objective identified in Clause 12.01 of all Victorian Planning Schemes is 'To ensure that there is no net loss to biodiversity as a result of the removal, destruction or lopping of native vegetation'.

This is to be achieved through the following three-step approach, as described in the Guidelines:

- 1. Avoid the removal, destruction or lopping of native vegetation.
- Minimise impacts from the removal, destruction or lopping of native vegetation that cannot be avoided.
- 3. Provide an offset to compensate for the biodiversity impact from the removal, destruction or lopping of native vegetation.

**Note:** While a planning permit may still be required, if native vegetation does not meet the definition of either a patch or a scattered tree, an offset under the Guidelines is not required.

#### Assessment pathways

The first step in determining the type of assessment required for any site in Victoria is to determine the assessment pathway for the proposed native vegetation removal. The three possible assessment pathways for applications to remove native vegetation in Victoria are the following:

- Basic;
- Intermediate; or
- Detailed.

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This assessment pathway is determined by two rustops: be used for any purpose which may breach any

- Location Category, as determined using the states 'Location Map. The location category indicates the potential risk to bodiversity from removing a small amount of native vegetation. The three location categories are defined as follows:
  - Location 1 shown in light blue-green on the Location Map; occurring over most of Victoria.
  - Location 2 shown in dark blue-green on the Location Map; includes areas mapped as endangered EVCs and/or sensitive wetlands and coastal areas.
  - Location 3 shown in brown on the Location Map; includes areas where the removal of less than 0.5 hectares of native vegetation could have a significant impact on habitat for rare and threatened species.
- Extent of native vegetation The extent of any patches and scattered trees proposed to be removed (and the extent of any past native vegetation removal), with consideration as to whether the proposed removal includes any large trees. Extent of native vegetation is determined as follows:
  - Patch the area of the patch in hectares.
  - Scattered Tree the extent of a scattered tree is dependent on whether the scattered tree is small or large. A tree is considered large if the diameter at breast height (DBH) is equal to or greater than the large tree benchmark DBH for the relevant bioregional EVC. Any scattered





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tree that is not a large tree is a small scattered tree. The extent of large and small scattered trees is determined as follows:

- Large scattered tree the area of a circle with a 15 metre radius, with the trunk of the tree at the centre.
- Small scattered tree the area of a circle with a ten metre radius, with the trunk of the tree at the centre.

The assessment pathway for assessing an application to remove native vegetation is subsequently determined as shown in the following matrix table:

Extent of native vegetation	Location Category						
Extent of flative vegetation	Location 1	Location 2	Location 3				
< 0.5 hectares and not including any large trees	Basic	Intermediate	Detailed				
< 0.5 hectares and including one or more large trees	Intermediate	Intermediate	Detailed				
≥ 0.5 hectares	Detailed	Detailed	Detailed				

Note: If the native vegetation to be removed includes more than one location category, the higher location category is used to determine the assessment pathway. This copied document to be made available determine the assessment pathway.

for the sole purpose of enabling its consideration and review as Landscape scale information - stretegic bloodyers by Value under the Planning and Environment Act 1987.

The SBV is a measure of a localtion to importance to ovilotoria foliodiversity, relative to other locations across the state. This is represented uses scorbiobetweel one hard and determined from the SBV map, copyright available from NVIM (DELWP 2022b).

Landscape scale information - habitat for rare or threatened species

Habitat importance for rare or threatened species is a measure of the importance of a location in the landscape as habitat for a particular rare or threatened species, in relation to other habitat available for that species. This is represented as a score between 0 and 1 and determined from the habitat importance maps administered by DEECA.

This includes two groups of habitat:

- Highly localised habitats Limited in area and considered to be equally important, therefore having the same habitat importance score.
- Dispersed habitats Less limited in area and based on habitat distribution models.

Habitat for rare or threatened species is used to determine the type of offset required in the detailed assessment pathway.

#### Biodiversity value

A combination of site-based and landscape scale information is used to calculate the biodiversity value of native vegetation to be removed. Biodiversity value is represented by a general or species habitat score as follows





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The extent and condition of native vegetation to be removed are combined to determine the habitat hectares as follows:

#### Habitat hectares = extent of native vegetation × condition score

The habitat hectare score is combined with a landscape factor to obtain an overall measure of biodiversity value. Two landscape factors exist as follows:

- General landscape factor determined using an adjusted strategic biodiversity score, and relevant when no habitat importance scores are applicable;
- Species landscape factor determined using an adjusted habitat importance score for each rare
  or threatened species habitat mapped at a site in the Habitat importance map.

These factors are subsequently used as follows to determine the biodiversity value of a site:

General habitat score = habitat hectares × general landscape factor

#### Species habitat score - habitat hectares × species landscape factor

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### Offset requirements

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A native vegetation offset is required for the lapproyed decreased the rest one of two types and each type in the lapproject and the lapproject of the lappr

The document must not be used for any habitat for rare or threatepped appecies (i.e. the proportional impact is below the species offset threshold). In this case a multiplier of 1.5 applies to determine the general offset amount.

#### General offset (amount of general habitat units) = general habitat score × 1.5

A species offset is required when the removal of native vegetation has a significant impact on habitat for a rare or threatened species (i.e. the proportional impact is above the species offset threshold). In this case a multiplier of 2 applies to determine the species offset amount.

Species offset (amount of species habitat units) = Species habitat score × 2

**Note:** If native vegetation does not meet the definition of either a patch or scattered tree an offset is not required.

## Offset attributes

Offsets must meet the following attribute requirements, as relevant:

- General offsets
  - Offset amount general offset = general habitat score × 1.5





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- Strategic biodiversity value the offset has at least 80% of the SBV of the native vegetation removed
- Vicinity the offset is in the same CMA boundary or municipal district as the native vegetation removed
- Habitat for rare and threatened species N/A
- Large trees the offset includes the protection of at least one large tree for every large tree to be removed
- Species offsets
  - Offset amount species offset = species habitat score × 2
  - Strategic biodiversity value: N/A
  - Vicinity: N/A
  - Habitat for rare and threatened species the offset comprises mapped habitat according to the habitat importance map for the relevant species
  - Large trees the offset includes the protection of at least one large tree for every large tree to be removed





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Appendix 2: Detailed Vegetation Quality Assessment results

Habit	at Zone	Α	В	С	D	Е	F	
Biore	gion		GipP	GipP	GipP	GipP	GipP	GipP
EVC N	lumber		55	55	55	55	55	55
Total	area of Habitat Zone (ha)		0.173	0.135	0.210	0.041	0.083	0.004
	Large Old Trees	/10	0	0	0	0	0	0
	Tree Canopy Cover	/5	0	0	0	0	0	0
_	Lack of Weeds	/15	2	2	6	9	2	6
Site Condition	Understorey	/25	5	5	5	5	10	5
te Co	Recruitment	/10	0	0	0	0	1	0
ळ	Organic Matter	/5	2	2	2	3	2	3
	Logs	/5	0	0	0	0	0	0
	Site Cond	ition subtotal	9	9	13	17	15	14
8 7	Patch Size	/10	1	1	1	1	1	1
Landscape Context	Neighbourhood	/10	0	0	0	0	0	0
Distance to Core /5		/5	1	1	1	1	1	1
Total	Condition Score	/100	11	11	15	19	17	16

<sup>\*</sup> Modified approach to habitat scoring - refer to Table 14 of DELWP's Vegetation Quality Assessment Manual (DSE, 2004).

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910 Princes Hwy, Bairnsdale - Native Vegetation Assessment

## Appendix 3: Large trees in patches and scattered trees recorded in the study area

Tree No.	Common Name	Scientific Name	DBH (cm)	Circumference (cm)	Habitat Category	Radius of TPZ (m)	Remove/Retain	Notes
1	Gippsland Red-gum	Eucalyptus tereticornis subsp. mediana	138	434	Large Scattered Tree	15	Retained	Habitat hollows
3	Gippsland Red-gum	Eucalyptus tereticornis subsp. mediana	137	430	Large Scattered Tree	15	Retained	Habitat hollows

**Notes:** DBH = Diameter at breast height (130 cm from the ground); **TPZ =** Tree Protection Zone.





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# Appendix 4: Flora species recorded in the study area

Origin	Scientific Name	Common Name	FFG	EPBC	CaLP		
	Acacia implexa	Lightwood					
	Acaena echinata	Sheep's Burr					
*	Acetosella vulgaris	Sheep Sorrel					
*	Agrostis capillaris	Brown-top Bent					
*	Aira spp.	Hair Grass					
*	Anthoxanthum odoratum	Sweet Vernal-grass					
*	Asparagus scandens	Asparagus Fern					
	Austrostipa pubinodis	Tall Spear-grass					
	Austrostipa spp.	Spear Grass					
*	Cenchrus clandestinus	Kikuyu					
*	Centaurium erythraea	Common Centaury					
*	Cirsium vulgare	Spear Thistle			С		
	Cycnogeton procerum s.s.	Common Water-ribbons					
*	Cyperus eragrostis	Drain Flat-sedge					
*	Dactylis glomerata	Cocksfoot					
	Dichondra repens	Kidney-weed					
	Eleocharis spp.	Spike Sedge					
*	Eragrostis curvula	African Love-grass			С		
*		nentapheapade available					
	Eucalyptus tereticornis subsp. mediana	purpose of enabling Gippsland Red-gam					
	Euchiton involucratus s.l. part of a plant	and review as hing process curiveedhe					
		InvBranchedt Gaddle 987.					
	Hypericum gramineum The document n	nust maniba usad donotiy					
*	Hypericum perforatum subsp. veronense	ich may breach any St John's Wort			С		
*	Hypochaeris glabra	Smooth Cat's-ear					
*	Hypochaeris radicata	Flatweed					
	Juncus spp.	Rush					
	Kunzea ericoides s.l.	Burgan					
*	Leontodon saxatilis subsp. saxatilis	Hairy Hawkbit					
*	Lolium perenne	Perennial Rye-grass					
	Microlaena stipoides var. stipoides	Weeping Grass					
	Oxalis perennans	Grassland Wood-sorrel					
*	Paspalum dilatatum	Paspalum					
*	Paspalum spp.	Paspalum					
*	Phalaris aquatica	Toowoomba Canary-grass					
*	Plantago lanceolata	Ribwort					
	Potamogeton tricarinatus s.l.	Floating Pondweed					
*	Romulea rosea	Onion Grass					
*	Rubus fruticosus spp. agg.	Blackberry			С		
	Rytidosperma setaceum	Bristly Wallaby-grass					
	Rytidosperma spp.	Wallaby Grass					
	Schoenus apogon	Common Bog-sedge					
*	Sporobolus africanus	Rat-tail Grass					





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Origin	Scientific Name	Common Name	FFG	EPBC	CaLP
	Themeda triandra	Kangaroo Grass			
*	Trifolium dubium	Suckling Clover			
*	Vulpia bromoides	Squirrel-tail Fescue			

Notes: EPBC = Threatened species status under the EPBC Act; FFG-T = Threatened species status under the FFG Act; FFG-P = Listed as protected (P) under the FFG Act; CaLP Act: Declared noxious weeds under the CaLP Act (S = State Prohibited Weeds – any infestations must be reported to DEECA that is responsible for control of these; P = Regionally Prohibited Weeds – landowners must eradicate these; C = Regionally Controlled Weeds – landowners must prevent the growth and spread of these; R = Restricted Weeds – trade in these weeds and propagules, either as plants, seeds or contaminants in other materials is prohibited).





<sup>\* =</sup> introduced to Victoria

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# Appendix 5: Photographs of native vegetation proposed for removal

All photographs were taken on 6th February 2023.



Habitat Zone A- Dominated by rush with high pasides giass covereview as



Habitat Zone B - Dried up dam surrounded by rush and Spike Sedge.





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Habitat Zone C - Dam surrounded by high cover of rush.



Habitat Zone E - Native grasses growing on roadside.





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Habitat Zone E - Kangaroo Grass growing in drainage trench of roadside.



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Large Scattered Tree 1-Gippsland Red-gum growing in grazing paddock inside western fence line.



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Large Scattered Tree 2 - Gippsland Red-gum growing on Power Station Road in south east corner of study area.

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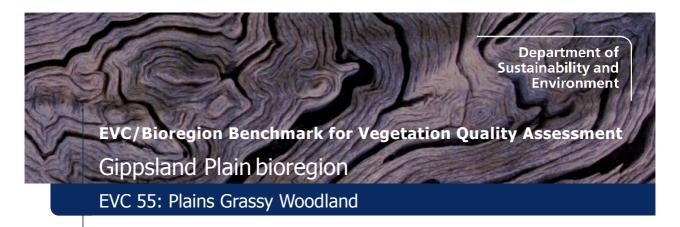
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Appendix 6: EVC benchmarks

Plain Grassy Woodland (EVC 55) - Gippsland Plain

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#### **Description:**

An open, eucalypt woodland to 15 m tall occurring on a number of geologies and soil types. Occupies poorly drained, fertile soils on flat or gently undulating plains at low elevations. The understorey consists of a few sparse shrubs over a species-rich grassy and herbaceous ground layer.

# Large trees:

 Species
 DBH(cm)
 #/ha

 Eucalyptus spp.
 80 cm
 10 / ha

#### **Tree Canopy Cover:**

%coverCharacter SpeciesCommon Name20%Eucalyptus tereticornis ssp. mediana<br/>Eucalyptus camaldulensisGippsland Red-gum<br/>River Red-gum

# **Understorey:**

Life form

Immature Canopy Tree
Understorey Tree or Large Shrub
Medium Shrub
Small Shrub
Prostrate Shrub
Large Herb
Medium Herb
Small or Prostrate Herb
Large Tufted Graminoid

Large Non-tufted Graminoid Medium to Small Tufted Graminoid Medium to Tiny Non-tufted Graminoid Bryophytes/Lichens

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## LF code

MS SS PS LH MH SH LTG LNG

# LF Code Species typical of at least part of EVC range

	Allocasuarina littoralis
T	Acacia mearnsii
T	Acacia melanoxylon
MS	Kunzea ericoides
SS	Pimelea humilis
PS	Bossiaea prostrata
MH	Hypericum gramineum
MH	Oxalis perennans
SH	Dichondra repens
SH	Poranthera microphylla
LTG	Austrostipa rudis
LNG	Gahnia radula
MTG	Themeda triandra
MTG	Carex breviculmis
MTG	Lomandra filiformis
MTG	Schoenus apogon
MNG	Microlaena stipoides var. stipoides

# BL Common Name

MTG

MNG

Black Sheoak Black Wattle Blackwood Burgan Common Rice-flower Creeping Bossiaea Small St John's Wort Grassland Wood-sorrel Kidney-weed Small Poranthera Veined Spear-grass Thatch Saw-sedge Kangaroo Grass Common Grass-sedge Wattle Mat-rush Common Bog-sedge Weeping Grass

# ADVERTISED PLAN



Ecological Vegetation Class bioregion benchmark

# EVC 55: Plains Grassy Woodland - Gippsland Plain bioregion

#### **Recruitment:**

Continuous

#### **Organic Litter:**

10 % cover

### Logs:

10 m/0.1 ha.

#### Weediness:

LF Code	Typical Weed Species	Common Name	Invasive	Impact
LH	Plantago lanceolata	Ribwort	high	low
MH	Hypochoeris radicata	Cat's Ear	high	low
MH	Centaurium erythraea	Common Centaury	high	low
LNG	Holcus lanatus	Yorkshire Fog	high	high
MTG	Anthoxanthum odoratum	Sweet Vernal-grass	high	high
MNG	Romulea rosea	Onion Grass	high	low
MNG	Briza maxima	Large Quaking-grass	high	low
MNG	Briza minor	Lesser Quaking-grass	high	low

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Appendix 7: Native Vegetation Removal (NVR) report

Report No. 22340.01 (1.0)

# ADVERTISED PLAN



# Scenario test – native vegetation removal

This report provides offset requirements for internal testing of different proposals to remove native vegetation. This report DOES NOT support an application to remove, destroy or lop native vegetation under Clause 52.16 or 52.17 of planning schemes in Victoria. A report must be obtained from the Department of Environment, Land, Water and Planning (DELWP).

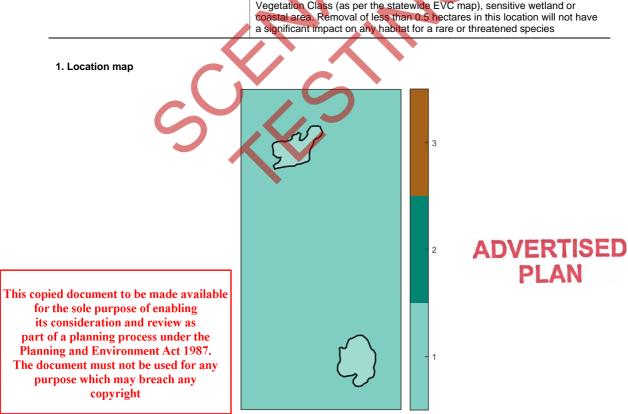
Date of issue: 27/02/2023 Report ID: Scenario Testing

Time of issue: 2:03 pm

Project ID	22340_Bairnsdale_Solar_Removal_230227
------------	---------------------------------------

# Assessment pathway

Assessment pathway	Basic Assessment Pathway
Extent including past and proposed	0.383 ha
Extent of past removal	0.000 ha
Extent of proposed removal	0.383 ha
No. Large trees proposed to be removed	0
Location category of proposed removal	Location 1  The native vegetation is not in an area mapped as an endangered Ecological Vegetation Class (as per the statewide EVC map), sensitive wetland or coastal area. Removal of less than 0.5 hectares in this location will not have a significant impact on any habitat for a rare or threatened species



Page 1

# Scenario test - native vegetation removal

# Offset requirements if a permit is granted

Any approval granted will include a condition to obtain an offset that meets the following requirements:

General offset amount <sup>1</sup>	0.055 general habitat units					
Vicinity	East Gippsland Catchment Management Authority (CMA) or East Gippsland Shire Council					
Minimum strategic biodiversity value score <sup>2</sup>	0.364					
Large trees	0 large trees					

NB: values within tables in this document may not add to the totals shown above due to rounding

Appendix 1 includes information about the native vegetation to be removed

Appendix 2 includes information about the rare or threatened species mapped at the site.

Appendix 3 includes maps showing native vegetation to be removed and extracts of relevant species habitat importance maps



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<sup>1</sup> The general offset amount required is the sum of all general habitat units in Appendix 1.

<sup>2</sup> Minimum strategic biodiversity score is 80 per cent of the weighted average score across habitat zones where a general offset is required

# Scenario test – native vegetation removal

# Next steps

Any proposal to remove native vegetation must meet the application requirements of the Basic Assessment Pathway and it will be assessed under the Basic Assessment Pathway.

This report DOES NOT support an application to remove, destroy or lop native vegetation under Clause 52.16 or 52.17 of planning schemes in Victoria.

If you wish to remove the mapped native vegetation you must submit the related shapefiles to the Department of Environment, Land, Water and Planning (DELWP) for processing, by email to ensymnvrtool.support@delwp.vic.gov.au. DELWP will provide a *Native vegetation removal report* that is required to meet the permit application requirements in accordance with *Guidelines for the removal, destruction or lopping of native vegetation* (Guidelines).



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# Appendix 1: Description of native vegetation to be removed

All zones require a general offset, the general habitat units each zone is calculated by the following equation in accordance with the Guidelines:

General habitat units = extent x condition x general landscape factor x 1.5, where the general landscape factor = 0.5 + (strategic biodiversity value score/2)

The general offset amount required is the sum of all general habitat units per zone.

# Native vegetation to be removed

Information provided by or on behalf of the applicant in a GIS file					Information calculated by EnSym							
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
1-A	Patch	gipp0055	Endangered	0	no	0.110	0.173	0.173	0.460		0.021	General
1-C	Patch	gipp0055	Endangered	0	no	0.150	0.210	0.210	0.450		0.034	General
SCENIA									AD\	/ERTISED PLAN		

# **ADVERTISED** PLAN

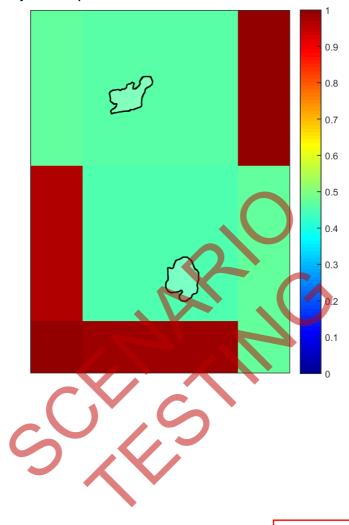
# Appendix 2: Information about impacts to rare or threatened species' habitats on site

This is not applicable in the Basic Assessment Pathway.

SCENARIOTESTING

# Appendix 3 – Images of mapped native vegetation

2. Strategic biodiversity values map



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Report No. 22340.01 (1.0)

Appendix 8: Evidence that native vegetation offset requirement is available

# ADVERTISED PLAN





# Report of available native vegetation credits

This report lists native vegetation credits available to purchase through the Native Vegetation Credit Register.

This report is **not evidence** that an offset has been secured. An offset is only secured when the units have been purchased and allocated to a permit or other approval and an allocated credit extract is provided by the Native Vegetation Credit Register.

Date and time: 28/02/2023 10:20 Report ID: 17895

## What was searched for?

## General offset

General habitat units	Strategic biodiversity value	Large trees	Vicinity (Catchment Management Authority or Municipal district)			
0.55	0.364	0	СМА	East Gippsland		
			or LGA	East Gippsland Shire		

# Details of available native vegetation credits on 28 February 2023 10:20

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These sites meet your requirements for general offsets as

		-		100 00	moracourton una review	•••			
Credit Site ID	GHU	LT	СМА	Plannin	a plawaing process unde g and Environment Act	1987 <sub>mer</sub>	Trader	Fixed price	Broker(s)
BBA-0115	2.987	0	West	The docu Gippsland Durp	ıment must not be used i East Gippsland Shire ose which may breach a	f <mark>or any</mark> Yes ny	Yes	No	Bio Offsets
BBA-2323	14.848	86	East C	Sippsland	East Sinnahad Shire	Yes	Yes	No	Bio Offsets, Ethos, VegLink
BBA-2843	15.103	903	East G	Sippsland	East Gippsland Shire	Yes	Yes	No	VegLink
TFN-C1621	1.387	1	East G	Sippsland	East Gippsland Shire	Yes	Yes	No	TFN
VC_CFL- 3720_01	1.876	244	East G	Sippsland	East Gippsland Shire	Yes	Yes	No	Contact NVOR
VC_CFL- 3760_01	28.660	765	East G	Sippsland	East Gippsland Shire	Yes	Yes	No	VegLink
VC_CFL- 3767_01	24.125	1629	East G	Sippsland	East Gippsland Shire	Yes	Yes	No	Ethos, VegLink

## These sites meet your requirements using alternative arrangements for general offsets.

Credit Site ID	GHU	LT	СМА	LGA	Land	Trader	Fixed	Broker(s)
					owner		price	

There are no sites listed in the Native Vegetation Credit Register that meet your offset requirements when applying the alternative arrangements as listed in section 11.2 of the Guidelines for the removal, destruction or lopping of native vegetation.

# These potential sites are not yet available, land owners may finalise them once a buyer is confirmed.

Credit Site ID	GHU	LT CMA	LGA	Land	Trader	Fixed	Broker(s)
				owner		price	

There are no potential sites listed in the Native Vegetation Credit Register that meet your offset requirements.

LT - Large Trees CMA - Catchment Management Authority

LGA - Municipal District or Local Government Authority



## **Next steps**

## If applying for approval to remove native vegetation

Attach this report to an application to remove native vegetation as evidence that your offset requirement is currently available.

# If you have approval to remove native vegetation

Below are the contact details for all brokers. Contact the broker(s) listed for the credit site(s) that meet your offset requirements. These are shown in the above tables. If more than one broker or site is listed, you should get more than one quote before deciding which offset to secure.

### **Broker contact details**

Broker	Broker Name	Phone	Email	Website
Abbreviation	DIOREI Name	Filone	Ciliali	wensite
Abezco	Abzeco Pty. Ltd.	(03) 9431 5444	offsets@abzeco.com.au	www.abzeco.com.au
Baw Baw SC	Baw Baw Shire Council	(03) 5624 2411	bawbaw@bawbawshire.vic.gov.au	www.bawbawshire.vic.gov.au
Bio Offsets	Biodiversity Offsets Victoria	0452 161 013	info@offsetsvictoria.com.au	www.offsetsvictoria.com.au
Contact NVOR	Native Vegetation Offset Register	136 186	nativevegetation.offsetregister@d elwp.vic.gov.au	www.environment.vic.gov.au/nativ e-vegetation
Ecocentric	Ecocentric Environmental Consulting	0410 564 139	ecocentric@me.com	Not avaliable
Ethos	Ethos NRM Pty Ltd	(03) 5153 0037	offsets@ethosnrm.com.au	www.ethosnrm.com.au
Nillumbik SC	Nillumbik Shire Council	(03) 9433 3316	offsets@nillumbik.vic.gov.au	www.nillumbik.vic.gov.au
TFN	Trust for Nature	8631 5888	offsets@tfn.org.au	www.trustfornature.org.au
VegLink	Vegetation Link Pty Ltd	(03) 8578 4250 or 1300 834 546	offsets@vegetationlink.com.au	www.vegetationlink.com.au
Yarra Ranges SC	Yarra Ranges Shire Council	1300 368 333	biodiversityoffsets@yarraranges.vi c.gov.au	www.yarraranges.vic.gov.au

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For more information contact the DELWP Customer Service Centre 136 186 or the Native Vegetation Credit Register at nativevegetation.offsetregister@delwp.vic.gov.au

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Notwithstanding anything else contained in this publication, you must ensure that you comply with all relevant laws, legislation, awards or orders and that you obtain and comply with all permits, approvals and the like that affect, are applicable or are necessary to undertake any action to remove, lop or destroy or otherwise deal with any native vegetation or that apply to matters within the scope of Clauses 52.16 or 52.17 of the Victoria Planning Provisions and Victorian planning schemes



Report No. 22340.01 (1.0)

## **Appendix 9: Construction mitigation recommendations**

Recommendations to mitigate impacts to vegetation during construction are provided below:

- Establish appropriate vegetation protection zones around areas of native vegetation to be retained prior to works.
- Establish appropriate tree protection zones around scattered native trees to be retained prior to works
- Ensure all construction personnel are appropriately briefed prior to works, and that no construction personnel, machinery or equipment are placed inside vegetation/tree protection zones.
- A suitably qualified zoologist should undertake a pre-clearance survey of planted trees to be removed in the week prior to removal to identify the presence of any nests or hollows.
- If considered necessary based on the results of the pre-clearance survey, a suitably qualified zoologist should be on site during any tree removal works to capture and relocate any misplaced fauna that may be present.







# **Traffic Impact Assessment Report**

# Solar Energy Facility (solar farm) at 910 Princes Highway East, Bairnsdale

**Project Number** 220471 **Revision Report** 12/07/2023

Client BE Pro BD Pty Ltd (Bison Energy),

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Document control record

**Document prepared by:** 

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Document control	
Report title	Solar Energy Facility (solar farm) at 910 Princes Highway East, Bairnsdale
Project number	220471
Client	BE Pro BD Pty Ltd (Bison Energy),
Client contact	Shannon O'Brien at Habitat Planning (02 6021 0662)

Revision	Date issued	Revision details / status	Prepared by	Authorised by
Draft	18/01/2023	Preliminary draft	Bob Citroën	Kate Kennedy
Final	23/01/2023	Final	Bob Citroën	
Final Rev #1	12/07/2023	Final #1	Bob Citroën	





# **Executive summary**

Habitat Planning, on behalf of BE Pro BD Pty Ltd (Bison Energy), has engaged Trafficworks to undertake a traffic impact assessment (TIA) for the proposed development of a **Solar Energy Facility (solar farm) at 910 Princes Highway East, Bairnsdale.** 

The table below summarises the site assessment and the proposed development details, and our conclusions and recommendations.

Address	Lot 1 on PS5165370,
	910 Princes Highway East, Bairnsdale
Zoning	Farming (FZ1)
Proposed development	Solar Energy Facility (solar farm)
Road network	Princes Highway East (A1) along southern site frontage (no direct access)
	Site access from Power Station Road along western site frontage
	(Melbourne to Bairnsdale railway line along the northern boundary)
Traffic generation	5 vph in AM peak during establishment
Car parking	4 light vehicles + 1 truck during establishment
Conclusion	We conclude there are no traffic engineering reasons that would prevent the development from proceeding, subject to implementation of our recommendations.
Recommendations	<ul> <li>1: that specific areas be identified on the site plan to be dedicated to car and truck parking, vehicle manoeuvring and materials storage during the construction phase.</li> </ul>
	<ul> <li>2: that detailed design of the new site entry driveway incorporate the relevant aspects of SD 265 of the IDM</li> </ul>



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#### **Referenced documents**

References used in the preparation of this report include the following:

- AS/NZS 2890.1:2004 Parking Facilities Part 1: Off-street car parking
- Austroads:
  - Guide to Road Design, Part 4: Intersections and Crossings, 2017
  - Guide to Road Design, Part 4A: Unsignalised and Signalised Intersections, 2017
  - Guide to Traffic Management, Part 6: Intersections, Interchanges and Crossings, 2020
- VicRoads Supplement to:
  - Austroads Guide to Road Design Part 4A: Unsignalised and Signalised Intersections, 2011
- Local Government Infrastructure Design Association's Infrastructure Design Manual (IDM), Version 5.30 released March 2020
- East Gippsland Shire Council Planning Scheme
- RTA Guide to Traffic Generating Developments, Version 2.2, October 2002
- Site Plan, drawings 24495P1 V1, prepared by Millar Merrigan Pty Ltd and dated 10/11/2020 (reproduced in Figure 8)
- Bairnsdale Battery Layout plan, sheet 1 of 1, Rev 1.2, prepared by Bison Energy and dated 16/11/2022.

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## 1 Introduction

Habitat Planning, on behalf of BE Pro BD Pty Ltd (Bison Energy), has engaged Trafficworks to undertake a traffic impact assessment (TIA) for the proposed development of a **Solar Energy Facility (solar farm) at 910 Princes Highway East, Bairnsdale**.

For the detail about:

- existing site conditions see Section 2
- assessment of the proposed development see Section 3
- traffic impact of the proposed development see Section 4
- our conclusions and recommendations see Section 5.



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**220471** Solar Energy Facility (solar farm) at 910 Princes Highway East, Bairnsdale – Traffic Impact Assessment Report Revision 12/07/2023

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# 2 Existing conditions

# ADVERTISED PLAN

# 2.1 Subject site

The site:

- is located at Lot 1, along the northern highway boundary at 910 Princes Highway East, east of Power Station Road, 5 km west of central Bairnsdale
- is currently vacant pasture used for stock grazing

Vehicular access to the land is currently available from Power Station Road, 400 m north of the highway. There is currently no gate access to the site along its highway frontage. The Melbourne-Bairnsdale railway line forms the northern boundary of the site.

Figure 1 shows the location of the site.

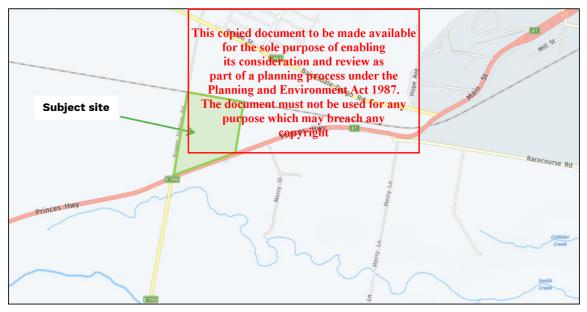


Figure 1: Location plan (reproduced with permission from NearMap under licence)

The site is surrounding by farming land all zoned Farming (FZ1). A timber mill operated by AusWestTimbers in located on land to the west of Power Station Road at the highway intersection and the Bairnsdale Power Station is located opposite the site some 500 m north of the highway.

Princes Highway is located in a Transport Zone category 2 (TRZ2) and the Melbourne-Bairnsdale railway line in a Transport Zone category 1 (TRZ1).

**220471** Solar Energy Facility (solar farm) at 910 Princes Highway East, Bairnsdale – Traffic Impact Assessment Report Revision 12/07/2023

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# **TRAFFICWORKS**

Figure 2 shows the zoning for the site and surrounding land.

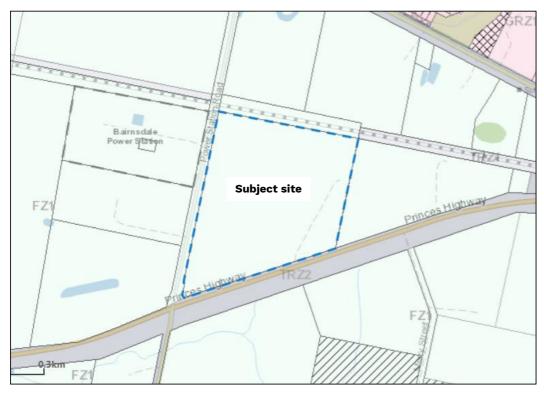


Figure 2: Zoning plan (reproduced from the Vicplan website)

#### 2.2 Road network

The road network includes:

- Princes Highway East (A1) along the site's southern frontage
- Power Station Road along the site's western frontage
- Bengworden Road (C106) as the extension of Power Station Road to the south of the highway.

#### 2.2.1 Princes Highway

Table 1 describes the features of the highway.



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**220471** Solar Energy Facility (solar farm) at 910 Princes Highway East, Bairnsdale – Traffic Impact Assessment Report Revision 12/07/2023



# ADVERTISED PLAN

Table 1: Princes Highway features

Feature	Description		
Road type	State Arterial Road (A1) managed by the Department of Transport and Planning (DTP)		
Access	The highway provides a long-distance travel route through Gippsland, between Melbourne and Bairnsdale (and beyond into southern NSW).		
Carriageway	7.4 m wide (2 x 3.7 m traffic lanes) bounded by 2.0 m sealed shoulders.		
	The highway has been widened at the approaches to the Power Station Road/Bengworden Road intersection to provide full channelised right turn lanes (CHR) and auxiliary left turn lanes (AUL) for both directions of travel.		
	Additionally, the cross-section on the west approach contains a wide median treatment that is fitted with central barriers further to the west.		
Road reservation	60 m wide		
Speed limit	The default 100 km/h rural spaed limit applies to this section of highway for the sole purpose of enabling		
Bicycle lanes/footpaths	its consideration and review as Not provided at this rural location part of a planning process under the		
	Planning and Environment Act 1987. The document must not be used for any		
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Figure 3 and Figure 4 provide photos of the highway at the site.



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Figure 3: View to the west along the Power Station Road intersection

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Figure 4: View to the east along the Princes Highway approaching the Power Station Road intersection

#### 2.2.2 Power Station Road

Table 1 describes the features of this road.



Table 2: Power Station Road features

Feature	Description		
Road type	Classified as a rural access road in East Gippsland Shire Council's Road Register		
Access	This local access road also provides a connection between the Princes Highway and the Bairnsdale Dargo Road (C601) clear of Bairnsdale Township.		
	Large splitter island treatments in Power Station Road and Bengworden Road at the highway result in a staggered-T configuration for this intersection.		
Carriageway	5.6 m wide seal bounded by gravel shoulders and grass verges		
Road reservation	20 m wide		
Speed limit	The default 100 km/h rural speed limit applies to this road		
Bicycle lanes/footpaths	Not provided at this rural location		

Figure 5 and Figure 46 provides photosocial photosocia

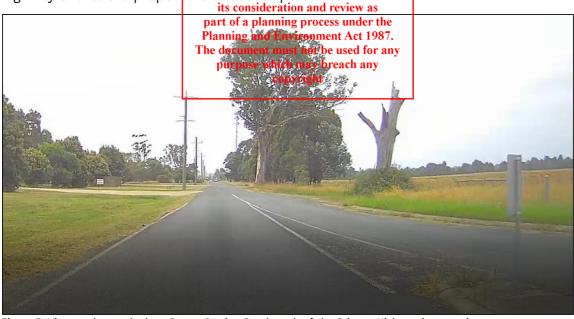


Figure 5: View to the north along Power Station Road north of the Princes Highway intersection.







Figure 6: View to the north along Power Station Road at the proposed site access location to the right.

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2.3 Traffic volumes

2.3.1 Princes Highway East

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PI AN

The DPT open data portal indicates the following 2020 traffic volume estimates along the Princes Highway:

• West of Bengworden Road:

o Eastbound: 3,500 vpd (vehicles per day)

o Westbound: 3,600 vpd

o Two-way (combined) 7,100 vpd

o Commercial vehicle content: 13.5%

• East of Bengworden Road:

o Eastbound: 4,100 vpd (vehicles per day)

o Westbound: 4,400 vpd

o Two-way (combined) 8,500 vpd

o Commercial vehicle content: 11.5%

On the basis that peak hour volumes are approximately 10% of daily totals, the morning and afternoon peak hour traffic volumes along the Princes Highway are estimated to be 350-410 vph (vehicles per hour) southeast bound and 360-440 vph northwest bound, or 710-850 vph two-way.

#### 2.3.2 Power Station Road

Traffic volumes on Power Station Road were surveyed by East Gippsland Shire Council in October/November 2021. The survey results are summarised in Table 3.

Table 3: Surveyed traffic volumes for Power Station Road

Survey date	Location	Weekday two-way volume (vpd)	Peak hour two-way volume (vph)	Commercial vehicles (%)	2023 Estimate (vph)
22/10/21 - 8/11/21	530 m north of Princes Highway	92	9 (8:00- 9:00AM)	9.5%	10*

<sup>\*</sup>Estimated using 2% pa compound growth

The volumes from this 2021 survey, factored up to reflect current-day levels, are used in the ensuing analysis, i.e. peak hour volume of 10 vph, or 5 vph in each direction.

**220471** Solar Energy Facility (solar farm) at 910 Princes Highway East, Bairnsdale – Traffic Impact Assessment Report Revision 12/07/2023



#### 2.4 Crash history

The DPT data portal, which details all injury crashes reported to Victoria Police on roads throughout Victoria, indicates that no casualty crashes have occurred on the roads in the vicinity of the subject site in the last five-year period for which data is available, i.e. 1/01/2017 – 31/12/2021.

**Conclusion 1:** Based on this crash history, we conclude that there is no crash trend that requires immediate investigation.

### 2.5 Public transport

There are no public transport services in the vicinity of the site. This matter is not pursued further in this report.

#### 2.6 Pedestrians and cyclists

There are no footpaths or on/off road bicycle facilities in the vicinity of this rural property located outside the Bairnsdale built-up area. The development is not expected to generate pedestrian or cycle activity and this matter is not pursued further in this report.

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### 3 Assessment of the proposed development

#### 3.1 Details of proposed development

The project comprises use and development of the approximately 20.7 ha site for a 50 MW solar energy facility, battery storage and utility installations that will include the following typical components (refer also to Figure 7):

- installation of some 12,000 photo-voltaic (PV) panels in 55 arrays on single axis trackers (60 degrees) and pile driven into the ground
- aboveground and underground cabling between panel arrays to combiner boxes and inverters
- Sungrow 4950 MVPS inverter within a power station and control room (in shipping container)
- battery storage facility (shipping container configuration)
- new internal substation yard
- aboveground and underground cabling and electrical connections between the panel inverters
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- new 66 kV feeder line acrosis Powier Station Rviad required to connect to the Ausnet substation to the Planning and Environment Act 1987.



Figure 7: Site Layout (Bairnsdale Battery Layout Drawing, Rev 1.2 prepared by Bison Energy)

Vehicular access to the development site, during establishment and for future maintenance, will be through the present gateway onto Power Station Road some 400 m north of the highway and follow the internal driveway to the facilities.

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Based on the information provided by the client, the peak traffic generated by the development will occur during the three-month construction phase. Therefore, this report's primary focus is on assessing impacts during the peak construction phase of the development.

During the operational phase, the proposed facility is expected to generate one visit (or two vehicle movements) per day for maintenance and monitoring purposes on an irregular basis (i.e. not daily). This operational access is also to be via the proposed driveway from Power Station Road.

#### 3.2 Traffic generation and distribution

#### 3.2.1 Traffic generation

Appendix 1.1 details the anticipated traffic generation during the construction phase and the likely distribution of this traffic. This is summarised as follows:

During the first month of construction anticipated daily traffic generation is:

- 4 light vehicle entry movements in the AM and 4 departures in the PM, with 100% approaching from the east (from Bairnsdale) then turning north into Power Station Road
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- its consideration and review as

  2 to 3 heavy vehicle arrivals dandard for the west (from Melbourne) then the more than intermediate the control of the cont

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- 4 light vehicle entry movements in the AM and 4 departures in the PM, with 100% approaching from the east
- 1 heavy vehicle arrival (and departure) per day approaching from the west.

Operational traffic is confined to a single light vehicle attending the site on an intermittent basis.

**Conclusion 2:** For the purpose of this assessment, peak traffic generation will occur during the morning peak and has assumed the arrival of four light vehicles and one heavy vehicle during the morning peak hour, all heading north along Power Station Road from the highway.

#### 3.3 Car parking assessment

#### 3.3.1 Provision of car parking

Appendix A2.2 details estimated parking demand, anticipated parking provision and assesses parking adequacy.

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### 4 Traffic impacts of the proposed development

Table 4 summarises traffic impacts and recommendations for:

- sight distance
- turn provisions
- the existing road network.

For the detail that supports this summary and the recommendations, see Appendix 1 – Detailed TIA.

Table 4: Summary of road network assessment findings

Area assessed Im	pact /N)	Impact summary and recommendations			
Sight distance to No vehicles – at the access driveway (ESD)		the location of the driveway, at 400 m from the Princes Highway intersection, achieves compliance with the entering sight distance (ESD) criteria in AS/NZS 2890.1. Refer Appendix A1.3.1 – Site access – ESD requirement for detailed assessment.			
Sight distance to NA pedestrians		as there are no frontage road footpaths and no anticipated pedestrian activity in the area, this requirement of AS/NZS 2890.1 is not applicable to the subject site access (Refer Appendix A1.3.3).			
Turn provisions Yes	s	The analysis indicates that the:			
This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987.  The document must not be used for any		<ul> <li>right turn from Power Station Road into the site access meets the warrants for a basic right turn treatment. This basic treatment is covered in the design requirements of SD 265 of the IDM as outlined in Appendix A1.4.5 Driveway Entry.</li> </ul>			
		<ul> <li>As there are not expected to be any left turns from Power Station Road into the site access, no left turn treatment is proposed.</li> </ul>			
purpose which may breach any copyright		Refer Appendices A1.4 - Turn provisions impact for detailed assessments.			
Existing road network No		the intersection treatment in the Princes Highway at Power Station Road adequately caters for the additional turns by construction and component delivery vehicles for this project without a need for upgrading.  Refer Appendix 1 for detailed assessment.			



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#### 5 Conclusions and recommendations

We conclude there are no traffic engineering reasons that would prevent the development from proceeding, as outlined below:

- based on the crash history, we conclude that there is no crash trend that requires immediate investigation
- for the purpose of this assessment, peak traffic generation will occur during the morning peak and has assumed the arrival of four light vehicles and one heavy vehicle during the morning peak hour, all heading north along Power Station Road from the highway.
- the location of the site access driveway, at 400 m from the Princes Highway intersection, achieves compliance with the entering sight distance criteria in AS/NZS 2890.1.
- based on the data gathered and assessed in this section, we conclude that the:
  - right turn from Power Station Road into the proposed site access meets the warrants for a basic right turn treatment in the morning peak period.
  - no left turn treatment is required.
- the current intersection treatment in the Princes Highway at Power Station Road adequately caters for the additional turns by component delivery and trade vehicles for this project without a need for upgrading.

As such, this TIA has identified the following matters that need to be addressed when preparing plans to accompany the Planning Permit Application:

- Recommendation 1: that specific areas be identified on the site plan to be dedicated to car and truck parking, vehicle manoeuvring and materials storage during the construction phase.
- Recommendation 2: that detailed design of the new site entry driveway incorporate the relevant aspects of SD 265 of the IDM



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### **Appendix 1 - Detailed TIA**

The TIA has assessed the impact of the proposed development on:

- traffic generation in Section A1.1
- car parking in Section A1.2
- sight distance in Section A1.3
- turn provisions in Section A1.4
- the existing road network in Section A1.5



#### A1.1 - Traffic generation and distribution assessment

#### A1.1.1 – Traffic generation

Traffic generation for new developments is typically estimated using the traffic generation rates provided in the object Generation generation rates provided in the threst generation generation rates for Guide or the IDM.

developments is typically estimated using the traffic generation generation generation and review as solar energy facilities are not covered in either the RTA Planning and Environment Act 1987.

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On-site construction for the proposed solar energy facility comprises the preparation of footings, delivery of a prefabricated inverter, construction and fitting of the substation, delivery of solar panels, assembly, and connection of components.

The total construction period is estimated to extend over three months. The client envisages the following timeframes:

 Weeks 1-4 – Initial delivery of PEG SD System and fencing in seven containers on semi-trailers.

Photo-voltaic (PV) modules will progressively be delivered ahead of installation. These components will be transported in 27 containers on semi-trailers. Assuming a progressive delivery schedule, this will result in 1 to 2 deliveries by semi-trailer per day.

There is a probability of occasional additional contractor heavy vehicles arriving during this stage (crane trucks, concrete deliveries etc). These will approach Power Station Road along the Princes Highway from the east.



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Overall, allowance is made for 4 light vehicles and 2 to 3 heavy vehicle arrivals per day on average.

- Month 2 By now PV modules are installed and most of the containers will have arrived and be stored on site. So, allow for 4 light vehicles and 1 heavy vehicle per day average.
- Month 3 Substation components to arrive for installation. They will arrive in 2 containers on semi-trailers. Maintain the 4 light vehicles and 1 heavy per day average arrival frequency.

Following completion and commissioning, the operational traffic is expected to generate one visit (or two vehicle movements) per day for maintenance and monitoring purposes on an irregular basis.

#### **A1.1.2 Traffic distribution assumptions**

Tradesmen working on the site are expected to be based in Bairnsdale and travel to the site each day in their own vehicles generating four arrivals in the morning and four departures in the evening, all travelling from the trade available into Power Station Road to approach the site entrance from the evening process under the

by semi-trailer, will approach purpose which may breach any the beak construction phase mostly by semi-trailer, will approach purpose which may breach any Melbourne along Princes Highway from the west and access the sitpyfrom the south. These trips are expected to be spread throughout the day, with one arrival during the morning peak hour.

The development will attract no traffic along Power Station Road from the north.

#### A1.1.3 - Traffic summary

During the first month of construction anticipated daily traffic generation is:

- 4 light vehicle entry movements in the AM and 4 departures in the PM, with 100% approaching from the east
- 2 to 3 heavy vehicle arrivals (and departures) all approaching from the west

This reduces during months two and three to:

- 4 light vehicle entry movements in the AM and 4 departures in the PM, with 100% approaching from the east
- 1 heavy vehicle arrival (and departure) per day approaching from the west



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Operational traffic is confined to a single light vehicle attending the site on an intermittent basis.

#### A1.2 - Car parking assessment

#### A1.2.1 - Statutory parking provision

Section 5 of the RTA Guide to Traffic Generating Developments or Table 1 to Clause 52.06 of the Planning Scheme are the normal sources used to establish the requirements for the provision and design of car parking spaces for new developments. Neither of these sources covers the construction or operation of solar farms and parking demand has been estimated from first principles as outlined in the following section.

#### A1.2.2 - Car parking demand assessment

During construction the client has indicated a likely need to accommodate parking of four trades vehicles and up to two semi-trailers per day.

Post completion there will any copical to quite mention to visit on an intermittent basis for main tenaries to visit on an its consideration and review as

# A1.2.3 – Adequacy of car partefnglanning process under the Planning and Environment Act 1987.

The Site Layout plan does not indicate any specific planting and vehicle manoeuvring areas or materials storage areas. Scruting of the plan indicates that there is ample available space on the site to make this provision, but it needs to be identified.

**Recommendation 1:** that specific areas be identified on the site plan to be dedicated to car and truck parking, vehicle manoeuvring and materials storage during the construction phase.

#### A1.3 - Sight distance impact

#### A1.3.1 – Site access – ESD requirement

Section 3.2.4 in AS/NZS 2980.1 Parking Facilities – Part 1: Off-street car parking, sets out minimum sight distance criteria at access driveways as follows:

- entering sight distance (ESD) criteria for a driver exiting an access driveway to traffic on the frontage road
- sight distance to pedestrians.

Un-signalised access driveways shall be located so the intersection sight distance available to drivers leaving the driveway along the frontage road is at least that



shown in Figure 3.2 of AS/NZS 2890.1 (reproduced in Figure 8) from a driver's position set back 2.5 m from the edge of frontage road (edge of traffic lane).

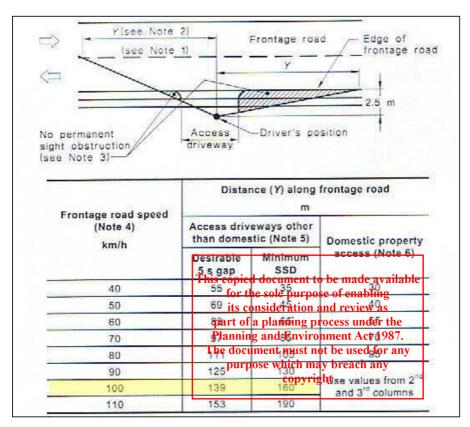


Figure 8: Sight distance requirements at driveways (Source: Figure 3.2 from AS/NZS 2890.1)

#### A1.3.2 - Impacts for this development

From Figure 8, the applicable minimum ESD (or SSD) for vehicles departing the site at the access driveway onto Power Station Road is 160 m for the 100 km/h approach speed. This criterion is satisfied at the site driveway location (refer photos in Figures 9 and 10).

**Conclusion 3:** the location of the access driveway, at 400 m from the Princes Highway intersection, achieves compliance with the entering sight distance criteria in AS/NZS 2890.1.





## ADVERTISED PLAN



Figure 9: Unobstructed view from the proposed driveway to the south



Figure 10: Unobstructed view from the proposed driveway to the north

#### A1.3.3 - Sight distance to pedestrians

As there are no frontage road footpaths and no anticipated pedestrian activity in the area, this requirement of AS/NZS 2890.1 is not applicable to the subject site access.

#### A1.4 - Turn provisions impact

The traffic turning from a major road into a minor road or a significant development should not delay through traffic or compromise road safety.

Turn treatments are generally provided at sign-controlled intersections from major roads into minor roads or at significant access points to ensure safe and efficient



operation of the intersection. Traffic volumes and speed environment are used to determine appropriate turn lane treatments at such locations.

Figure 11 summarises the anticipated peak hour traffic generated entering the proposed development as detailed in Section A1.1.3.

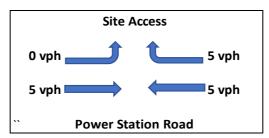


Figure 11: Anticipated AM Peak traffic generated from the proposed development

Figure 12 shows the formulae used to determine the major road volume  $(Q_M)$  needed to select the appropriate turn treatment.

To determine the turning treatments, the outcomes from these calculations are applied to Figure 3.25 of the Austroads Guide to Traffic Management Part 6 (AGTM6), shown in Figure 13, with the graph in Figure 3.25a used for the subject site access located in a 100 km/h speed environment.

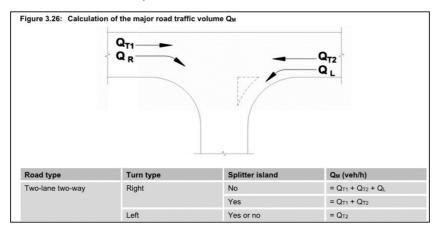


Figure 12: Formulae used to determine major road traffic (Source: Figure 3.26 from AGTM6)

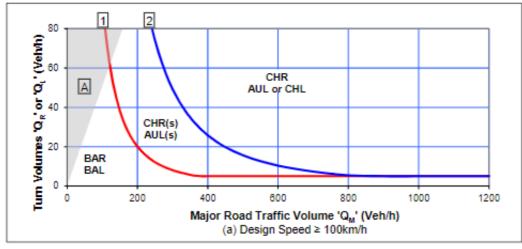


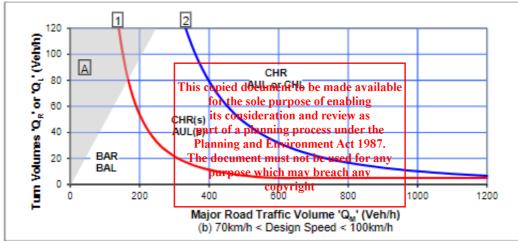
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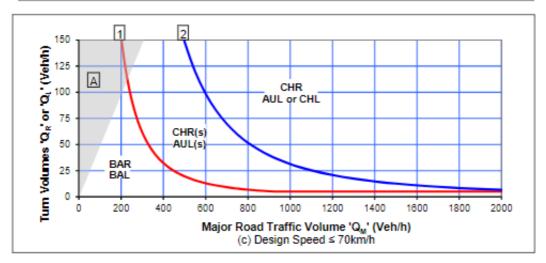


Figure 13: Warrants for turn treatments on major roads at unsignalised intersections (source: Figure 3.25, from AGTM6)





#### A1.4.1 - Turn lane treatments

Tables 9 & 10 in Appendix 2 summarise the various types of left and right turn treatments, as defined in the AGRD4 and AGRD4A.

# A1.4.2 – Anticipated conditions for Power Station Road at the site access

To determine the anticipated conditions at the site access, current traffic volumes from Table 4 and anticipated turning traffic from Figure 12 have been applied to the formulae in Figure 13 and inserted into graph (a) in Figure 14 to obtain the results summarised in Table 5.

Table 5: Right turn lane treatments on Power Station Road at the proposed site access - anticipated conditions.

Road	Period	Qτ1	<b>Q</b> <sub>T2</sub>	QL	<b>Q</b> <sub>R</sub>	Qм	Warrants
		vph	vph	vph	vph	vph	
Power Station	АМ	5		sole purpose ideration and	of enabling d review as	15	Type BAR
Road	РМ	6	Planning a	nd Egvironn	cess under the nent Asct 1987 be used for ar	12	No treatment
			purpose	which may l copyright	•		

As the development is not expected to generate any traffic to from the north, provision of a left turn treatment was not considered.

**Conclusion 4:** based on the data gathered and assessed in this section, we conclude that the:

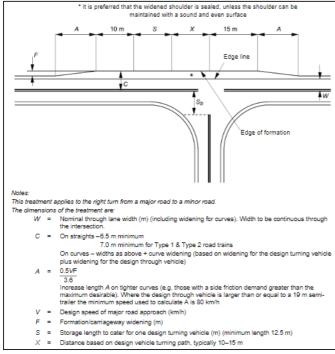
- right turn from Power Station Road into the proposed site access meets the warrants for a basic Type BAR right turn treatment in the morning peak period.
- no left turn treatment is required.

### A1.4.3 - Right-turning treatment

The above assessment indicates Power Station Road meets the warrants for the minimum Type BAR treatment. There is currently minimal shoulder width for a passing vehicle to travel on and the provision of this widening is regarded as necessary for safety, albeit in an unsealed state because of the low level of use.

# **TRAFFICWORKS**

Figure 14 (reproduced from Figure A6 of AGRD4) outlines the configuration of the Type BAR treatment that should satisfy the dimensions outlined in Table 6.



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Figure 14: Basic Type BAR right turn treatment

Table 6: Minimum dimensions of the Type BAR treatment for a design speed of 100 km/h,

Feature	Code on Figure	Requirement
Lateral movement length	A = 0.5VF/3.6	45 m (for V = 100 and rounded)
Nominal through lane width	W	2.8 m (half existing seal width of 5.6 m)
Total lane width	С	6.0 m (from road centre line)
Formation widening	F = C - W	3.2 m
Storage length	S	12.5 m
Clearance to access centreline	Х	15 m (nominal)
Treatment length	A + 10 + S + X + 15 + A	127.5 m



This treatment reflects the requirements of SD 265 of the IDM (see Section A1.4.5 below) and will ensure turns by semi-trailers entering or departing the site and the needs of through traffic are catered for.

#### A1.4.4 - Left-turning treatment

No treatment specified.



#### A1.4.5 - Driveway entry

The standard drawings accompanying Council's IDM specify typical entry treatments to be applied to new accesses. SD 265, reproduced in Appendix A2.3, illustrates the typical requirements at a rural vehicle crossing to cater for semi-trailer movements.

Although the configuration of the passing lane for right turns has been covered in Section A1.4.2 above, the following additional matters need to be incorporated in the cross-over design to comply with the IDM:

- the fence needs to be splayed and the gate set back to allow for an entering semi-trailer can stop pleas pleas pleas in the lane with the lane splayed and the gate is shut
- the driveway needs to be see le purpose of enabling sea le grand de and the property boundary

  part of a planning process under the Planning and Environment Act 1987.
- the formation needs to the did and the unsealed dopposite the entry to facilitate turns by semi-trailers into the site is the entry to facilitate turning vehicles by through traffic copyright
- no provision needs to be made for drainage along the road reserve as the land slopes away from the road formation.

**Recommendation 2:** that detailed design of the new site entry driveway incorporate the relevant aspects of SD 265 of the IDM.

#### A1.5 - The existing road network

As noted earlier, all delivery traffic is expected to approach the site along the Princes Highway from the west and execute a left turn from the Princes Highway into Power Station Road. Numbers of these trucks are expected to peak at 3 vpd.

This highway intersection is currently configured to provide an AUL left turn lane with the following dimensions:

• Diverge/deceleration length D = 120 m

• Taper length T = 30 m (included in D)

Through lane width W = 3.5 m



• Turn lane width  $W_T = 3.5 \text{ m}$ 

The above dimensions are consistent with the requirements for a rural Type AUL treatment in a 100 km/h speed environment (refer Appendix A2.2), except for the deceleration length D, which assumes a speed reduction to about 90 km/h prior to a vehicle entering the turn lane.

Similarly, all trades traffic is expected to approach the site along the Princes Highway from the east and execute a right turn from the Princes Highway into Power Station Road. Numbers of these vehicles are expected to be 4 vph during the morning peak.

This highway intersection is currently configured to provide a Type CHR right turn lane with the following dimensions:

D = 125 m (to stop condition)

• Lateral movement length A = 100 m (for V = 100 km/h)

• Taper length T = 30 m (included in D)

Storage length S= 12.5 m
 Clearance to intersection X = 15 m

Diverge/deceleration length

The above dimensions are consistent with the requirements for a rural Type CHR treatment in a 100 km/h speed environment (refer Appendix A2.2), except for the deceleration length D, which assumes a speed reduction to about 90 km/h prior to a vehicle entering the turn lane.

**Conclusion 5:** the current intersection treatment in the Princes Highway at Power Station Road adequately caters for the additional turns by component delivery and trade vehicles for this project without a need for upgrading.



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## **Appendix 2 – Turn treatments**

#### A2.1 - Urban

Table 9: Turn Treatment Descriptions (**Urban**) (Source: noted Sections from Austroads Guides to Road Design Parts 4 and 4A).

Turn treatment	Description
BAR	BAsic Right turn treatment on the major road, features a widened area (usually in place of parking) on the major road that allows through vehicles to pass to the left of turning vehicles (Figure 7.6 of Austroads Guide to Road Design Part 4A).
CHR(S)	CHannelised Right (Short) turn is a shorter version of the Channelised Right turn treatment which is reduced by removing space provided for storage in the right to be made available lane. This treatment type can only be used the consideration and review as Guide to Road Design Port (A), part of a planning process under the Planning and Environment Act 1987.  The document must not be used for any
CHR	purpose which may breach any  CHannelised Right turn treatment has two vehicle travel paths (through and right turns) separated by physical or painted medians or islands (Figure 7.8 of Austroads Guide to Road Design Part 4A).
BAL	BAsic Left turn treatment on the major road has a radius large enough to accommodate a design vehicle turning left into the minor road without crossing the centre line of the minor road (Figure A15 of Austroads Guide to Road Design Part 4).
AUL(S)	AUxiliary Left (Short) turn treatment is a shorter version of the Auxiliary Left turn treatment which is reduced by allowing some deceleration to occur in the through lane on the major road. This turn treatment also allows through vehicles to pass to the right of turning vehicles (Figure A17 of Austroads Guide to Road Design Part 4).



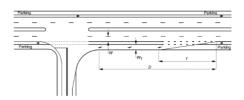
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Turn Description treatment

AUL

**AU**xiliary **L**eft turn treatment is a left turn lane on the major road that allows through vehicles to pass to the right of turning vehicles (Figure 8.6 of Austroads Guide to Road Design Part 4A).



#### A2.2 - Rural

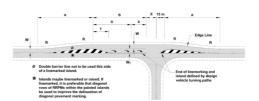
Table 10: Turn Lane Treatment Descriptions (Rural) (Source: noted Sections from Austroads Guides to Road Design Parts 4 and 4A).

Design Parts 4	4 ana 4A).	
Turn treatment	Description	
BAR	<b>BA</b> sic <b>R</b> ight turn treatment on the major road, features a widened area (usually in place of parking) on the major road that allows through vehicles to pass to the left of turning vehicles ( <i>Figure A6 of Austroads Guide to Road Design Part 4</i> ).	# It to professed that the soldined shoulder's soldied, unless the shoulder can be mourtaned with a sound and even markers.  A 10.0 m 8 X 15.0 m A copy at the soldined soldine soldin
CHR(S)	<b>CH</b> annelised <b>R</b> ight ( <b>S</b> hort) turn is a shorter version of the Channelised Right turn treatment which is reduced by removing space provided for storage in the right lane. This treatment type can only be used with line marking ( <i>Figure</i>	R R R R R R R R R R R R R R R R R R R

CHR

**CH**annelised **R**ight turn treatment has two vehicle travel paths (through and right turns) separated by physical or painted medians or islands (*Figure A8 of Austroads Guide to Road Design Part 4*).

A7 of Austroads Guide to Road Design



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Part 4).



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Turn treatment	Description
BAL	BAsic Left turn treatment on the major road has a radius large enough to accommodate a design vehicle turning left into the minor road without crossing the centre line of the minor road (Figure 8.2 of Austroads Guide to Road Design Part 4A).
AUL(S)	AUxiliary Left (Short) turn treatment is a shorter version of the Auxiliary Left turn treatment which is reduced by allowing some deceleration to occur in the through lane on the major road. This turn treatment also allows through vehicles to pass to the right of turning vehicles (Figure & Tois Auxiliary deceleration and review as part of a planning process under the treatment and process under the through vehicles to pass to the right of turning wehicles to pass to the sole purpose of enabling its consideration and review as part of a planning process under the through vehicles to pass to the right of auxiliary Left turn lane on the through vehicles (Figure 8.4 of Austroads turning vehicles (
AUR	In addition to the above, DoT will allow the use of the rural <b>Au</b> xiliary lane <b>R</b> ight turn treatment (from GTEP Part 5) in lieu of the CHR(s) treatment, (refer Sections 7.5.2 and 7.7.2 of VicRoads Supplement to AGRD4A)  DIMENSIONS:  A ***    Note:   1.   Proceedings   1.   Proc

#### **A2.3 - IDM**

Standard Drawing SD 265, which accompanies the Infrastructure Design Manual used by most regional councils in Victoria, should be applied to local road accesses for developments that represent significant traffic generators, particularly those that attract semi-trailer and B-Double use. This layout is shown in Figure 17 below.



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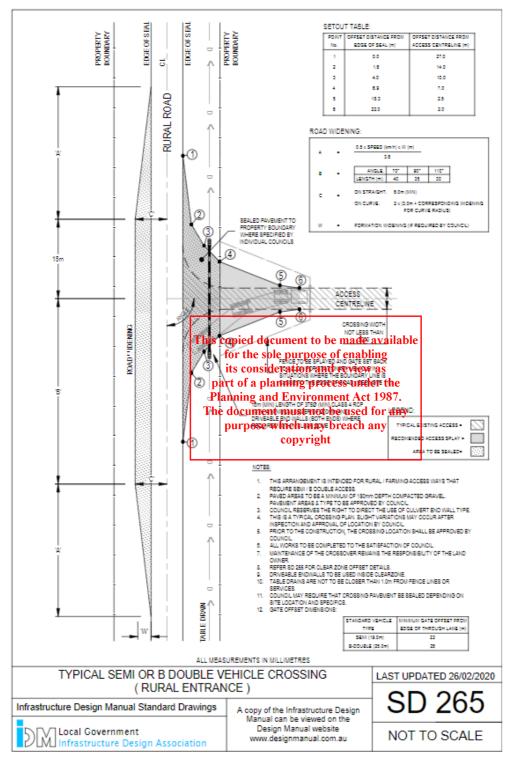


Figure 17: SD 265 from the IDM





## **Appendix 3 – Acronyms and terms**

Acronyms / terms	Definition
AGRD4	Austroads Guide to Road Design Part 4 – Intersections and crossings
AGRD4A	Austroads Guide to Road Design Part 4A – Unsignalised and signalised intersections
AGTM6	Austroads Guide to Traffic Management Part 6 – Intersections, interchanges and crossings management
AGTM8	Austroads Guide to Traffic Management Part 8 – Local street management
AS/NZS2890.1	Australian Standard / New Zealand Standard 2890.1 Parking facilities Part 1: Off-street car parking
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ESD	part of a planning process under the Ente <b>ਸੀਸਕੁ site dista</b> ਸਿਲਾਂronment Act 1987. The document must not be used for any
IDM	purpose which may breach any Infrastructure Designy Manual
PSP	Precinct structure plan
SIDRA	SIDRA intersection – micro analytical traffic engineering software to model the performance of intersections
SISD	Safe intersection sight distance
TIA	traffic impact assessment
vpd	vehicles per day
vph	vehicles per hour
VPA	Victorian Planning Authority



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Project: Bairnsdale Solar Farm - Visual Impact Assessment Commissioned by: Bison Energy Pty Ltd Prepared by Yonder Landscape Architecture, PO Box 1198, Albury NSW 2640 Australia ABN 68 437 343 209

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STATUS DATE REVISION Α

Client Review 27.04.23 LL

#### Attachment 5.1.2.11

Bairnsdale Solar Farm Visual Assessment

#### Contents

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#### Introduction

#### **Purpose**

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Yonder Landscape Architecture has been commissioned by Bison Energy to undertake a visual impact assessment for a proposed 50 megawatt (MW) Solar Photo Voltaic Generation (SPVG) facility, at Princes Highway, Bairnsdale. The proposal covers an area of approximately 7.6 hectares (Ha), in the Local Government Area (LGA) of East Gippsland Shire Council in Bairnsdale Victoria.

This visual impact assessment delivers an objective statement of the probable impacts on the visual environment resulting from the construction of the proposed development. The report outlines the results from site assessment undertaken in April 2023, describing the present landscape character. It documents the assessment of visual impact resulting from the proposal and provides an indication for suitable mitigation measures.

#### Statutory Framework

The DRAFT Solar Energy Facilities - Design and Development Guidelines prepared by Victorian Government Department of Environment, Land, Water and Planning outlines the assessment and development process for large scale solar energy facilities in Victoria. The guidelines address landscape values and visual amenity and include using best practice design will help minimise impacts on visual amenity for surrounding land users, with specific consideration of:

- screening the site using vegetation or other barriers.
- ▶ implementing methods to reduce the impact of glint, glare and light spill, such as screening and panel row orientation.
- ▶ designing fencing and other security measures to reduce impacts on surrounding
- ▶ land use
- designing the height, siting and layout of panel arrays and related infrastructure to minimise visibility from surrounding viewpoints
- choosing materials with colours and textures that provide minimal contrast with the landscape
- using the topography of the site and the surrounding landforms to reduce visibility.

#### Methodology

The visual impact assessment involved the following activities:

- Desktop review using aerial photography to confirm the extents of the proposed development on the site and check for any prominent land features and vegetation in and around the site.
- ▶ Investigation of possible viewsheds along Princes Highway, Old Station Road, Bengworden Road and Merry Street where the proposed development may be seen from and document the views with photos as well as descriptions. The views will be documented according to the sensitivity and if the proposed development is visible will be recorded. The nature of the visual impact and rating will also be carried out.
- ▶ Describing and evaluating the existing landscape character and visual environment in order to establish a baseline for the visual assessment.
- Mapping the visual envelope based on field studies and data while identifying sensitive visual receivers. Sensitive visual receivers are individuals or people who have the potential to be visually affected by the proposal.
- ▶ Undertaking a visual impact assessment using the grading matrix, considering visual sensitivity and the magnitude of the visual change. This report considers the visual impact of the development from Princes Highway, Old Station Road and Bengworden Road.



Bairnsdale Solar Farm Visual Assessment

# ADVERTISED PLAN

#### Visual Impact Assessment Method

The methodology adopted in this Landscape Character and Visual Impact Assessment is based on the NSW Government Roads and Maritime Service Environmental Impact Assessment Guidance Note (2013): Guidelines for landscape character and visual impact assessment. The methodology has been modified to align with the features and requirements of this particular proposal.

The method to measure impact is based on the combination of:

- ▶ the sensitivity of the existing area or view to change.
- the magnitude (scale, contrast, quality, distance) of the proposal on that area or view.

#### Sensitivity

Sensitivity refers to the qualities of an area, the number and type of receivers and how sensitive the existing character of the setting is to the proposed nature of change.

Visual sensitivity is a measure of how critically a change to the existing landscape is viewed by people from different areas. The assessment is based on the number of people affected, land use, and the distance of the viewer from the proposal (EDAW, 2000).

For example, a significant change that is not frequently seen may result in a low visual sensitivity although its impact on a landscape may be high. Generally the following principles apply:

- ▶ Visual sensitivity decreases as the viewing time decreases.
- ▶ Visual sensitivity decreases as the number of potential viewers decreases.
- Visual sensitivity can also be related to viewer activity (e.g. A person viewing an affected site whilst engaged in recreational activities opiced document to be made available affected by change than someone passing a scene in a cafer and isolet purpose of enabling destination).

#### Magnitude

Magnitude refers to the physical scale of the project, how distant it is and the visual contrast it presents to the existing condition. Magnitude will also need to consider cumulative impact, which is a consideration of the result of the incremental impact of the proposal when added to other past, current and known likely future activity. Magnitude is also called visual effect.

- ▶ Low level: occurs when a proposal blends in with its existing viewed landscape due to a high level of integration of one or several of the following: form, shape, pattern, line, texture or colour. It can also result from the use of effective screening ie. Topography and vegetation.
- ▶ Moderate level: occurs where a proposal is visible and contrasts with its viewed landscape however, there has been some degree of integration (e.g. Good siting principles employed, retention of significant existing vegetation, provision of screen landscaping, appropriate colour selection and/or suitably scaled development).
- ▶ High level: results when a proposal has a high visual contrast to the surrounding landscape with little or no natural screening or integration created by vegetation or topography.

#### Visual Impact Rating

Visual impact refers to the change in appearance of the landscape as a result of development. (EPHC, 2010). Visual impact is the combined effect of visual sensitivity and visual effect. Various combinations of visual sensitivity and visual effect will result in high, moderate and low overall visual impacts as suggested in Table below.

			Nagnitude				
			High	Moderate	Low	Negligible	
_		High	High	High-Moderate	Moderate	Negligible	
in merina		Moderate	High-Moderate	Moderate	Moderate-low	Negligible	
		Low	Moderate	Moderate-low	Low	Negligible	
ak	le	Negligible	Negligible	Negligible	Negligible	Negligible	

its consideration and review as Grading matrix
Source: Roads and Maritime Service Environmental Impact Assessment Guidance Note (2013): Guidelines
part of a planning process under the lands cape character and visual impact assessment
Planning and Environment Act 1987.

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The site



### Landscape character

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The development site is located approximately 6km west of Bairnsdale on the

Princes Highway. The site is directly adjacent to the Auswest Timbers Bairnsdale and Bairnsdale Power Station on Power Station Road. The site is bounded by the railway line to the north and the Princes Highway to the south.

Bairnsdale Subject site

- ▶ Flat land form with a mix of open areas and landscape buffers.
- ▶ A mix of industrial and rural land uses. Electrical infrastructure is visually prominent telecommunications.

Key site characteristics of the regional and local landscape character include:

- ▶ Railway lines and assorted buffer planting.
- ▶ Scattered rural buildings.









pagel 6 East Gippsland Shire Council - Agenda Council Meeting - Tuesday 6 February 2024

#### Attachment 5.1.2.11

Bairnsdale Solar Farm Visual Assessment

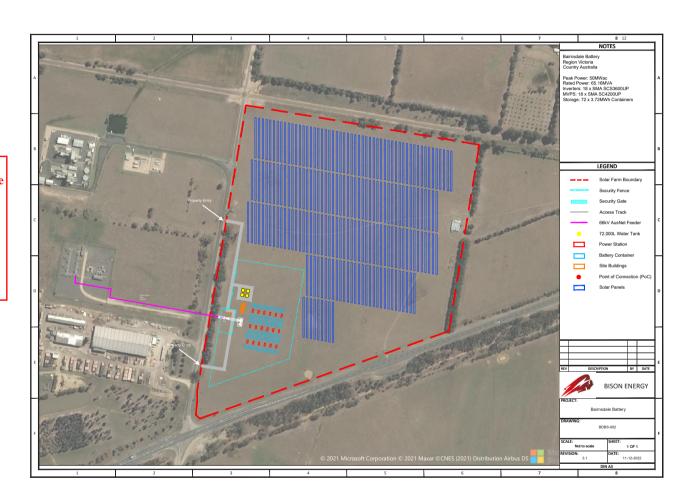
### The Proposal

The Bairnsdale Bairnsdale Battery is a proposed 50 megawatt (MW) solar photo voltaic generation (SPVG) facility.

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### Visual Impact Assessment

Viewshed 1	Sensitivity	Magnitude	Impact
Along Princes Highway	Negligible	Negligible	Negligible
looking west from Merry St.			



Distant view to the southern side of the site, obscured by existing vegetation.

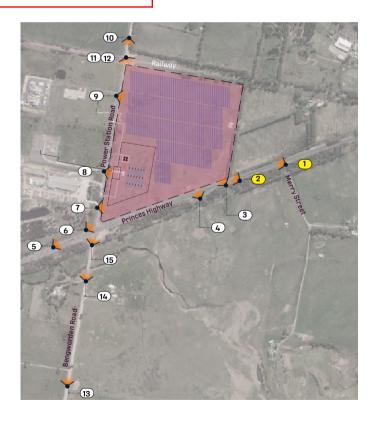
Viewshed 2	Sensitivity	Magnitude	Impact
First glimpse of site towards	Negligible	Negligible	Negligible
west on Princes Highway			



Distant view to the site from high traffic road, partially obscured by existing vegetation.

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Bairnsdale Solar Farm Visual Assessment

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Viewshed 3 Sensitivity Magnitude Impact

Across road from site High High High boundary on Princes Highway.

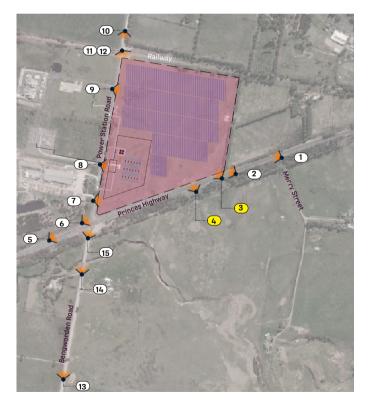


View to the site.

Viewshed 4	Sensitivity	Magnitude	Impact	
Rest area across road	High	High	High	
from site				



Panoramic view to the site.



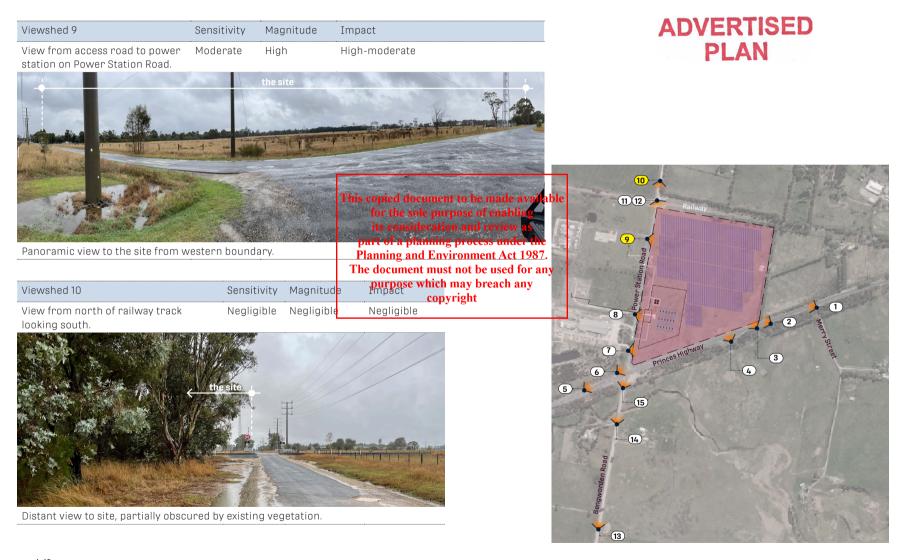
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East Gippsland Shire Council - Agenda
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Viewshed 7	Sensitivity	Magnitude	Impact	ADVERTISED
Looking east into the site from first gravel driveway on Power Station Road.	Moderate	High	High-moderate	PLAN
	The state of the s	the site		
			This copied document to be made as	ailable 10 2 Andrews
View to the site along west			part of a planning process under Planning and Environment Act 19 The document must not be used for purpose which may breach any	987.
Viewshed 8	Sensitivity	Magnitude	Impact copyright	and an analysis of the state of
Looking east into the site from sealed driveway on Power Station Road.	Moderate	Moderate	Moderate	8
		the site		Princes Hidhway  4
			April 1	(E)
Table 1		Adams All		rden Road
View to the site along west	ern boundary, pa	rtially obscured b	oy existing vegetation.	Benguno





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East Gippsland Shire Council - Agenda
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Viewshed 11	Sensitivity	Magnitude	Impact	ADVERTISED
View from railway crossing looking south-southeast to site.	High	High	High 	PLAN
	the site		This capited disconsisters as a successful for the safe me const of enabling its consideration and invites as	lable 11/12 Railway
View to the site.			Planning and Environment Act 198	
			The document must not be used for a	
Viewshed 12	Sensit	ivity Magnitu	de Impact copyright	18 January
View from railway crossing lookir southeast to site.	ng High	High	High	8
	es .	the site		7 princes Highway  6 15
				engworden koad
View to the site.				3

# yonder.

Viewshed 13	Sensitivity	Magnitude	Impact
View from Bengworden Road	Negligible	Negligible	Negligible
looking north.			



10

11 12

(15)

9



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Low

Viewshed 14SensitivityMagnitudeView from Bengworden RoadLowLow

(south of Smiths Creek) looking north-northeast



Distant view to the site, partially obscured by existing vegetation.



East Gippsland Shire Council - Agenda Council Meeting - Tuesday 6 February 2024



#### Attachment 5.1.2.11

Bairnsdale Solar Farm Visual Assessment

Viewshed 15

Sensitivity Magnitude Impact

View from intersection of Bengworden Road and Princes
Highway looking NNE

Sensitivity Magnitude Impact

Moderate Moderate

Moderate

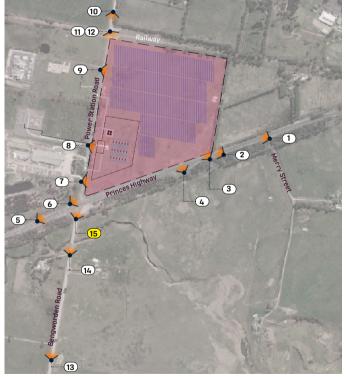


View to the site.

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#### Findings and recommendations

#### Findings

The visual assessment findings are summarised below:

Viewshed	Impact
1	Negligible
2	Negligible
3	High
4	High
5	Negligible
6	Low
7	High-moderate
8	Moderate
9	High-moderate
10	Negligible
11	High
12	High
13	Negligible
14	Low
15	Moderate





#### 5.1.3 East Gippsland Bushfire Recovery Final Progress Report

Authorised by General Manager Place and Community

#### **Conflict of Interest**

Officers preparing this report have no conflict of interest to declare.

#### **Executive Summary**

Council, with support from other agencies, has prepared a fourth Bushfire Recovery Progress Report on recovery actions following the 2019/20 Black Summer fires in East Gippsland.

The Bushfire Recovery Progress Report (**Attachment 1**) outlines achievements and status of the recovery efforts across the bushfire impacted communities of East Gippsland. It incorporates activities and insights from Community Recovery Committees (CRCs), Council, Emergency Recovery Victoria and other agencies such as the Department of Energy, Environment and Climate Action (DEECA) and Parks Victoria.

The report recognises the substantial contributions to recovery from community volunteers and leaders as well as various agencies. It highlights how much has been achieved while also recognising that recovery is a long journey, acknowledging that there is still work ahead. It is also important to acknowledge the compounding impacts on community recovery from other subsequent events, influencing recovery timelines.

The report was developed to document and report on recovery activities as part of our accountability to funding and other stakeholders and to the affected communities. Officers would like to recognise the significant financial and other support provided by both the Victorian and Commonwealth Governments and other entities that has enabled this work.

There are many community members and other entities that have contributed to recovery. While we may not have been able to capture the multitude of projects and activities in the report, all contributions are recognised and appreciated.

The first Bushfire Recovery Progress Report was published in September 2020, followed by updates in May 2021 and October 2022. With four years having passed since the fires, the recovery work is transitioning to a new phase with support for communities including project delivery and preparedness for future events embedded within Council's work program.

As part of this transition, the fourth Progress Report will be the final. This does not mean that recovery activities have concluded or that recovery is complete, and Council will continue to work with other agencies to support community members on their recovery journey.

#### Officer Recommendation

#### That Council

- 1. receives and notes this report and all attachments pertaining to this; and
- 2. recognises the recovery activities outlined in the East Gippsland Bushfire Recovery Final Progress Report January 2024 (Attachment 1) and the significant role of community leadership and funding support from the Victorian and Commonwealth governments.

#### **Background**

The final Bushfire Recovery Progress Report builds on the three previous progress reports (published in September 2020, May 2021 and October 2022)

Highlights of the final progress report include:

- Community-centred Recovery Community Recovery Committees (CRCs) and other
  representative groups continue to play a vital role in the broader recovery, with 10 CRC
  groups actively contributing to local level social recovery, advise and support for major
  upgrades and community recovery plans.
- Social Recovery Community events continue to enhance wellbeing, with 116 funded community events, including 47 through Council's partnership with East Gippsland Community Foundation, taking place across the Shire. Doctor Robert Gorden revisited East Gippsland, presenting at several workshops, discussing well-being and the Stages of Recovery with community and Council staff. Council allocated funds to the Gippsland Primary Health Network to enable continued outreach and trauma counselling by Royal Flying Doctors Service and Relationships Australia Victoria.
- **Built Environment Recovery** Sixteen more private properties have been rebuilt, with steady growth in building and planning permits, since the previous report. Overall rebuilding continues to be slow and impacted by a range of factors including remoteness and building cost escalations. It is expected that support for the rebuilding of private dwellings will continue for some time.

Also, the rollout of committed new telecommunication infrastructure is progressing and there remains funding commitment for additional towers to address mobile black spots.

Successful completion of major infrastructure projects includes Mallacoota Skate Park, Buchan Caves Reserve Linkage, Bruthen Streetscape and Bemm River footpaths. Council is managing the development of the Sarsfield, Buchan and Swifts Creek Recreation Reserves on behalf of the respective communities.

Council has delivered, or is currently delivering, an estimated \$50 million of bushfire recovery capital work projects, including \$39.5 million in government funding. Capital works projects include:

- Rectification works including restoration of assets, financed by insurance and DRFA funds
- Projects that received funding specifically for bushfire affected communities.
- Projects that received stimulus funding in the wake of the Black Summer Fires / COVID 19 pandemic.

There are also significant community facility and infrastructure improvement projects that have, or are being, delivered by communities (e.g., Ensay Recreation Reserve upgrade, Swifts Creek Hall upgrade, community facility upgrades through the Errinundra to Snowy district).

The restoration of impacted Council assets was a focus in the earliest period of recovery and has been included as part of previous progress reporting. These works included road repairs, replacement of impacted timber bridges and foreshore and airport infrastructure. Other agencies similarly delivered works to replace or restore impacted public assets although some visitor assets on public land are yet to be replaced.

- Aboriginal and Cultural Healing Recovery Emergency Recovery Victoria (ERV)
  published the Strategy for Aboriginal Community-led Recovery, a comprehensive report
  providing an approach to realise culturally responsive recovery. ERV facilitated the Local
  Aboriginal Bushfire Recovery Planning Workshop, which helped inform Council
  Emergency Management project development dedicated to outcomes for the Aboriginal
  community.
- Economic Recovery 929 businesses have accessed initiatives providing case
  management support in the four years since the fires. Further assistance was available
  for agribusiness, including the successful Youth Agri-Tech Forums, which aimed at
  encouraging young people to consider careers in agribusiness. Eight of the 13 projects
  funded by the Local Economic Recovery (Economic Stimulus) Program are now
  complete, including the new building Tambo Valley Honey in Bruthen and the rebuilding
  of the Mallacoota Abalone Limited Processing Facility.
- Natural Environment Recovery The East Gippsland Catchment Management Authority completed over 730ha of weed control in fire-affected areas since the last report, with a cumulative total of over 2,300ha completed since the fires. Furthermore, Council's weed management program along the foreshores of Mallacoota identified and effectively treated 15 invasive species. Recognising the potential impact of a changing climate on the natural environment and our communities, Council has implemented the Environmental Sustainability Strategy 2022-2032 including the dedicated goal "Community resilience to respond to increasing climate risk and natural disaster", ensuring ongoing commitment to effectively manage the natural environment.
- Planning for Future Events Substantial work to improve Assembly Areas and Emergency Relief Centres has taken place to better prepare against future events including the extensive roll out of Commonwealth funded STAND systems for improved digital connectivity and facility upgrades through the Local Economic Recovery grants totalling \$1,043,955. Council developed 44 Local Incident Management Plans for districts across the shire, as well as supported the community to deliver Preparedness Days, and similar initiatives, alongside other agencies.

#### Legislation

As of 1 July 2021, all provisions of the *Local Government Act* 2020 commenced. Some provisions of the *Local Government Act* 1989, that have not been repealed, will remain applicable until such time as they are revoked.

Under the State Emergency Management Plan, municipal councils are responsible for coordination of recovery at a local or municipal level.

The implications of this report have been assessed and are not considered likely to breach or infringe upon the human rights detailed in the Victorian Government's Charter of *Human Rights and Responsibilities Act* 2006.

The implications of this report have been assessed and align with the principles and objects of the *Gender Equality Act* 2020.

#### **Collaborative procurement**

Not applicable.

#### **Council Plan**

This report has been prepared and aligned with the following strategic objectives set out in the Council Plan 2021-2025:

Strategic Objective 1: 1.3 Community groups and volunteers are acknowledged, promoted and supported.

Strategic Objective 1: 1.4 Through targeted services, partnerships and advocacy, communities enjoy strong mental and physical health, well-being and resilience.

Strategic Objective 2: 2.3 Planning with local communities for natural disasters and emergencies strengthens capacity, infrastructure, resilience, preparedness, and recovery.

Strategic Objective 5: 5.2 Strong relationships with government, partners and stakeholders are maintained and strengthened to advocate for the community.

Strategic Objective 5: 5.3 Communities are engaged in decision-making and support is provided to develop local solutions to local issues.

#### **Council Policy**

Not applicable

#### **Options**

Not applicable

#### Resourcing

Financial

There are no financial implications associated with this report.

Plant and equipment

There are no plant and equipment implications associated with this report.

Human Resources

There are no human resource implications associated with this report.

Risk

The risks of this proposal have been considered and are assessed to be low.

#### **Economic**

The Final Progress Report describes the significant work undertaken by Council, other agencies, and community to support the economic recovery of East Gippsland following the 2019/20 Black Summer Fires.

#### Social

The Final Progress Report describes the significant investment by Council, Bushfire Recovery Victoria, other agencies and community to support the social recovery of communities and individuals following the 2019/20 Black Summer Fires.

#### Gender Impact Statement

This report has considered the Gender Equality Act 2020 in its preparation and has been assessed as not requiring a Gender Impact Assessment (GIA).

#### **Environmental**

The Third Progress Report describes work undertaken by land management agencies to support recovery of the natural environment following the 2019/20 Black Summer Fires.

#### Climate change

This report has been prepared and aligned with the following Climate Change function/category:

- Community Risk: Climate change is considered as a community risk and includes responses to direct and indirect impacts.
- Emergency Management: Consideration is given to climate change in all elements of the Planning, Preparation, Response, Recovery (PPRR) process.

#### **Engagement**

The Final Progress Report describes the significant engagement with community in supporting bushfire recovery. In particular, the report describes the work of the Community Recovery Committees and the work of Council and other agencies to support these.

#### **Attachments**

1. East Gippsland Bushfires Final Progress Report January 2024 [5.1.3.1 - 54 pages]

East Gippsland Bushfires 2019/20 Final Progress Report January 2024





# **Version control**

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Author	East Gippsland Shire Council
Document status	Authorised
Version	1

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# **Publication details:**

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# Acknowledgement of Country

East Gippsland Shire Council acknowledges the Gunaikurnai, Monero and Bidawel people as the Traditional Custodians of the land that encompasses East Gippsland Shire, and their enduring relationship with Country. The Traditional Custodians have cared for and nurtured East Gippsland for tens of thousands of years. Council values their living culture and practices and their right to self-determination. Council pays respect to all Aboriginal and Torres Strait Islander people living in East Gippsland, their Elders, past, present and future.

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# Message from the CEO

This marks the fourth and final progress report detailing the advancements in the recovery efforts following the 2019/20 bushfires. Although it signifies the culmination of our progress reports, we acknowledge that recovery is an ongoing process that doesn't simply come to an end. The commitment of Council to assist communities in their recovery remains unwavering for this event and subsequent events.

Our communities, along with the invaluable support of Community Recovery Committees and representative groups, have made remarkable strides, with many of the identified priority actions delivered. However, not all aspects of the recovery process have reached completion. Rebuilding homes, strengthening social connections, and revitalising community and public infrastructure in the aftermath of such a catastrophe is a lengthy journey.

It's crucial to acknowledge that out of the 346 homes lost, only 66 have been rebuilt. While a significant portion of those affected by the disaster have relocated, there is still a need to support those in the process of rebuilding or who have yet to make their decisions.

Looking toward the future, recent events in October 2023 saw East Gippsland facing bushfires and floods within a single week. While such challenges are never easy, Council and our communities are better prepared than in previous years. More work lies ahead, but we have comprehensive plans and actions in motion.

Our strengthened emergency management arrangements position us for a more resilient future. Approaching almost four years since the fires, Council is now in the process of transitioning its current recovery model into an enduring framework for community development and planning. Further details on this transition are provided in the report.

The journey of recovery has been long and arduous, one we fervently hope to never repeat. We take immense pride in the contributions of everyone who has played a role in supporting our shire, with a special mention to the dedicated volunteers within the Community Recovery Committees and representative groups. The achievements and future plans of these groups are elaborated on in this report, beginning on page 14.

It is important to recognise that recovery efforts have been dependent on financial contributions from all levels of government as well as numerous organisations that have provided and continue to provide funding and other support for recovery.

In closing, I extend my gratitude to all our partners who have joined us on this recovery journey.

**Anthony Basford**Chief Executive Officer

# Introduction

This report marks the fourth and final recovery progress report in response to the East Gippsland Black Summer bushfires of 2019/20. It serves as a summary of the actions taken to address community needs and priorities, as identified through extensive engagement with affected communities and individuals. Building upon the progress outlined in East Gippsland Shire Council's October 2022 report, this document provides insights into the ongoing recovery process and outlines future directions.

While the primary focus of this report is on the recovery from the 2019/20 fire event, it is important to acknowledge the compounding impacts on community recovery resulting from subsequent events. Since the fires, East Gippsland has navigated various challenges, including but not limited to, the impacts from COVID-19, flooding, storm damage, as well as the Victorian Government decision to transition from native forestry for some districts. These events have influenced social recovery and the broader rebuilding effort.

Council extends its appreciation for the funding opportunities provided notably by the Victorian Government through Emergency Recovery Victoria (ERV), previously known as Bushfire Recovery Victoria (BRV), and the Commonwealth Government through the National Emergency Management Agency (NEMA), and other agencies. These contributions have enabled Council to deliver dedicated community recovery initiatives.

This report, developed by East Gippsland Shire Council (Council), incorporates valuable input from key recovery partners who have collaborated closely with Council to compile this report. Their contributions ensure a comprehensive and informed assessment of the recovery journey in bushfire-affected areas in East Gippsland.

# **Purpose**

This fourth and final report is intended to offer stakeholders, including communities, agencies, volunteers and government entities, an overview of the recovery efforts undertaken in response to the East Gippsland 2019/20 Bushfires, while also highlighting developments since the October 2022 Third Progress Report. Additionally, it provides visibility into the contributions of the Community Recovery Committees and representative groups, serving as a comprehensive record of our collective efforts in the recovery process.

**Bushfire Recovery Final Progress Report 2024** 

6

# Impacts of the Black Summer bushfires

In the summer of 2019/20, East Gippsland faced an unprecedented natural disaster caused by lightning strikes that ignited multiple fires across the region. These fires, which raged throughout the summer months, presented significant challenges due to their extensive scale, prolonged duration, and far-reaching societal and economic effects.

The initial fires started on November 21, 2019, in remote and challenging terrains, making containment efforts difficult. Subsequently, several fires merged of great magnitude, affecting Gippsland, the North East, and neighbouring New South Wales.

As the year ended, dry lightning ignited new fires west of Mallacoota, culminating in a catastrophic blaze on New Year's Eve, amid extreme fire and weather conditions. On 2 January, 2020, then Victorian Premier Daniel Andrews declared a State of Disaster under the provisions of the Victorian Emergency Management Act and a few days later advice from the then Victorian Emergency Management Commissioner, Andrew Crisp, was urging holidaymakers to leave East Gippsland.

Arterial roads were closed, communities became isolated, and a collaborative effort involving the Australian Defence Force, Victoria Police, East Gippsland Shire

Council, and other government agencies was launched to provide emergency aid and evacuate residents and holidaymakers trapped by the fires.

Adding to these challenges were the pre-existing issues of drought and economic changes, notably in the timber industry.

On April 2, 2020, East Gippsland officially entered the recovery phase, with East Gippsland Shire Council and Bushfire Recovery Victoria (now Emergency Recovery Victoria) taking charge of recovery coordination. The East Gippsland Recovery Committee (EGRC) played a key role in managing recovery efforts.

# Recovery coordination and progress

Following April 2020, recovery coordination adapted to meet changing community needs, considering available resources, funding, and recovery priorities of various stakeholders. In September 2021, the EGRC held its final meeting with Council and Bushfire Recovery Victoria continuing to collaborate in the coordination efforts.

Throughout 2021 and 2022, numerous priority recovery initiatives by agencies and organisations were successfully implemented, and the dedicated work of sub-committees and working groups moved closer to completion. Detailed information on these actions are available in the Progress Reports released in September 2020, May 2021, and October 2022.

### **Future recovery arrangements**

From March 2024 and further into 2025, Council will commence transitioning its recovery model. Many of the government structures and arrangements in place from early 2020 have transitioned and the levels of resourcing and services of many recovery agencies or departments including Emergency Recovery Victoria have reduced.

Recovery teams have remained within Council across Economic Development, Rebuild Support Service, Community Recovery and Bushfire Recovery Coordination. Much of the support provided by Council has been made available through the receipt of State or Commonwealth Government grant funding for recovery support initiatives.

Remaining funds are being allocated based on an understanding of the needs of our communities, as CRCs or representative groups finalise the delivery of their priority recovery projects and activities.

Each CRC or representative group is also making its own decision to either continue their work, form new structures, wind down or transition. An essential aspect of the recovery process has been for all levels of government to support the ability of communities to advocate for their own requirements and priorities.

Council is committed to ensuring the committees and other groups established as part of the recovery process are supported to continue as part of the ongoing wellbeing of each community.

The knowledge obtained by the CRCs and representative groups on their communities, unique challenges, resources and capacities will inform how Council will work with communities beyond the current focus of recovery.

# **Community-centred recovery**

# Community Recovery Committees and representative groups

Community Recovery Committees (CRCs) and representative groups remain integral to the recovery efforts across East Gippsland with 10 groups continuing to operate since the fire. The CRCs and their members have undertaken a diverse range of community recovery projects and activities since their conception. Council acknowledges the work these groups have done and the significant contribution they have made to their communities' recovery and future resilience. Further information on the work of the CRCs and the representative groups, can be found starting on page 14.

#### **CRC Link-up**

The 'CRC Link-up', a group of CRC and Representative Group members, has continued to meet regularly since the 2019/20 bushfires with the secretariat support provided by Council.

Independent facilitator, Peter Williams volunteered to support this dedicated group. In May 2020 as COVID-19 took hold Peter was approached by the lead of Community Engagement for the then, Bushfire Recovery Victoria, who were looking to facilitate digital ways of communities being able to connect. Peter ran a successful workshop with emerging CRC leaders valuing the connection with other CRCs and governments agencies. Since the workshop, Peter continued to volunteer and take on the role as independent facilitator.

"Everything I do is voluntary because I am a community advocate and if I was getting paid, I would no longer be independent. Throughout Black Saturday we received support from many people who had previously experienced disasters, and this was an opportunity for me to pay it forward, where it can help".

During 2023 in addition to online meetings, the Link-Ups were held face to face at Wairewa, hosted by the Wairewa CRC, at the Tambo Crossing Community Centre hosted by Tambo Crossing community members and Orbost Golf Club hosted by the Orbost District Community Recovery and Transition Committee. Face to face meetings at community venues enabled valuable networking opportunities, which allowed hosts to share information on their recovery journeys and showcase infrastructure rebuilding and new developments in the community.



Wairewa Road Railway Bridge, Wairewa



CRC members, Tambo Crossing
Community Facility





CRC members with Certificates of Appreciation, presented by Council at the CRC Link-up Meeting 10 November 2023, Orbost

# Community impacts and recovery committees

#### **Bruthen District**

Bruthen, Wiseleigh, Mossiface, Fairy Dell and Double Bridges Bruthen district, home to around 2,100 residents, faced a daunting trial during the 2019/2020 bushfires. Sixty-six percent of its land area was consumed by flames, resulting in the destruction of several dwellings in Wiseleigh. The district grappled with the threat of flames for three months, enduring economic impacts, and losing power, telecommunications, and water services during the crisis. In response, the Bruthen Community Recovery Committee was established. This committee, operating within the Bruthen and District Citizens Association, serves as a steadfast advocate for individuals navigating the path to recovery while diligently crafting a comprehensive recovery plan.

### **Buchan District**

Bete Bolong North, Buchan, Buchan South, Butchers Ridge, Gelantipy, Murrindal, Suggan Buggan, W Tree, Wulgulmerang, Wulgulmerang East and Wulgulmerang West Buchan, Gelantipy, and the surrounding district, home to approximately 460 residents are focusing on the restoration of community life and the preservation of the natural environment. In response to the bushfire, the Buchan, Gelantipy & Districts Renewal Association (BGDRA) emerged. This representative group united the voices of the community, voicing recovery needs, and guiding individuals and the collective toward a brighter future. Their relentless efforts culminated in the creation of a Community Renewal Plan, striving for the betterment of the entire community.

# Cann Valley District

Cann River, Noorinbee,
Noorinbee North, Tonghi
Creek, Buldah, Chandlers
Creek, Club Terrace,
Combienbar, Tamboon South,
Tamboon/Peach Tree/Furnells
Landing and Wingan

The Cann Valley district comprises many smaller communities, with a total population of around 380 people. Ninty-two percent of the land area succumbed to flames, resulting in the destruction of 25 dwellings. The need to evacuate Cann Valley residents was felt significantly by many. The challenges multiplied with the closure of highways to all communities for five weeks in January 2020, along with power and telecommunications losses. COVID-19 lockdowns and border closures further burdened the district, acting as the junction point for two highways entering Victoria from New South Wales. Responding to the fires, the Cann Valley District Representative Group (CVDRG) emerged, offering support and advocating for the community's needs.

### Clifton Creek District

Clifton Creek, Waterholes, Deptford and parts of Granite Rock Clifton Creek, with approximately 270 residents, and its outlying settlements of Waterholes, Deptford, and Granite Rock faced the destruction of 60% of their land area during the bushfires. Thirteen dwellings, 329 kilometres of fencing, and the Clifton Creek Primary School were lost. Responding to the crisis, the Clifton Creek Community Recovery Team (CCCRT) was born. This dedicated team operates with the best interests of the entire community at heart, regularly convening to support the district's recovery. Volunteer members can structure their time on the committee around other commitments.

# Errinundra to Snowy District

Bendoc, Bonang, Cabanandra, Deddick Valley, Delegate River, Dellicknora, Haydens Bog, Tubbut, Goongerah In the Errinundra to Snowy District, home to 341 residents across 208,905 hectares, substantial old-growth and native forests, along with vital wildlife habitats, fell victim to the 2019/20 bushfires. Thirty-nine percent percent of the land area was scorched, resulting in the destruction of 19 dwellings and cutting off roads, power, and communications for many weeks. The COVID-19 further exacerbated the impacts on these isolated communities. Responding to these challenges, the Community Recovery Committee emerged, offering support and assistance to meet the community's needs.

# Mallacoota District

Mallacoota, Genoa, Wangarabell, Maramingo Creek, Wallagaraugh, Gipsy Point and Wroxham River Mallacoota and District, home to approximately 1,161 residents, bore the brunt of the devastating Black Summer fires. A staggering 83% of the land area was consumed by flames, resulting in the destruction of 123 homes and the tragic loss of a life in the Genoa district. The only road in and out of town was closed for 39 days, leading to over 1,500 residents and visitors being evacuated by the Australian Defense Force. The economic impact was profound, compounded by the challenges posed by COVID-19. The toll on flora and fauna continues to exact an emotional and psychological toll on the community.

In the immediate aftermath of the fires, a group of community-minded individuals formed a 'Thinking Group,' taking proactive steps to collect ideas and skills for a community-led recovery. This initiative received support from recovery mentor, Steve Pascoe. Following extensive community consultation, the Mallacoota and District Recovery Association (MADRA) was established, growing to include over 780 members. This proactive group conducted a Snapshot Survey to gather initial community feedback, which has since informed the locally led recovery process. The 12 members of the first iteration of the MADRA Committee were elected through an independent election overseen by the Victorian Electoral Commission on 21 May 2020. The second iteration of the MADRA committee was elected at the first MADRA AGM on the 17 August 2021. MADRA's dedicated members worked tirelessly to pave the way for a stronger future.

## Omeo Region

Omeo, Swifts Creek, Benambra, Ensay, Ensay North, Brookville, Cassilis, Doctors Flat, Hinnomunjie, Livingstone Valley, Omeo Valley, Reedy Flat, Glen Valley, Cobungra, Shannonvale, Bingo Munjie, Tambo Crossing, Tongio, Anglers Rest, Bindi, Uplands, and Bundara The Omeo District, with a population of around 1,437 residents and a vast expanse of nearly 600,000 hectares, faced multiple challenges with 30% of the land area engulfed in flames, leading to the loss of 15 houses and 36 sheds. The economic impacts reverberated throughout the community as road access, power, and telecommunications were disrupted for extended periods. Reliable access to power, communication, and roads remained elusive.

In response, the Omeo Region Community Recovery Association (ORCRA) emerged in June 2020, committed to supporting and guiding community-led recovery. The group successfully became incorporated and invited community members across the Omeo District to join their ranks. Despite the challenges posed by COVID-19, face-to-face gatherings became possible towards the end of 2021, through support from Regional Development Victoria Grants. The association's resilience survey identified five priority areas: reliable power and communications, road access, fuel management, and mental health. Working groups have been diligently organising workshops to address these critical areas, bringing the community one step closer to stability.

# Orbost District

Orbost, Newmerella, Marlo, Bemm River, Cabbage Tree Creek, Jarrahmond, Brodribb River, Corringle, Lochend, Simpsons Creek, Waygara, Bellbird Creek, Cape Conran, Manorina, Sardine Creek, Murrungower, Tabbara, Sydenham Inlet The Orbost District, home to 3,889 residents, saw 76% of its land area consumed by flames in 2019/2020. Surrounding national parks also witnessed the loss of numerous flora and fauna species. The local economy, already grappling with timber industry changes, faced additional challenges due to limited summer trading. Communities endured telecommunication and power losses during the fire events while remaining under constant threat for three months.

Responding to the crisis, the Orbost District Community Recovery and Transition Committee (ODCRTC) emerged. Born from the fires and the impacts of timber industry transition resulting from the Victorian Forestry Plan, this committee has played a pivotal role in supporting the community during its journey toward recovery.

### Sarsfield

Sarsfield District saw 49% of its land area engulfed in flames and the destruction of 77 dwellings. Communities lost power and telecommunications, and over 130 residents were displaced and an overwhelming 72% of the 276 homes in the area suffered damage.

The Sarsfield Recreation Reserve and Hall Committee stepped up to support the community during and immediately after the fires. In August 2020, the Hall Committee established a dedicated recovery committee known as the Sarsfield Community Association. This committee has worked tirelessly, organising sub-groups to plan, support, and deliver various recovery priorities and projects, fostering unity and hope in the district.



Wairewa, with a population of 87 residents, witnessed the devastation of 86% of its land area. Eleven dwellings were destroyed, and the community endured severe stress and anxiety due to direct flame impact. Many lost their livelihoods, including fruit, vegetable, olive, beef, and dairy producers. Extensive stock losses added to the challenges faced by this close-knit community. Roads, power, and telecommunications were cut off for an extended period, and the iconic O'Grady's wooden trestle bridge sustained significant damage.

In response, the Wairewa Community Recovery Committee (WCRC) emerged as a small yet cohesive group dedicated to meeting the community's needs and supporting personal recovery efforts.





# **Bruthen District**

# Progress so far

In a testament to community resilience and engagement, the Bruthen District Community Association (BDCA) saw a successful Annual General Meeting in June 2023. All positions were filled, and the membership increased. The Bruthen District Community Recovery Committee (BDCCRC) with community feedback and existing plans were able to create their Priorities Document. This document was reviewed in January 2023, with most identified actions either completed or in their final stages.

Bruthen's physical landscape has seen remarkable changes. The **Bruthen Streetscape Project**, facilitated by Council, is nearing completion. Features include the **Yarning Circle**, additional parking, traffic improvements, increased seating areas, natural materials and rock walls and gardens. The remaining new public toilets will enhance community amenities. The public toilet at Lions Park, delivered by Council in partnership with the Bruthen Lions Club, serving visitors to the popular skatepark, playground and BBQ area.

The Bruthen Recreation Reserve Upgrade Project has been adapted to maximise improvements within its budget, encompassing upgrades to toilets, additional female facilities, and enhancements to netball and tennis courts. Despite a two-year setback due to the pandemic, this community-led endeavour is expected to reach completion by the end of 2024.

- 66 Good progress is pleasing to note. The finalisation of the streetscape upgrade, when it is finally completed, means the township can look forward to renewing its five-year plan and continued improvements. It is the new starting point for other opportunities for strategic town developments.
  - James (Nico) Nicholas, treasurer of Bruthen District Citizens' Association and Community Recovery Committee



Bruthen's business scene has thrived with the Council's Pilot Business Boost program. The Business Façade Upgrade program has also boosted the town's commercial appeal. Cultural and social vitality flourishes, with events like the Winter Festival, Spring Festival, and a variety of affordable performances through Regional Arts Victoria.

The Bruthen District Neighborhood House (BDNH) secured funding for youth-led projects, children's holiday programs, community events, and training. Initiatives tailored for young mothers and infants have been launched, and consultations with local farmers are ongoing to address their needs. There have been successful funding applications for projects like the Bruthen Mechanics Hall kitchen upgrade, with an application for further funding for a new roof underway. Additionally, the Mossiface Hall upgrade has made substantial progress, with additional funding applications and further improvements in the pipeline. The Bruthen Neighbourhood House and Bruthen Recreation Reserve Caravan Park have been identified for extension and upgrade and a brief has been developed to obtain design and costings.

Contributing to being prepared for future emergencies The Local Incident Management Plan (LIMP) flyer was reviewed, reprinted and sent to all residents.

### Looking to the future

As we move forward, the BDCCRC has integrated back into BDCA. They will continue to access support for community events and infrastructure as appropriate and will be ready to stand up for future emergency events. Importantly, the BDCA is eager to embark on its next five-year Community Plan, in consultation with the community.

**Bushfire Recovery Final Progress Report 2024** 

# **Buchan District**

# Progress so far

In response to the bushfires the Buchan, Gelantipy & Districts Renewal Association Incorporated (BG&DRA Inc.) emerged. Comprising individuals and members from local community groups, this association was founded with the primary mission of representing the community's recovery needs to government authorities. Their dedication extended to helping individuals and the entire community in rebuilding their lives with renewed purpose.

BG&DRA Inc. has continued to make significant strides in its commitment to the community's well-being. Simultaneously, they are working towards boosting economic activity within the district.

BG&DRA Inc. has been instrumental in nurturing a vibrant community spirit through Family Fun Days and AGM celebrations. It actively seeks opportunities for economic growth, aligning with the district's Tourism Opportunity Plan. The association has played a pivotal role in supporting the Project Reference Group; comprising members from local sporting clubs working with Council in the delivery of the Buchan Recreation Reserve redevelopment and endorsing funding for community events like the East Gippsland Winter Festival.

The Buchan District has also hosted a number of recovery-support events and helping community members and businesses tap in to new opportunities and access services.

- Bushfire Rebuild Support Service in addition to access to the Concierge and Building Advisory Services in conjunction with Emergency Recovery Victoria (ERV).
- Access to the Builders Incentive and Trades
   Accommodation programs for people in
   Buchan (and the North East) as part of the
   housing rebuild pilot project.
- Succession Planning EXPO focusing on Family, Farm, Finance, Future.
- STAYS EXPO; agritourism event supporting visitor accommodation options in for the area.
- Destination branding working closely with the Buchan Business and Tourism Association.
- Enterprise Facilitation with local start up and existing businesses via the Business Boost.



Furthermore, BG&DRA Inc. is championing economic and infrastructure development for the community through its support for the Main Street and Linkages Project, aiming to enhance footpaths, parking, landscaping, and the installation of an EV Charging Station. The BG&DRA continue to strongly advocate for improving disaster recovery service delivery models in rural and remote areas.

The BG&DRA support localised fire preparation priorities, community preparedness and activations to develop community resilience by securing funding to:

- Engage a Wellbeing Support Officer based at the Buchan Bush Nurses Centre to support long term planning for increased Mental Health and Wellbeing services for the Buchan District and wider communities.
- Upgrade community facilities at the Buchan Mechanics Hall, the Buchan Recreation Reserve, the Gelantipy Hall and the Wulgulmerang Recreation Grounds to revitalise the facilities and reinforce community connectivity.
- Provide a community owned generator at several locations including the Buchan Valley Roadhouse and Buchan Recreation Reserve.

### Looking to the future

BG&DRA continues to advocate for funding and endorse support for:

- A five-year Community Renewal Plan which strives for the betterment of community.
- Installation of an RV Dump Point.
- Planning and design of a Nature Based Play Space.
- Efforts to develop and increase tourism to the district (beyond the Buchan Caves).
- The continued exploration of community enterprise and renewable energy initiatives.

**Bushfire Recovery Final Progress Report 2024** 

# **Cann Valley District**

# **Progress so far**

In the Cann Valley district, the third iteration of the Cann Valley District Representative Group (CVDRG) has been working tirelessly to champion recovery needs and has achieved notable progress.

Initiated by CVDRG, the restoration of the Monaro Centre, formerly the Noorinbee Winery, is near completion. This project provides a space for diverse recreational, social, and educational activities for Cann River residents and the surrounding community. Plans are well under way to transform the Mick Baum Skate Park. The project, facilitated by Council, will upgrade the well-loved site into a modern, inviting facility that promises joy and excitement for the Cann River community and visiting tourists for years to come.

CVDRG initiated a feasibility study to explore the construction of a larger dam at the rear of the school and recreational reserve. The goal is to improve water access and enhance the area with beautiful gardens, picnic tables, and other amenities. CVDRG has also updated and issued Local Incident Management Plans to ensure efficient coordination and communication among various response agencies during emergency situations.

The Committee alongside the Council and other organisations have played a pivotal role in ensuring the availability of communication infrastructure and equipment during extreme weather events. The distribution of UHF radios to outlying areas and advocacy for additional water tanks in public spaces enhance readiness during emergencies. CVDRG has actively contributed to the development of the Club Terrace Community Facility, which is well under way and expected to be completed within approximately the next six months. The installation of the Strengthening Telecommunications Against Natural Disaster (STAND) system in the Club Terrace community is an important achievement to note.



Singing and sound healing - Cann Valley



CVDRG has contributed to numerous community gatherings, including the Healing Singing Day, Tree Grafting, Lantern Making Workshops, and Cann Valley Winterfest 2023. These activities received high attendance and participation from the local community and visitors, showcasing local attractions and boosting tourism and economic activity in the area.

# Looking to the future

The CVDRG has outlined an array of promising future plans for the Cann Valley district, with several already in progress:

- Enhancing tourism: While Council provides routine maintenance at the free temporary stay Cann River Rainforest Campground, the CVDRG continues to look for opportunities to improve this important facility for the local economy. This is supported by improvement in street parking, delivered by Council with funding support from the Commonwealth Government.
- Point Hicks Bridge: The CVDRG continues to advocate for this important infrastructure to be replaced.
- Waste transfer station: Planning for the new Waste Transfer Station location is in progress, including arrangements for a temporary facility, with CVDRG and Council working diligently to address all facets of the facility effectively.
- Sprinkler system installation: The CVDRG is supporting the installation of a sprinkler system on the SES and Ambulance Buildings.
- Relief Centre training: CVDRG recently supported relief centre training for community volunteers, enhancing readiness and response capabilities in times of need.

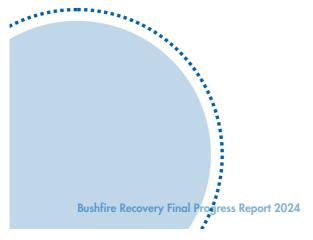
# **Clifton Creek District**

# Progress so far

In the wake of the bushfires, Clifton Creek and its neighbouring communities, including Waterholes, Deptford, Granite Rock, and parts of Wy Yung, rallied together to rebuild and recover. This united effort started the Clifton Creek Community Recovery Team, a collective comprising members from five existing local organisations, including the Clifton Creek Hall and Recreation Reserve Committee of Management, Clifton Creek Primary School, two Landcare groups, and the Tennis Club.

The Recovery Team, aided by dedicated community volunteers, accomplished significant milestones that fostered community engagement for mental and emotional recovery. Infrastructure received an upgrade with the creation of a new outdoor stage at the Recreation Reserve, poised to host future music events. The community also enhanced its firefighting capacity through advocating for a satellite CFA shed and the installation of four Static Water Tanks. Efforts were made to protect and rehabilitate biodiversity and advocate for better fire management on public lands. Advocacy extended to enhancing community safety through improved mobile network and internet coverage.

Memorable events like the Sandhill Ashes cricket match against Sarsfield brought neighbours together in the spirit of camaraderie. In October 2022, the Clifton Creek Community Recovery Team organised a grand celebration known as the "Big Bash". This event was a heartwarming gathering that united the entire community and those who contributed to the recovery journey. It featured music, food, artists, entertainment for children and more.





### Looking to the future

At the end of 2022, the Community Recovery Team reintegrated into their respective organisations, confident in the success of their collaborative model should the need ever arise again. While the pace of activities may have slowed, ongoing projects include community check-ins facilitated by a consultant and smallgroup discussions to ensure everyone's voices are heard while finalising the community and recovery plan. Several projects remain, including the installation of shade sails over the playground and the completion of the permaculture community garden at the Hall and Recreation Reserve. A bi-monthly newsletter continues to promote community togetherness through various events like free tennis lessons, tree grafting workshops, supported playgroups, Landcare activities, and photos amidst fields of sunflowers, intentionally planted to bring joy to the community.



Clifton Creek – 2023 winners of the Sandhill Ashes cricket match

# Errinundra to Snowy District

# Progress so far

The Errinundara to Snowy (E2S) Community Recovery Committee (CRC) adopted the 2019 Errinundra to Snowy Community Plan as its Recovery Plan. The Community Plan was already responding to the issues of being remote and underserviced, issues that were exacerbated as a result of the bushfires. The E2S CRC has met monthly committing to plans that build resilient, social, built and natural environments.

Significant work has been achieved in the following areas:

- Improved Road Safety and Amenities Community working with Regional Roads Victoria, DELWP and others to fully seal the Bonang Road. Optimisation of community halls and retired school buildings has occurred to provide safe resources for a range of social and community activities. Council facilitated the Commonwealth funded STAND communications equipment. CRC has implemented climate control and access improvements under the Priority Projects program. Tubbut have community Goongerah accommodation in former school buildings and Goongerah has created a co-working space in an old school demountable.
- Improved local access to health care and wellbeing services Three Wellbeing Spaces (Service Hubs) have been created, appropriately equipped for in-person and virtual consultation including IT and Microsoft HoloLens augmented reality software. Funding has been granted by the Gippsland Primary Health Network for a 21-month pilot program in partnership with Orbost Regional Health run by a Nurse Facilitator. The pilot will be professionally evaluated through State Funding and adapted with the intention of seeking funding to continue the program long-term.
- Established and/or improved telecommunications and internet access While there are still large areas of the district without internet or mobile phone access, coverage and access has been boosted at a number of community infrastructure sites on a time limited basis, according to available funding and



program delivery. The community is continuing to work toward equitable and reliable telecommunications and WiFi access.

 Promoted nature- based tourism and a sustainable economy - The community have succeeded in the restoration of the Old Growth Walk trail and signage with Friends of Errinundra. Supported Easter Citizen Science Camp 2023 with Goongerah Environment Centre.

Boosted social resilience and community connection - Four community gatherings have been held in 2023, to bring people together, rekindle community spirt, address areas of community interest and link to relevant services including "Our Future – Building Possibilities", "Go Deep into the Wild East" nature based tourism, a "Wellbeing lunch" at Tubbut Neighbourhood house and the Big Bonang Arvo to launch the Wellbeing spaces.

### Looking to the future

Looking ahead, the Errinundra to Snowy District is invested in developing a nature-based tourism economy. Including guides and signage, infrastructure improvements for accommodation and camping, advocacy for the Emerald Link and the Sea to Summit trail, and fostering small businesses and employment opportunities in hospitality, tour leadership, and environmental education.

The future holds promise of the Resilience Centres Partnership - projects to adapt or expand infrastructure at community halls, ensuring supplies of power, water, and food during emergencies.



Testing the mixed reality HoloLens headsets, Big Bonang Arvo - Errinundra to Snowy

# **Mallacoota District**

# Progress so far

In the Mallacoota district, the fourth iteration of the Mallacoota and District Association Inc. (MADRA) has been unwavering in advocating for recovery needs and accomplishing significant milestones. The Fuel Management Working Group have ensured information and resources have been shared to develop fire risk reduction strategies and ongoing educational and awareness campaigns play a pivotal role in fostering a culture of fire safety. Consistent dialogues with landowners and regular fuel reduction maintenance near vital infrastructure contribute to reducing fire hazards.

MADRA worked with Council and local organisations to redevelop the Mallacoota Skate Park. The park caters to all ages, offering a space for play, learning, and social inclusion through active recreation. The skate park, in combination with the Mallacoota Hall Upgrade, also Council managed, will ensure a vibrant community space for years to come.

The upgrade of the Mallacoota Mudbrick Pavilion has commenced, bringing excitement to the community. This pavilion has been a beloved space for various events and gatherings, and the aim is to enhance its facilities and functionality for the community to enjoy for years to come.

Other significant community-led infrastructure projects include the Mallacoota Gun Club, Mallacoota Pony Club and the Mallacoota Golf and Country Club.

A sub-committee of MADRA collaborated with Council's Bushfire Rebuild Support Service (RSS) and a consultant to tailor solutions for residents facing unique complexities around rebuilding that need to be addressed to move forward. In alignment with previous commitments, MADRA played a pivotal role in partnering with Homes Victoria to secure the first block of land for four affordable housing units, currently in construction off-site. Work on the second and third block will commence in the near future.



MADRA initiated the completion of community engagement postcards. These cards serve as valuable tools for gathering insights and feedback from residents, allowing them to articulate their desires and visions for the area's future development. MADRA also facilitated a series of 'Sunday in the Soup' sessions, aimed at supporting social recovery and engagement within the ongoing recovery work. Red Cross, in collaboration with MADRA, facilitated the RediCommunities project, uniting key agencies and the community to evaluate community strengths, risks, and capabilities to build emergency response capacity.

MADRA, in conjunction with the community, advocated for the expansion of the Timber Milling Project to include Mallacoota and the district. This project repurposes fallen timber from fire activity, milling it into usable timber for reconstruction. In the telecommunications sphere, Telstra has upgraded the Mallacoota mobile network, and MADRA has received assurance that a new tower for the Gipsy Point region is nearing delivery.

### Looking to the future

Thanks to the relentless efforts of the Committee, Parks Victoria is in the final stages of regulatory processes to ensure the replacement or upgrade of all jetties by the end of 2024.

MADRA has recently engaged in a strategic planning process, supported by a consultant, to consolidate succession planning, prioritise remaining recovery aspirations, and chart the future and strategic direction of the Committee. MADRA looks forward to the future ahead, further endeavours and the greater well-being of the Mallacoota community.

# Omeo Region Progress so far

The Omeo Region Community Resilience Association (ORCRA) has been steadfast in pursuing its seven priorities from the 2021 Resilience Plan. The comprehensive plan comprises seven individual Community Emergency Plans. These plans articulate community expectations of agencies during emergencies and define roles that communities can undertake. This plan found recognition when presented at the Emergency Management Victoria Community Showcase and the Municipal Emergency Management Planning Committee (MEMPC). https://ourrecovery.com.au/omeo-region.

ORCRA, in partnership with Council, recently organised community engagement through a series of five Community Conversations across the region. Representatives from key emergency management agencies and the community came together to address concerns and expectations that emerged from the seven plans. Community Conversations were held in Benambra, Omeo, Swifts Creek, Ensay and Tambo Crossing. These events were a resounding success, marked by good attendance, respectfulness, and excellent outcomes. ORCRA remains committed to pursuing actions arising from these crucial conversations.

#### Progress across seven key priorities

- Fuel management: Through the fuel management subcommittee, ORCRA maintains close collaboration with the Department of Energy, Environment and Climate Action (DEECA) and the Country Fire Authority (CFA) to ensure local knowledge and priorities are considered in fuel management across the region.
- Telecommunications and alternative power sources: ORCRA's subcommittee continues to advocate for increased telecommunications and power supply resilience. In May 2023, a community meeting brought agencies and the community together to explore challenges and opportunities in this domain. Council facilitated the installation of Commonwealth funded STAND equipment in community facilities of Benambra, Omeo, Swifts Creek, Ensay and Tambo Crossing now provide reliable communication points in all these communities. Access to solar power and batteries in Swifts Creek provided by RACV Solar is a welcome development. Generators are being accessed for all halls.



Stand Alone Power Systems (SAPS) have been installed in Brookville and Reedy Flat by Mondo/Ausnet and are proving reliable.

- Road access: Advocating for consistent road access, timely updates, improved local communication during emergencies, and access to better quality alternative roads remains a focal point. A dedicated Facebook page serves as a central hub for sharing information about road access issues and emergencies.
- Mental health: ORCRA facilitated a Mental Health Round Table in August 2023, uniting key agencies and community members. ORCRA is mapping out actions based on the outcomes from this meeting, fostering ongoing dialogue with key agencies to customise service delivery for the region's diverse demographics.
- Funding and grants: ORCRA's maintains a proactive stance in assisting community groups to secure funding for rebuilding facilities, recovery initiatives, and well-being events. Networking with grant organisations, including the EGCF. empowers more communities to engage in faceto-face discussions with grant decision-makers and fine-tune their grant applications. ORCRA ensures a continuous flow of funding opportunities on its Facebook page, Omeo Region Community Recovery Association, and offers letters of support for grant applications. ORCRA continues to disseminate information to individuals, and organisations. Collaborations between Tambo Crossing, Activating Ensay, Swifts Creek Community Omeo Hub, and Benambra Neighbourhood House highlight the ongoing and productive effort to strengthen the Omeo Region.

The region has had a strong focus on facility improvements, the Tambo Crossing Community Facility: multi-purpose facility, delivered in partnership with Council, is now available and being embraced by the community. With injection from multiple sources of funding the Swifts Creek Recreation Reserve Upgrade facilitated by Council, will deliver improvements to the netball courts, meeting rooms and toilets. Cassilis Recreation Reserve has seen the installation of new composting toilet, shed and upgrade of facilities, again through multiple sources of funding and delivered by DELWP.

# **Orbost District**

# **Progress so far**

The Orbost District is navigating a landscape shaped by bushfires, floods, and the abrupt closure of the native timber industry. These uncontrollable events have left an indelible mark, yet the spirit of the community remains unwavering, transforming challenges into opportunities for positive change.

Over the past year, the Orbost District Community Recovery and Transition Committee (ODCRTC) has been focused on fire preparation, social recovery, and support for the timber industry transition.

In a collaborative effort with the Country Fire Authority (CFA), the ODCRTC organised Fire Ready Demonstration Days in September and October 2022. These events took place in Cabbage Tree Creek, Marlo Plains, Orbost, and Newmerella. Later, in December 2022, the ODCRTC hosted a Fire Ready Expo, drawing over 300 attendees. This dynamic gathering brought together key stakeholders such as Orbost CFA, SES, Vic Police, Rotary, Cann River CFA, Moogji, Council Emergency Management team, and Gippsland Lakes Complete Health. These initiatives were informed by a community survey conducted at the Orbost Agricultural Show.

Alongside bushfire recovery, Orbost District has also been navigating the Victorian Government Timber Transition Program since 2021 when the pilot Community Transition Program was launched. The Timber Transition project group highlighted childcare as a crucial factor/impact for being able to creating new industries and employment opportunities. In response, the ODCRTC organised Childcare Round Tables, engaging partners, community members, and early years educators to dissect the issues and devise solutions. With support from the East Gippsland Community Foundation and GELLEN, an Orbost Early Years Facilitator will be employed. This role aims to nurture individuals pursuing careers in childcare while reforming the network to provide ongoing support.

ODCRTC would like to also acknowledge the Orbost Regeneration Project which will provide a new P-12 school, the Orbost Community College,



opening later in 2024. The major project, located at the existing Orbost Secondary College site, will merge the Secondary College with Orbost Primary School and Orbost North Primary School.

Elevating social recovery and community connection remains paramount for all CRCs. ODCRTC has supported and promoted a myriad of applications and events, including free entry to the 2023 Orbost Agricultural Show, chainsaw safety courses for women via Far East Landcare, vibrant music performances at the Orbost Exhibition Centre, and the creation of the Orbost Youth Space.

Other notable endeavours encompass the Hockey Club reunion ball, Bemm River Neighbourhood House initiatives, planning events in Cabbage Tree Creek, the Marlo Cheese Making Course, Winter Festival workshops, and expansive training opportunities for district groups.

The ODCRTC, in conjunction with the Chamber of Commerce and Industry, actively advocate to ensure promises made to the community are fulfilled. The efforts encompass projects under Parks Victoria at Cape Conran, the establishment of a mobile phone tower at Cabbage Tree Creek, and fostering transparent communications regarding support for timber workers, fire readiness, and planning.

# Looking to the future

Looking ahead, the community recognises the need to maintain the relationships forged with government agencies during the recovery phase. With numerous emerging leaders stepping forward, the ODCRTC seeks to empower and champion new ideas and voices. Their collective vision revolves around a resilient Orbost district, where opportunities are harnessed for the greater good of the community.

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# Sarsfield

### **Progress so far**

In August 2020, the Sarsfield Recreation Reserve and Hall Committee established the Sarsfield Community Association (SCA) as the dedicated CRC. Since then, the SCA has maintained a proactive stance, meeting regularly with ongoing subgroups to strategise, support, and execute various recovery projects and priorities.

One standout achievement is the triumph of advocacy spanning nine months to gain funding for the **Sarsfield Hall and Reserve upgrade**. Through relentless efforts and a government review of grants, in April 2023, the community received the news of grant approval. A Project Working Group and Project Reference Group is now formed, jointly operated by the Council and SCA.

Fostering social recovery and focus on fire preparedness, the community continues to unite through monthly Friday Night Feed. Additionally, activities such as the Sandhill Ashes cricket match, Yoga, Women's Groups, and creative and sporting pursuits are consistently offered. The formation of a social cricket club, a first in many years, stands as a testament to community revitalisation.

66 The Sarsfield community recovery volunteers are to be congratulated for their hard work over the past 12 months (and nearly four years) for continuing in their unwavering support of the Sarsfield and other bushfire-affected communities' recovery journeys. The persistent community advocacy resulted in a successful outcome for funding a new community hall and playground, two key community priorities. I would also like to thank all community members who have engaged with us and who have had input into the plans and priorities and assisted and participated in events and festivities. This makes all the hard work seem worthwhile. The ongoing support of volunteers over the next few years is critical to the successful conclusion of the hall building project and other projects in our community plan, and for the hall and reserve continuing to run in a viable manner into the future. I would also like to thank the Council, State and Commonwealth Governments and the various recovery service agencies for supporting us. We could not do all that we have done without all that support. 99

- Simon Hof, Vice-President Sarsfield Community Association.

With the closure of the Emergency Recovery Victoria Hub in August 2022, a collaborative effort resurrected the Sarsfield, Bruthen, and Clifton Creek Recovery Services Network in late 2022. This initiative has successfully reconnected workers, aligning efforts more effectively with community needs.



SCA actively maintains its website, Facebook page, Snippets newsletter, and contributes promotional articles to local newspapers; Tambo Rambler and The Bairnsdale Advertiser.

SCA has formulated a Business Plan for the new hall, the Sarsfield 2030 Community Plan has been developed and master plans has been created for the Recreation Reserve and Nicholson River Picnic Reserve. Infrastructure enhancements include the upgrade of public toilet facilities, including additional disability access and a parents' room, funded by the EGCF. The installation of the STAND Satellite system has delivered free WiFi access, while the addition of water tanks ensures preparedness for future emergencies. Lighting and maintenance equipment improvements through various grants, and funding has been secured for an engaging youth-led project.

# Looking to the future

SCA is anticipating the completion of a new community hall will occur by December 2025. This involves the phased replacement of the aging hall with an interim shed that will accommodate various activities while also providing additional storage.

Looking ahead, SCA envisions a diverse range of social and community activities to sustain long-term viability. Initiatives such as cooking classes, wellbeing journals, and training programs in areas like First Aid, Safe Food Handling, and Responsible Serving of Alcohol are being explored.

In a recent move, the SCA and the Hall Committee have amalgamated, streamlining support for the community's recovery journey and the upkeep of community assets.

The SCA has laid out an extensive agenda that includes upgrading their website, reviewing the community plan, implementing road safety measures, actively participating in the Nicholson River project, and taking a central role in the design and construction of the new hall and reserve upgrade.

SCA extends a warm invitation to both new and existing residents, as well as volunteers eager to contribute to Sarsfield's ongoing recovery and future.

## **Wairewa**

## Progress so far

The Wairewa Community Recovery Committee (WCRC) was quickly established in response by several members of the existing Hall Committee of Management who recognised the critical need for navigating the recovery journey and providing safer facilities for their community.

The WCRC has been actively engaged in addressing the recovery needs of the community and putting identified priorities into action. Notable achievements include securing grants and funding from various sources, forming partnerships with service providers, and successfully initiating upgrade works for the Wairewa Public Hall and Recreation Reserve. These upgrades have enhanced community safety and reignited social connections through a variety of community events.

Additionally, the WCRC has supported the development of the O'Grady's Bridge precinct, positioning it as a prominent tourism destination and historical attraction for visitors. Their advocacy for nature-based tourism, centered around the Rail Trail and the picturesque landscapes of the Wairewa Valley, continues to contribute to the area's appeal as a tourism vantage point.

Safety improvements to critical infrastructure such as bridge restoration, road access, road safety and drainage issues have been a priority for the community. In collaboration with EGSC, the WCRC has worked on several projects, including ember proofing the hall, upgrading window glass,



screens, and doors to meet BAL rating standards, and installing communication infrastructure such as internet and community WiFi at the Hall.

Furthermore, Council has improved road access across Bills Creek, mitigating flooding issues that previously led to road closures, ensuring safer valley access. The community have advocated to DEECA for enhancements to Carl Smith, 3 Mile and 10 Mile roads, advocating for alternative access roads. Additionally, they have endorsed safety improvements in the valley and have supported projects in collaboration with other local communities and organisations in the area.

## Looking to the future

The WCRC has successfully fulfilled a majority of their priority items outlined in the recovery plan. The committee has been unwavering in its efforts to address these needs, yielding impressive results for our small community.

While there are still some outstanding tasks awaiting completion, the committee is steadily progressing toward a transition phase. Eventually, the Wairewa CRC will seamlessly integrate as a permanent sub-committee within the Wairewa Public Hall Committee of Management, readily reconvening when the need arises.



Wairewa Community Christmas Dinner



## Social recovery

The impact on residents' social lives and livelihoods from the bushfires prompted a comprehensive response from various organisations and agencies. Recognising the challenges, social recovery initiatives were set in motion to address grief, shock, disconnection, and the financial and emotional distress experienced by communities.

Community Recovery Committees (CRCs) and representative groups played a crucial role in shaping recovery plans that prioritised social, emotional, and mental health aspects. Understanding the need for support, these plans emphasised the critical nature of ongoing recovery efforts.

In June 2022, Council initiated the Recovery Reset – a needs assessment focused on mental health and wellbeing. The assessment identified key social recovery issues, including Emotional Wellbeing, Mental Health, Community Connectedness, Services for Children and Families, Housing, Rebuilding, and Financial Counselling.

The findings of the Recovery Reset were shared to key recovery partners, service providers, and participants. This information has been instrumental in shaping planning strategies, supporting advocacy efforts, and identifying funding needs. In March 2023, Council took steps to address the identified issues, entering into an agreement with the Gippsland Primary Health Network (GPHN) to continue mental health and wellbeing services.

The collaborative program with GPHN aims to enhance mental health service access and outcomes for those affected by the bushfires. Trauma counselling services have been extended to Mallacoota and Cann River, as well as additional outreach in Mallacoota, Cann River, Orbost, Omeo, Errinundra and Snowy. The allocation of funding has ensured the sustained delivery of mental health services, with providers such as Relationship Australia Victoria (RAV) and Royal Flying Doctors Service (RFDS) actively being involved.

The program has catered to 112 clients, including 51 young individuals and two from the Aboriginal community. The collaboration with service providers has strengthened, particularly in supporting people with disabilities, fostering an inclusive referral pathway. Notably, outreach occasions have reached 434 from July to September 2023, marking a 40% increase from the end of June. This uptake is attributed to improvement in promotion, outreach recruitment across East Gippsland, and engaged stakeholder participation.

Council is currently undertaking a review of the Recovery Reset, with a focus on 15 priority recommendations guiding their efforts until June 2024. Key areas of attention include understanding funding end dates for service providers, optimising service delivery, addressing the needs of those in remote areas, and sustaining housing and rebuilding support.

## Dr Robert Gordon visits the shire

Dr Rob Gordon is a clinical psychologist who has dedicated his career to helping traumatised communities recover after a disaster. In August 2023, Dr Gordon visited the towns of Benambra, Buchan, Cann River, Mallacoota and Sarsfield which included the Omeo, Bruthen, Clifton Creek and Wairewa communities and led conversations with fire-impacted residents on the topic of comprehending and addressing the enduring trauma that extends beyond physical damage. An estimated 170 community members attended the five sessions.

Dr Gordon highlighted the importance of people taking their time to rebuild after losing homes, emphasising the need for a clear state of mind for thoughtful long-term decisions. This is due to the "cortisol phase" of recovery potentially impacting decision-making.

There were many essential take-away messages and beneficial discussions during Dr Gordon's tour. In particular, he emphasised the importance of the Stages of Recovery:

- Adrenaline phase at time of event and just after.
- Cortisol phase can go for years, cortisol allows you to carry on, rebuild, work on recovery but takes energy from your body.
- Identity phase who are we now? How has the disaster changed us? What are our values and what do we want for our future?

Dr Gordon also suggested now is a good time to bring artists into our fire-affected communities as they have the unique ability to assist in reflecting and telling our stories. Art projects and cultural initiatives can have a lasting impact beyond the immediate recovery period. They can continue to enrich the community's cultural life and provide ongoing benefits for years to come.

Dr Gordon has visited East Gippsland several times during and since the 2019/20 fires. Dr Gordon's dedication to providing sound advice and support for bushfire affected residents and communities is evident in the detail in sessions and is always very welcome in East Gippsland. For more of Dr Gordon's advice on wellbeing in bushfire recovery, please visit:

www.vic.gov.au/your-wellbeing-bushfire-recovery



Dr Rob Gordon





**Dr Rob Gordon Community Meeting Sarsfield** 

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## Community events

## Community connection through events

Community events have remained at the forefront of the efforts of community to foster unity, enhance wellbeing, and bolster resilience within bushfire-affected communities. These events also play a pivotal role in bridging emergency and social wellbeing services within our communities. Supported by the State and Commonwealth Governments, Council has invested approximately \$324,000 of the bushfire funding into community events since October 2022, contributing significantly to the overall recovery process.

To streamline the management of event funding, Council entered into a partnership, establishing an auspice agreement with the East Gippsland Community Foundation. This collaboration led to the creation of the East Gippsland Small Grants Community Events program, exclusively dedicated to funding events supported by Community Recovery Committees. To date, this arrangement has successfully funded 47 community events across the 10 flame-impacted districts, further solidifying the role of events in community connection.

Recognising the profound impact of events on community connection, Council is pleased to announce that community event funding will remain accessible through 2024, ensuring that these meaningful and positive outcomes continue to flourish.



**Fruit Tree Grafting** 



**Lantern Making Workshop** 





On Foot in the Gorge - Clifton Creek

Since October 2022, our communities have proudly hosted 116 funded community events in bushfire-impacted districts, including 24 workshops designed to nurture community connection and leadership. Each community has identified events that are most meaningful to them, fostering social connections through a diverse array of activities such as community dinners, sporting events, Christmas gatherings, walking tours, and events associated with community consultation. It was particularly heartening to see new events that originated from community recovery priorities recur such as the Mallacoota Be Ready Day and the popular Sandhill Ashes, underscoring the positive impact events have in our communities.

A notable success story is the Sarsfield Friday Night Feed, which grew from post-bushfire community connection. This monthly event continues and has served as a platform for various themes and presentations including the Recreation Reserve Upgrade community engagement.

Large-scale events, like the Orbost Agriculture Show, Buchan Colour Run, Omeo Show and Bruthen's Medieval Winter Festival and Lantern Festival, are important for social inclusiveness, engaging various community groups and stakeholders while shaping the local events calendar for residents across East Gippsland.

The East Gippsland Winter Festival, a shire-wide celebration, brought people together through events and activities, including Community Lantern Making Workshops. These workshops attracted an impressive turnout of 378 community members, providing a unique opportunity to forge new social connections. Communities across East Gippsland, including Bruthen, Buchan, Cann River, Goongerah, Orbost, Sarsfield, and Swifts Creek, showcased their lantern creations through street parades and community displays, with a key event in Lakes Entrance featuring large lantern sculptures across the Cunninghame Arm Footbridge.



Goldrush Concert featuring Mollimor - Omeo Region



**Exhibition Centre - Orbost** 



Tom McIntosh MP and Shelly McLaren, CRC Chair, opening the Goongerah Wellbeing Space



Sarsfield vs Clifton Creek, Sandhill Ashes 2023



## Support to rebuild

Council acknowledges that rebuilding a home after the fires can be a long and emotional journey. However, reimagining your life, and the home that you wish to live in, is an important step within the recovery process. Understanding that the decision to rebuild demands thoughtful consideration and courage, Council recognises the importance of providing appropriate support when landowners are ready.

In its fourth year, the rebuilding effort persists and remains steady. Council has established two key programs to aid landowners in this process: The Rebuild Support Service (RSS) and the Building Advisory Service (BAS).

## **Rebuild Support Service**

The Rebuild Support Service (RSS) was established by Council in partnership with ERV following the 2019/20 bushfire. The service was developed to provide specialised advice to help streamline both planning permit and application requirements, assisting landowners to navigate rebuilding and make informed decisions within a safe and trauma informed environment. The service has 164 closed clients with another 222 open referrals and 45 clients who are either preparing plans or on hold for various reasons.

Council liaises with various Council departments and external agencies like the Country Fire Authority (CFA) and Department of Energy, Environment Climate Action (DEECA) on behalf of landowners. The service also works closely with other Recovery Support Services, to assist impacted landowners connect to a range of support including targeted recovery case management / advocacy assistance, mental health professionals, and financial counselling.

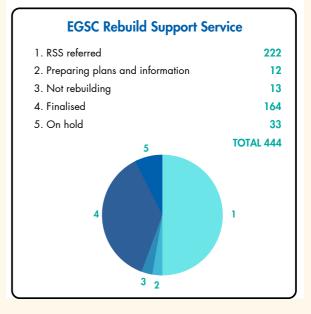
## **Building Advisory Service**

In 2022, Council identified a growing number of landowners encountering obstacles in progressing their rebuilds. Responding to this, Council initiated a trial of the Building Advisory Service (BAS) to provide tailored support during pre-construction and construction phases. This approach assembles external consultants to provide independent building advice, enabling landowners to access assistance at various building stages to meet their specific needs.

## Rebuilding in figures

Total number of properties within East Gippsland identified as damaged/destroyed within the Secondary Impact Assessment is 1162 of which 346 were dwellings and 762 outbuildings.

#### Of the 346 damaged/destroyed dwellings 1. Landowners who have sold or not rebuilding 105 2. Landowners who did not refer to the RSS **78** 3. Building Permits issued to landowners 31 4. Planning Permits issued to landowners 32 5. Occupancy Permits issued (rebuilt) 66 6. Landowners referred to the RSS, not progressed 26 7. Dwellings that are agency owned 8 **TOTAL 346**



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(December 2023)

# Support and barriers to rebuilding in Mallacoota after the bushfires

Council actively supports the Mallacoota and District Recovery Association (MADRA) in understanding and tackling the complex barriers faced by residents in the Mallacoota District when rebuilding after total loss.

Having a thorough understanding of both the barriers and facilitators of re-building after total loss, through the voices of those with lived experience, is imperative to developing targeted and effective strategies to support. A consultant was engaged to collaborate directly with total-loss landowners, producing a report highlighting key barriers and offering potential solutions and strategies.

These findings guide advocacy efforts aimed at addressing the challenges. A project control group is diligently working through the report's 13 recommendations.

The journey of rebuilding after a disaster is an unforeseen path, and landowners often find themselves caught in a whirlwind of decision making.

Various barriers arise, impeding progress and occasionally leading to decisions to put the process on hold. Some landowners may choose not to rebuild, relocate to another area, or purchase an established home within a township area.

For those landowners who do wish to rebuild, there are dedicated rebuilding support available to enhance support and encourage the rebuilding process.

## Need for ongoing support

#### Individua

- Mental health
- · Financial constraints
- Physical health and age



#### Socia

- Social isolation
- Social support from friends and family (f)



#### Community

- Community support
- Community initiatives



#### **Policy**

- Financial relief (f)
- Insurance (f)
- Recovery agency support
- Understanding BAL ratings
- · Execution of BAL ratings



#### **Building process**

- Navigating the rebuild process
- Access and ability of trades people
- Cost and availability of building materials
- Simple build solutions (f)



f =future and not immediate

# Investing in recovery and strengthening our future

## Major infrastructure projects

East Gippsland has received substantial funding aimed at addressing community recovery and resilience needs in the aftermath of the devastating bushfires. Many of these redevelopments, upgrades and new facilities have or will contribute to strengthening the future of East Gippsland Shire and its community.

Significant investments have empowered Council to play a pivotal role in supporting local Community Recovery Committees (CRCs). These committees, integral to the planning and execution of community-led recovery initiatives, have received funding for a range of purposes. These include responsive recovery programs, leadership development, small-scale operating costs, and assistance with priority setting and transition arrangements.

The bushfires served as a catalyst, elevating the community's awareness and commitment to incorporating resilience into core planning and community preparedness. At all levels of government and within various agencies, there is a concerted effort to embed resilience in the rebuilding and upgrading of public infrastructure and programs, with the overarching goal of building stronger recovery strategies for future events.

Over the past 12 months, considerable progress has been made with the implementation of various projects. The achievements outlined in this progress report highlight the impact of the funding on the recovery and resilience landscape of East Gippsland.



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## **Major projects**

## Mallacoota Skate Park

The Mallacoota Skate Park stands as a vibrant family hub catering to all ages, providing a space for play, learning, and active recreation. Following the challenges posed by the 2019/20 Black Summer bushfires and the ongoing impact of COVID-19, a united group of local organisations, individuals, and businesses rallied to support Mallacoota's recovery.

Through collaborative efforts involving The Sanctuary (Mallacoota Youth Group), Mallacoota Halls and Recreation Committee of Management, Mallacoota and District Recovery Association, and Mallacoota Lions Club, funding was administered by the Bendigo Bank Community Enterprise Foundation from the Victorian Bushfire Appeal for the design and construction of the new skate park. Council developed the skatepark which was opened in April 2023.

# Mallacoota streetscape upgrade

Work on upgrading the streetscape of Mallacoota to improve the functionality, aesthetics and operation of Maurice Avenue continues.

The upgrade was also identified by the Mallacoota and District Recovery Association (MADRA) as playing a key role in the Disaster Recovery Plan and contributing majorly to commercial and tourist activities. After the tireless efforts of the local Mallacoota community and key stakeholders working with Council, a contract was awarded for the detailed design development of the concept masterplan in February 2023. In August, the design was in its final stages and construction work to commence after Easter 2024.





## **Bemm River footpaths**

Bemm River was severely impacted by the 2019/20 bushfires, at times completely surrounded by the fire front, and isolated for weeks while the Princes Highway was cut. The community endured power outages and shortage of food, water and fuel. The development and implementation of safe pedestrian access in Bemm River was identified as a priority during the recovery process, and in the existing Bemm River Community Plan.

Council secured funding from the Commonwealth Government through the Black Summer Bushfire Recovery Grants Program to construct approximately 1.7km of an all-weather pathway in the township of Bemm River. The pathway will be a combination of concrete footpaths and wooden boardwalks in areas subject to inundation. Community engagement was undertaken within Bemm River, including several community meetings. As at November 2023 the detailed design is now complete and tender submissions have been reviewed ready to commence work in 2024.

## Buchan Caves Reserve Linkage

The shared path link from the Buchan Caves campground to the heart of Buchan marks a significant milestone within the larger Buchan Main Street and Linkages project.

This initiative has breathed new life into Buchan's tourism economy by enhancing visitor access to the town centre and elevating its overall appeal. The shared path link also carries benefits for the local community, facilitating safer mobility within the town. Council secured funding for this project through the Victorian Government's Local Economic Recovery Program, with joint support from the Victorian and Commonwealth Governments.

## Bruthen streetscape upgrade: Transforming into a tourism hub

Bruthen's streetscape has undergone a vibrant transformation, thanks to a collaborative effort supported by funding from the Victorian Government's Local Economic Recovery Program (a joint initiative of the Australian and Victorian Governments), and Council. This revitalisation project has elevated Bruthen into a tourism hub.

The township now boasts new gardens, bike racks, a bus shelter, and upgraded street furniture, fostering a welcoming atmosphere. Improved pedestrian paths have been integrated into the town centre, ensuring safer access for residents and visitors alike. Additional parking spaces, including two designated for disabled visitors, have been added. The incorporation of locally sourced Bruthen blue sandstone wall seating, surrounded by native vegetation and thoughtfully designed landscaping, has created an aesthetically pleasing and enjoyable space.

Upgrades to one of Eastern Victoria's most utilised public toilets are to begin shortly. Attention has been given to constructing kerbs, channels, drainage systems, driveways, and bitumen asphalt work with line marking for this project.

Beyond the physical improvements, the streetscape project has aimed to attract investment, generate employment opportunities, and support population growth in the surrounding areas. By enhancing the functionality of the main street, elevating town amenities, and fostering a conducive environment for local businesses, Bruthen is now poised for sustained growth.

Twelve local businesses participated in the Facade Upgrade Program, which offered grants of up to \$5,000 for cosmetic enhancements, including signs, external painting, and improvements to their shop fronts. Although the Facade Upgrade Program has concluded, the Business Boost Program continues to support new and emerging businesses by providing enterprise facilitation and connecting them to valuable resources and opportunities.

To amplify Bruthen's visibility and promote local businesses, Destination Gippsland is spearheading a digital and social media campaign, with a launch event scheduled for the end of 2023.



As part of the Bruthen Streetscape Project, the Bruthen rotunda was relocated, joined by new pathways and garden beds

## **Project management**

Council recognises an active and well-connected community is able to work together with Council particularly during times of natural disaster. Improved recreation reserves and facilities have been a high priority for the impacted community since 2019/20. Working closely with communities, Council is managing project design and delivery for several critical projects across the shire. Projects of significance include:

The Buchan Recreation Reserve, which has been jointly funded by the Victorian and Commonwealth governments under the Commonwealth-State Disaster Recovery Funding Arrangements. The local Buchan community welcomed Council's support to upgrade and revitalise the reserve with new and improved sporting and community facilities.

Funding for the Sarsfield Recreation Reserve and Community Hall Revitalisation is provided by the Commonwealth Government through the Department of Infrastructure, Transport, Regional Development, Communications and the Arts. This redevelopment will create a purpose-built space for the community to come together and recover following the bushfires.

The Swifts Creek Recreation Reserve Upgrade, which aims to provide fit-for-purpose sporting and recreation facilities. This project was funded through the Local Economic Recovery Program by the Victorian and Commonwealth governments.





# Digital connectivity in East Gippsland

In the wake of nationwide infrastructure delays, the commitment of Commonwealth and State governments to telecommunication projects in East Gippsland, post the 2019/20 bushfires, has not wavered. Importantly, funding commitments continue to be secured and projects are being progressively implemented, reflecting a dedication to improving regional connectivity.

Council has maintained close collaboration with telecommunication agencies, in particular Telstra and NBN, to identify and address remaining gaps and priorities in our region. This collaboration has allowed us to wield influence in securing vital government funding for new towers and place-based telecommunication infrastructure projects. Council remains committed to advocating on the needs of community, as identified in community recovery plans and those highlighted in the 2021 Digital Connectivity - Gaps and Priorities Report.

Acknowledging the substantial investments in telecommunication infrastructure post the 2019/20 fires, Council extends our appreciation to the agencies for the continued efforts in seeking Commonwealth and State Government funding for new projects. Since 2020, telecommunication funding has committed 23 new mobile towers across East Gippsland, as well as over 30 significant tower upgrades, augmentations and mobile hardening projects (enhancements to backup power supply) and three major NBN upgrades. Furthermore, the STAND system project telecommunication resilience community through free NBN WiFi at community facilities. Further details on the STAND project can be found on page 51, Facility preparedness for emergencies.

Council celebrates the successful completion of projects, with special recognition given to the Eastern Transmission Link. The Eastern Transmission Link is a major telecommunications upgrade that will build, improve and expand mobile coverage along the Great Alpine Highway. The project will create a transmission ring from Bairnsdale to Wangaratta, providing a vital second connectivity path, strengthening network resilience. The project has upgraded a tower in the Tambo Crossing district and introduced a new Macrocell tower in the Omeo township. When complete, the project will also provide a second upgraded tower in Ensay and new 42km fibre optic cable along the Tambo Valley section of the highway

In response to the growing trend of remote work, increased digital services, and the integration of digital technologies in regional and remote areas, NBN committed to a nationwide upgrade of fixed wireless and satellite networks. This initiative, beginning in March 2023, aims to expand coverage and improve speeds for the fixed wireless system, while enhancing the performance of the satellite system. East Gippsland localities dependant on satellite and fixed wireless systems will particularly benefit from this initiative.

Council extends its gratitude to the CRCs for their instrumental role in helping identify connectivity gaps and priorities within our districts. Council remains steadfast in our commitment to advocating for social and economic digital equity across our region, ensuring critical emergency connectivity to be a priority on our digital roadmap.

# Community Microgrids and Sustainable Energy Program

Department Energy Environment and Climate
Action and AusNet are working with communities
in Mallacoota and Omeo increase energy resilience
through the Community Microgrids and Sustainable
Energy Program, (CMSEP).

The 2019/20 bushfires highlighted the critical need for resilient power, independent of the electricity grid during bushfires and extreme weather events in rural settings. The CMSEP will support the installation of a mix of solar systems, batteries and diesel generators with the aim to increase access to locally generated energy and storage.

A suite of important public buildings in Mallacoota and Omeo will receive subsidised solar panels, batteries and some generators, with the goal of keeping these buildings available during sustained outages, or in association with emergencies.

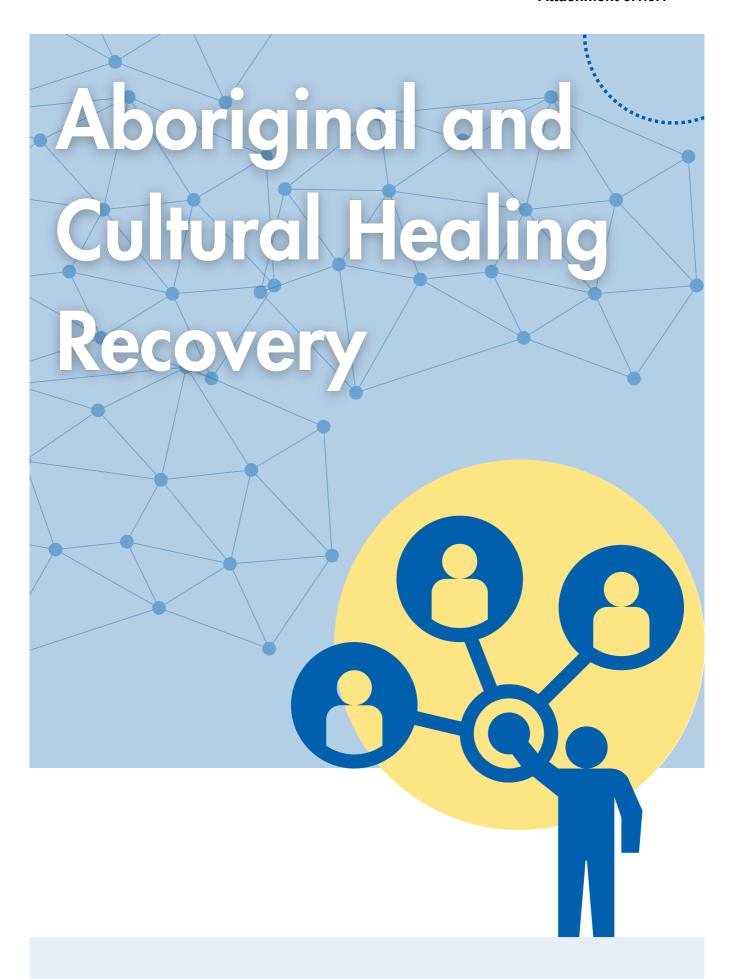
For residents across the Omeo township the process is underway to contact all people who submitted 'Expressions of Interest' to receive a subsidised solar system and battery. For people who elect to purchase one of these systems, they will have access to backup household power for dedicated critical circuits.

Mallacoota residents will have the option to purchase a subsidised high efficiency hot water heat pump. The heat pumps will support a reduction in energy use, contributing to the CMSEP and helping to extend the operation time of the Mallacoota Area Grid Storage (MAGS) system.



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## **Cultural healing**

## Victorian strategy for Aboriginal-led recovery

The Strategy for Aboriginal Community-led Recovery, launched by Emergency Recovery Victoria (ERV) in July 2023, provides an approach to realise culturally responsive Aboriginal community-led outcomes in recovery in coordination with government, councils and delivery partners.

The Strategy is a result of extensive consultation process with Victorian Aboriginal communities impacted by the Eastern Victorian Fires 2019/20 that identified a state-wide need to put Aboriginal communities at the centre of their recovery processes.

The Strategy supports the Recovery Framework, a matrix of the identified Outcomes / Recovery Aspirations and key areas of focus for the Victorian Government, and is broken down into the following domains:

- Foundations of culturally responsive recovery
- Strategic reform and operational needs for Aboriginal community-led recovery
- Aboriginal expertise and decision-making inform government accountability
- · Monitoring and evaluation for success

To download a copy of the Strategy for Aboriginal Community-led Recovery, visit www.vic.gov.au/strategy-aboriginal-community-led-recovery

## Local Aboriginal Bushfire Recovery Planning Workshop

To assist in the development of an ERV Local Aboriginal Emergency Plan Template and to provide opportunity to meet, understand perspectives, identify resources and develop relationships, the Federation of Victorian Traditional Owner Corporations (FVTOC), with ERV, facilitated The Local Aboriginal Bushfire Recovery Plan Workshop, held on 23 November 2022 in Lakes Entrance.

The workshop was attended by Gippsland and East Gippsland Aboriginal Co-operative (GEGAC), Gunaikurnai Land and Waters Aboriginal Corporation (GLaWAC), Lakes Entrance Aboriginal Health Association (LEAHA), Lake Tyers Aboriginal Trust (LTAT), Moogji Aboriginal Council, Ramahyuck, Yoowinna Wurnalung Aboriginal Healing Service (YWAHS), Council and ERV.

Information gathered from the workshop supported ERV and Council in identifying emergency management priorities in our Aboriginal communities', contributing to the ongoing work in Aboriginal-led recovery.



**Bruthen Streetscape Yarning Circle** 

## **Projects**

The following projects have been approved for funding by ERV. Projects are progressing with estimated delivery in 2024.

 Fire for Food Workshops - workshops providing targeted training in traditional fire practices in relation to food and land management. Black Duck Foods

## **Projects continued**

- Elders and Kitchen Facility Upgrade renovation of the Elders and kitchen facility, incorporating an incident-response centre for the coordination of community response actions and mapping of a disaster event. Gippsland and East Gippsland Aboriginal Co-Operative (GEGAC).
- Preparing for the future creating a place for community providing education on land and environmental cultural management practices. Moogji Aboriginal Council.
- Relief Centre and Sports Pavilion Redevelopment previously known as The Lake Tyers Emergency Relief Centre Project. Lake Tyers Aboriginal Trust auspiced by GLaWAC.
- Understanding of cultural values Understanding of Cultural Values project will work with communities in building greater education and voice regarding fire recovery. Nindi-Ngujarn Ngarigo Monero Aboriginal Corporation (NNNMAC).
- Cultural fire in managing Country project will undertake using Cultural fire to help manage Country.
   Project is in partnership with DEECA and Parks Victoria. Project includes undertaking area mapping for potential role to mitigating future events.
- On Country training training and development workshops on the connection to earth, health and wellbeing. Wayapa Wuurrk.
- Healing and Wellbeing Initiatives framework to address trauma, support healing and well-being in community. Project also supports employment, training, and community engagement. Lakes Entrance Aboriginal Health Association.
- Resilience building project will focus on resilience building within the community through a custom-built mobile service to support community with agency resources for example family therapy, counselling and family violence. Yoowinna Wurnalung.

## **Project highlights**

#### Relief Centre and Sports Pavilion Redevelopment

The redevelopment project, at Lakes Tyers Aboriginal Trust, aims to create a safe and secure area for community during and after a bushfire disaster, in addition to being used for sporting and community activities outside of emergencies. It will replace the existing sporting pavilion next to the oval. The project, which has experienced positive engagement with the community, is in the detailed design stage, including a new mural which came out of the community engagement.

#### **Bruthen Streetscape Yarning Circle**

The Yarning Circle is a public sculpture space as part of the Bruthen Streetscape project, a significant streetscape project designed and delivered by Council with funding by Victorian Government Local Economic Recovery Program. The Yarning Circle was coordinated in partnership with Gunaikurnai Land and Waters Aboriginal Corporation (GLaWAC). GLaWAC designed and installed the yarning circle, which can be found in Bruthen's Main Street gardens. Embraced by shields representing the five Gunaikurnai clans, the yarning circle is a celebration of Gunaikurnai culture and is designed to support the foundation of respectful relationships and provide a safe place for all to speak without judgement.



**Bruthen Streetscape Yarning Circle** 



# Investing in business development for a thriving economic community

East Gippsland's economic environment has experienced substantial investment and reinvigoration following the Black Summer bushfires and the COVID-19 Pandemic. The flow of State and Commonwealth funding, together with strong agency partnerships and collaboration has supported the region's small business, tourism, events and agricultural sectors in their recovery efforts over the past three years.

Despite an unpredictable business environment post COVID-19 pandemic with supply chain disruptions, workforce and housing shortages, East Gippsland's economy has shown healthy indicators of recovery with expenditure and visitation all trending positively (see Figure 1 and 2), however, cost of living pressures and rising interest rates have likely contributors to a reduction in overnight visitor expenditure (Figure 3).

The legacy impacts of recovery interventions are likely to flow into future years and with Council's unwavering commitment to economic development along with the East Gippsland's Community Recovery Committees adopting an economic approach as part of their plans for the future, businesses and industries will continue to be supported to thrive into the future.

## **Business support**

#### Small business recovery mentoring services

While this program by Small Business Victoria concluded in 2022, it laid the foundation for other initiatives funded through our recovery efforts by providing 929 business with case management support.

#### Investing in East Gippsland's future

Council's Investment Attraction campaign continues to shape the future of East Gippsland by developing an investment prospectus. The campaign showcases the success stories of local businesses through the Invest East Gippsland website, attracting new residents and businesses to our thriving region.

Figure 1: Total expenditure (\$Million)

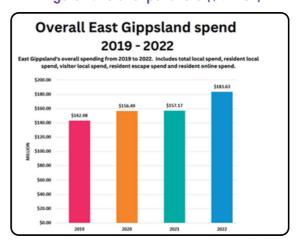
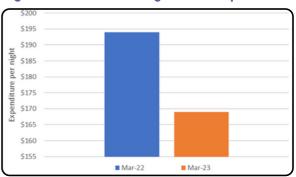


Figure 2: Domestic visitation to East Gippsland



Source: Destination Gippsland - National Visitor Survey, YE June 23, Tourism Research Australia

Figure 3: Domestic overnight visitor expenditure



Source: Destination Gippsland - estimated using data from National Visitor Survey and Regional Expenditure Model, YE March 2023, Tourism Research Australia

**Bushfire Recovery Final Progress Report 2024** 

#### **Business Boost Program**

The Business Boost Program has not only engaged and supported 14 new businesses within Buchan and Bruthen but has also fostered peer-to-peer networks, enhancing the economic resilience of our community. The program is testament to an innovative approach, acknowledged at the 2023 Rural Councils Victoria Forum of rural councils "doing things differently". The program's success has prompted expansion and opportunities are being explored for the program to be extended.

#### **Business support for success**

Council's Business Support initiatives, including the Business Concierge and Business Resilience and Development Officer positions, have played pivotal roles in navigating the challenges faced by our local businesses. The Business Concierge has been instrumental in removing barriers for businesses in fire-impacted areas and connecting job seekers with local businesses through the coordination and delivery of the East Gippsland Job Expo. The Concierge role has provided internal pathway navigations through Council's internal business units for all relevant enquires across East Gippsland including Buchan, Orbost, Mallacoota, Club Terrace and Cann Valley.

Council has been proactive in delivering various workshops and programs to support local businesses, including the Australian Centre for Rural Entrepreneurship (ACRE). ACRE workshops began in July 2023 and will continue into March 2024. This initiative empowers businesses to increase productivity, enhance efficiency and procedures, create a lean business that can compete with imports/competition and foster a more motivated workforce.

Business support has also focused on strengthening the capacity and connection between our major urban Chambers of Commerce and rural business and tourism associations.

# Agribusiness progress and resilience building

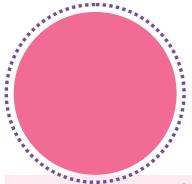
More than 450 primary producers were impacted by the fires with significant livestock losses, burnt pastures and horticultural crops and over 2,800 kilometres of fencing destroyed. The fires came after prolonged dry seasonal conditions and drought which had eroded farm business financial reserves.

The economic recovery efforts have continued to support agribusinesses and local farming families in preparation for the future. A series of program and events has been delivered to empower our local agribusiness community, supporting connection, building resilience and proactively responding to a changing climate. These initiatives reflect our dedication to fostering a positive and resilient agricultural sector and nurturing future prospects.

Council hosted two Agri-Tourism Expos, shining a spotlight on the vast opportunities and potential developments in rural lands with attendees appreciating the pathway to diversity and importance of connecting with Council in the early stages to understand the process before engaging consultants.



Youth Agritech Expo



Bushfire Recovery Final Progress Report 2024

#### Succession planning

Succession planning forums acted as pathways for the entire family to explore succession planning, family dynamics, farm finances, and the future of farming. Speakers focused on wills, legal processes, considerations, financial matters, case studies, ageing on farms and supports available. Attendees were able to access individual support from financial services after the event. Feedback received noted it was very relevant. Informative but not too technical and an important topic.

#### Agribusiness mentoring

Twenty farmers looking to diversify their ventures received invaluable guidance through our Agribusiness Mentoring program. This initiative not only enhanced their knowledge but also helped to strengthen the fabric of our local agricultural community. There was growth through utilising transport, increased focus, reduced stress, work life balance, family conferences for decision making and second income stream.

#### Youth Agri-Tech forums

Council is actively shaping the future by encouraging young individuals to consider careers in agribusiness. Our Youth Agri-Tech Expo helped to inspire the next generation to be part of a thriving industry through immersive experiences and various industry visits. This work will continue into 2024 through offering financial capability sessions, an agriculture economic leadership program, social connectedness rural events, and upskilling workshops. Notably, the latter will be delivered in collaboration with Neighbourhood Houses across the shire, fostering community resilience.

### Visitor attraction events

\$190,000 Council secured through Commonwealth Government's Regional Tourism Bushfire Recovery Grant program to deliver five events three of which were delivered in 2022). Council successfully delivered the Cattlemen 100 MTB event in Omeo with the event showcasing the Omeo Region beyond just the well-known Great Alpine Road. Unfortunately, the Super Trail Lakes Entrance trail running was cancelled due to poor weather conditions and was unable to be postponed with the funding being retained by Austrade (the funding body). Council has taken it as an opportunity to regroup and develop a strategy for future visitor events.



Succession Expo - Buchan



Adam Bloem, Neil Stringer and Hayley Hardy - Succession Expo Buchan

## Regional Development Victoria and Local Economic Recovery Program

Regional Development Victoria (RDV), in partnership with East Gippsland Shire Council and key local stakeholders representing government, industry and businesses, supported the coordination of the Economic Recovery pillar working group in response to the 2019/20 summer bushfires. The working group had oversight and responsibility for the development of the Economic Recovery Sub-Plan that detailed over \$90 million of economic recovery projects, designed to support and drive economic recovery and prosperity in the region.

Today, RDV continues to monitor in excess of \$20 million of priority projects that are completed, or are progressing towards completion, funded through the Local Economic Recovery Program Fund and the Bushfire Tourism and Business Fund. Of the 13 funded projects, eight have been successfully completed notably, the rebuild of the Mallacoota Abalone Limited Processing Facility, Tambo Valley Honey in Bruthen and the Metung Hot Springs. A further two projects will be completed by the end of 2023, and three projects are due for completion in 2024. Riviera Nautic is now complete while Sailors Grave Brewing still continues.

## The Conservation and Land Management Program also delivered



## Case Study - Envite Environment - training and skills for bushfire economic recovery

The Conservation and Land Management Program received funding support of \$851,600 through the Local Economic Recovery (LER) Regional Economic Programs Fund. The initiative aimed to empower young people by building their confidence, providing a sense of purpose, and creating direction through education and work experience that ultimately sets them up for a career in conservation management and related fields; skills that are highly valued in the East Gippsland wilderness coast region.

A total of 20 trainees and six school-based trainees aged 14 to 18, participated in the program that taught important skills in areas such as weed management, revegetation, fencing, seed collection and propagation, as well as formally conducting site assessments. A total of 17 trainees completed their placements and successfully transitioned into work and/or further education, obtaining a Certificate II in Conservation and Land/Ecosystem Management as well as key industry tickets including; First Aid, AgChem Chemical Users, and Chainsaw License.

In addition to economic recovery, this project has brought about positive social and environmental outcomes in the East Gippsland community.





## Recovery in the natural environment

The natural environment is a major attraction for living in East Gippsland and for many residents the impacts of the fires on the native plants and animals were devastating. The rehabilitation of the natural environment has been heavily supported by the dedicated work of Landcare groups and other voluntary community groups and private landholders that have undertaken a myriad of projects across East Gippsland and Council acknowledges the efforts of those volunteers.

Beyond the information below on the weed management undertaken by Council and our partner the East Gippsland Catchment Management Authority (EGCMA), rehabilitation work has also been undertaken through Parks Victoria and Department of Energy, Environment and Climate Action (DEECA). Visit the websites below for more information.

www.parks.vic.gov.au/news/2023/09/11/05/55/bushfire-recovery-continues-in-east-gippsland

www.wildlife.vic.gov.au/home/biodiversity-bushfire-response-and-recovery

## Weed management

Following the bushfires, more than 1200km of Council's road network bore the impact, with 615 km of these roadsides deemed of high conservation value according to Council's roadside value mapping system. Diverse vegetation types, including forests, heathlands, woodlands, and associated flora species, suffered from the aftermath.

In 2022, proactive measures were taken as part of the Commonwealth Government's Bushfire Recovery for Wildlife and Habitat Community Grants Program, leading to the treatment of over 600km of roadside weeds in high-value areas. This initiative aimed at supporting the recovery of roadside vegetation within the burn area. Subsequently, in 2023, state funding empowered Council to reassess vegetation and conduct weed treatment in previously untouched impacted areas. The funding also facilitated the treatment of sites falling under medium or low classification.

A notable highlight from the third progress report involves the Commonwealth Government's funding for weed treatment in foreshores around Mallacoota. Seventy hectares, encompassing the Mallacoota Coastal Walk and popular sites like Pebbly and Betka beaches, underwent treatment for emerging weeds in recovering vegetation.

**Bushfire Recovery Final Progress Report 2024** 

During these works, fifteen species were identified and effectively treated. Remarkably, this area has shown significant recovery, prompting ongoing monitoring by the Council to track progress.

## East Gippsland Catchment Management Authority in bushfire recovery

The EGCMA has invested significant efforts in bushfire recovery over the past three years, and like many agencies, communities and individuals, the EGCMA continues to invest in bushfire recovery.

Following the bushfires, weeds flourished, and with the few wet years following the fires, weed growth and establishment increased further. During 2023, the EGCMA completed over 730ha of woody weed control in fire-affected areas, and over 2,300ha have been treated since the bushfires, working closely with Parks Victoria and the DEECA to tackle remote weeds, treat willows, broom, and blackberries in natural and remote greas.

There has been a focus on targeting weeds along waterways that were impacted by fire across the region. Regular weed treatment and maintenance in the upper river reaches has been a priority, especially the major rivers of East Gippsland. Bushfire recovery works are not limited to weed control for the EGCMA with over 100kms of fencing replaced along waterways following the fires.

Community events hosted by the EGCMA have continued throughout 2022 and 2023 and have proven very popular and well-received by the East Gippsland community. These have included boat trips, walk and talks, and community barbecues and will continue with the focus on informing the community about recovery projects in their areas and listening to community suggestions.



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## Restoring public assets

The pile fields along the Buchan River have undergone a comprehensive restoration process. Strategically designed to mitigate the impacts of high-flow events, these pile fields play a crucial role in preventing bank erosion and aiding in the stabilisation of the riverbed.

In an effort to naturally reinforce the area, native vegetation has been planted on both sides of the banks. Over time, these plantings are expected to contribute significantly to bank stabilisation and the gradual slowing of water flows. The pile fields, serve as a temporary stabilising mechanism until the native plants reach maturity. This intentional planting also fosters a habitat for a number of living organisms, including insects. These insects, in turn, play a vital role in sustaining native fish populations by providing a crucial food source. The collective result is the establishment of ecologically diverse and thriving waterways, promoting a healthy and balanced aquatic ecosystem.



## East Gippsland Shire Council Environmental Sustainability Strategy 2022-2032

The Environmental Sustainability Strategy 2022-2032 is Council's key environmental policy document, guiding work across Council to achieve objectives for climate change, biodiversity, land and water management and resource efficiency.

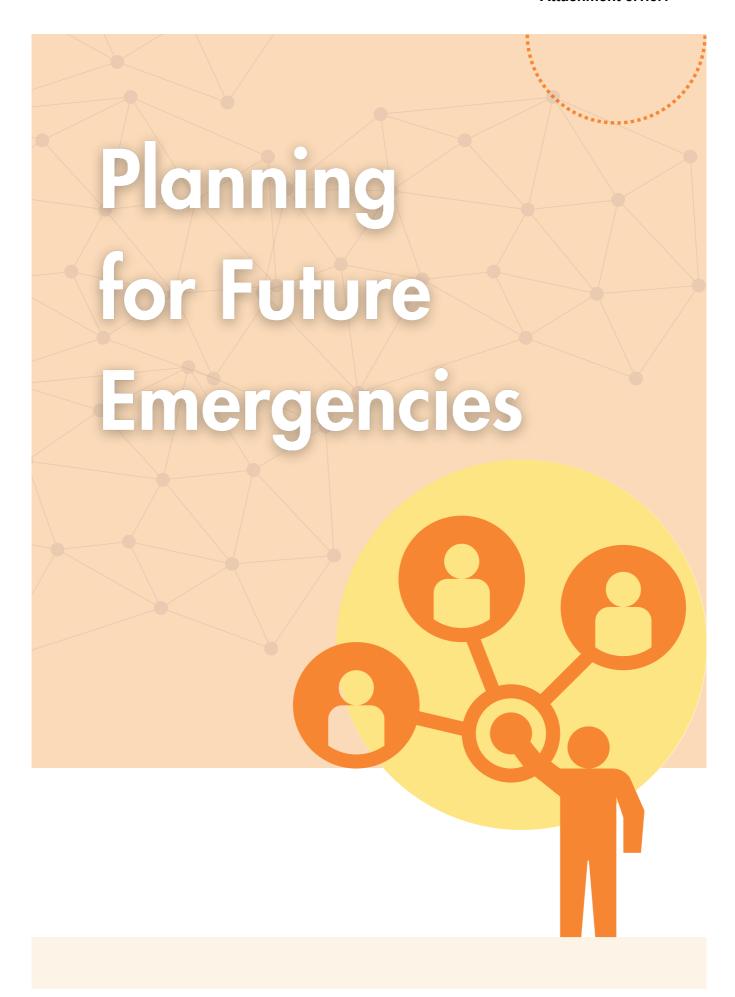
East Gippsland faces several varying climate risks including more days of extreme heat, harsher bushfires, sea level rises combined with storm surges causing inundation, flooding and other impacts, more frequent and intense heavy rainfalls (including hailstorms) causing flooding, and frequent drought periods.

As the impact of a changing climate emerges, the need for Council individually and collectively to focus on the sustainability of our environment is desperately needed.

Highlighting the seventh goal of the strategy: Community resilience to response to increasing climate risk and natural disaster. Over the next 10 years, Council will continue to identify and support additional opportunities to contribute to this outcome by:

- Improving community emergency preparedness by planning before events happen.
- · Adapting the agriculture sector
- Building resilient communities and infrastructure
- Promoting sustainable land-use development
- Investing in the growth of emerging industries
- Building capacity of all industries to become more sustainable, and;
- Protecting our natural heritage and biodiversity

Council will contribute to this goal by effectively managing natural environments that fall on Councilmanaged land and improving Council assets to increase resilience to climate change and natural disasters. Council's Municipal Emergency Management Plan, Health and Wellbeing Strategy and Economic Development Strategy also play core roles in achieving this goal.



## Facility upgrades and emergency planning

Since the Black Summer bushfires in 2019/20, we have completed extensive work to ensure our Assembly Areas and designated Emergency Relief Centre facilities are better prepared for future events. Annual audits are taking place to make sure facilities are clean and appropriately stocked. Council is supporting building community capacity through community-led activation of relief centres delivering on community feedback post fire and also highlighted in the Inspector-General for Emergency Management (IGEM) report.

# Facility preparedness for emergencies

#### **Community Facilities and Development Program**

Under the Community Resilience and Development Program, the focus is on upgrading identified community facilities to bolster preparedness for future emergencies and foster year-round community connections. oThis initiative has been funded through ERV's Local Economic Recovery (LER) grants program, allocating \$1,043,955.

The four key upgrade components below are intended to improve the resilience and usefulness of community facilities. They include:

- Bushfire Attack Level Assessment (BAL): Conducting a thorough assessment to gauge a building's potential exposure to ember attack, radiant heat, and direct flame contact. This assessment will guide construction methods and requirements to fortify the building against future bushfires.
- Electrical switchboard upgrade: Implementing an electrical switchboard upgrade, complete with a transfer switch, to enable connection to emergency power sources such as generators.
- Audio Visual (AV) upgrade: Supplying and installing AV equipment where needed to support remote and rural communities, promoting connectivity not just during recovery but throughout the year.

 Ember Protection Upgrade: Retrofitting existing facilities to enhance protection against ember attack by sealing gaps, cracks, or areas vulnerable to ember lodging, significantly reducing the building's ignition risk.

## Strengthening Telecommunications Against Natural Disaster (STAND)

The STAND project is a major part of the Facility Resilience Program providing an upgrade of telecommunication systems including AV infrastructure, Wi-Fi and digital connectivity at selected sites. The project is an initiative of the Commonwealth Government and implemented by NBN and supported by Council and the State Government.

There are two types of satellite communication systems (large and small) being rolled out as part of the pilot stage. The main differences between large and small is:

- Small system comes with only one wireless access point (WAP);
- Large system comes with two WAPs, and a battery backup that keeps the system operating for up to 8 hours.

When an emergency event is declared the system will be switched to active disaster mode resulting in the small sites supporting up to 40 concurrent users and the larger sites up to 100 concurrent users.

## **FACILITY UPGRADES**











LESSONS LEARNT
Communication
Power
Removal of Isolation
Social Support
Basic food/water

## Planning for emergencies

#### Local Incident Management Plans (LIMP)

Local incident management planning has been a considerable focus for Council and communities over the past 12 months with 44 LIMPs now developed across the shire. This two-page document ensures residents and visitors know where to go, what to take and what to expect if major incident affects the area. Identifies where each communities Assembly Area is located. LIMPs are issued to all households and displayed in all lodgings within a district. Are reviewed each year to ensure details are accurate and timely. LIMPs and Emergency Information Booklets on our website: www.eastgippsland.vic.gov.au/community/emergen cy-management-plans

#### \$1.2M Disaster Ready Fund

In June 2023, Council was granted \$1.2 million by the Commonwealth Government's National Emergency Management Agency to enhance disaster preparedness and community resilience. The Disaster Ready Fund will be used to extend Council's current projects aimed at advancing disaster and preparedness and resilience in collaboration with communities across the Government's National Emergency Management Agency to enhance disaster preparedness and community resilience. The Disaster Ready Fund will be used to extend Council's current projects aimed at advancing disaster preparedness and resilience in collaboration with communities across the shire.

#### **Timber Bridge Replacement Program**

Council's timber bridge replacement program is nearing completion. In the past 9 years over 153 timber bridges have been replaced with steel and concrete bridges, or where possible, major culverts. The new bridges have a 100-year design life and a load capacity of up to 68 tonne and are less prone to impacts by fires or floods. Suttons Access Road, Combienbar and West Bridge Road, Cabbage Tree Creek were completed in November 2023.

#### Concrete static water tanks

Increased access to water has seen over 60 concrete static water tanks (47,000 litre) now in place for firefighting use. Water is untreated and not suitable for domestic or livestock use. There are also 14 water bores/standpipes installed for stock and domestic use. Water is potable and suitable for domestic and livestock use.

#### Community-centred planning

In addition to the LIMPs development, updates and distribution, many communities have held Preparedness Days and other initiatives. These events see agencies and communities come together and share information.

Communities are supported to further develop Emergency plans and to present to Municipal Emergency Management Planning Committee and be endorsed or recognised.

## Case study - community building resilience

Under the guidance of the Omeo Region Community Recovery Association (ORCRA), five 'Community Conversations' were delivered at Benambra, Omeo, Swifts Creek, Tambo Crossing and Ensay in September to December 2023 to continue to build disaster resilience.

ORCRA presented its Disaster Resilience plan to the Municipal Emergency Management Planning Committee (MEMPC), where emergency management agencies were provided an opportunity to understand and respond to a listing of community expectations. These expectations were then written in community level emergency plans.

With support from Council and an independent consultant, Community Conversations brought Community and agencies together in community to discuss the progress of these issues and expectations. The outcome highlighted progress had been made, but there was still room for improvement, information sharing in emergencies is critical, and community provided valuable suggestions for agencies to capture local knowledge. Future actions were captured, and an overall report will be provided back to community and again through the MEMPC.



## 5.1.4 Economic Development Advisory Committee Unconfirmed

Minutes 16 October 2023

Authorised by General Manager Place and Community

#### **Conflict of Interest**

No Officer who has provided advice in the preparation of this report has disclosed a conflict of interest

#### **Executive Summary**

This report provides minutes for the Economic Development Advisory Committee (EDAC) meeting held 16 October 2023, 3.00pm, Corporate Centre 273 Main St, Bairnsdale VIC 3875.

A copy of the minutes is presented at **Attachment 1**.

### Officer Recommendation

That Council receives and notes this report and all attachments pertaining to this report.

#### **Background**

The Economic Development Advisory Committee (Committee) provides advice, guidance and recommendations to East Gippsland Shire Council (Council) on matters that affect Economic Development in East Gippsland and its communities.

The roles and responsibilities of the Committee are set out in the Economic Development Advisory Committee Charter (2023).

Note that the meeting held on the 16 October 2023 had a specific focus on *Fostering Business*, and investment attraction and facilitation in particular. Future agendas for the Economic Development Advisory Committee will progressively work through elements of the implementation of the East Gippsland Economic Development Strategy.

Future agendas will also include some set agenda items suggested by committee members.

#### Legislation

As of 1 July 2021, all provisions of the *Local Government Act* 2020 commenced. Some provisions of the *Local Government Act* 1989, that have not been repealed, will remain applicable until such time as they are revoked.

The implications of this report have been assessed and are not considered likely to breach or infringe upon the human rights detailed in the Victorian Government's Charter of *Human Rights and Responsibilities Act* 2006.

#### **Council Plan**

This report has been prepared and aligned with the following strategic objectives set out in the Council Plan 2021-2025:

Strategic Objective 4: 4.3 Council's work with stakeholders fosters entrepreneurship and new business opportunities, particularly with communities facing change.

Strategic Objective 5: 5.2 Strong relationships with government, partners and stakeholders are maintained and strengthened to advocate for the community.

### **Council Policy**

This report is consistent with the Economic Development Advisory Committee Charter (2023).

#### **Options**

There are no alternate approaches for Council on this reporting requirement.

#### Resourcing

Financial

There are no direct financial implications associated with this report.

Plant and equipment

There are no plant and equipment requirements with this report.

Human Resources

There are no direct human resource issues associated with this report.

Risk

The risks of minutes have been considered and have been assessed as low.

#### **Economic**

There are no direct economic implications stemming from this report, however the work of the Economic Development Advisory Committee is important in providing advice to Council about economic development in East Gippsland.

#### Social

This report is assessed as having no direct social impact. However, inclusive economic development as outlined in Council's East Gippsland Economic Development Strategy underpins a range of positive social outcomes.

Gender Impact Statement

This report is compliant with the obligations and objectives of the Victorian *Gender Equality Act* 2020 and has been assessed as not requiring a Gender Impact Assessment (GIA).

#### **Environmental**

There are no environmental implications stemming from this report.

Climate change

This report is assessed as having no direct impact on climate change.

### **Engagement**

Not applicable.

### **Attachments**

1. EDAC Unconfirmed Minutes 16 October 2023 [5.1.4.1 - 5 pages]

## **Unconfirmed Minutes**Economic Development Advisory Committee



Meeting Date:	Monday, 16 October 2023
Time:	3pm to 5pm
Venue:	Council Office, 273 Main Street Bairnsdale, Council Chambers and Microsoft Teams
Chairperson:	Cr. Mark Reeves, Mayor
Secretariat:	Andie McCullagh

### 1. Procedural

	L	
1.1	Welcome	Chair, Cr. Mark Reeves Acknowledging country and welcoming members to the meeting. Members were invited to reintroduce themselves around the table.
1.2	In attendance	
	Councillors	Cr. Mark Reeves, Mayor (Chair) (online), Cr, Jane Greacen, Cr. Trevor Stow, Cr. Mendy Urie (online)
	Members	Stephen Angus, Michelle Brooker, Richard Brownlow, Adam Guillot, Steven Holmes, Angela Hutson (online), Nicholas Kavadis, Andrea Lane, Liz Mitchell (online), Gabriella Moore, Chris Savige
	Staff	Andrew Davidson, Stuart McConnell, Andie McCullagh, Rebecca Steenholdt
	Apologies	Anthony Basford, Tanya Taylor
1.4	Confirmation of Minutes	Confirmation of Minutes of meeting held on 17 July 2023
		The minutes of meeting held on 17 July 2023 were accepted without modification.
		Moved: Richard Brownlow
		Seconded: Trevor Stow
1.5	Declaration of Conflict of interest:	Nil

### 2. Presentation/Discussion

2.1 Investment attraction and facilitation
Rebecca Steenholdt, Coordinator Economic Development

Members were invited to participate in an open conversation around the room to contribute their thoughts about the desired future state for investment attraction and facilitation in East Gippsland, including Council's role.

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A discussion ensued between members about Council improving their community presence and being more accessible to businesses in the region. Members discussed the importance of Council's representation at community events, specifically business/networking events. There is an opportunity for the Council to explore innovative ways to support opportunities existing and emerging businesses. There is also an opportunity to increase the extent and consistency of engagement through events and public facing engagements.

The discussion around next steps involved:

- How East Gippsland Shire Council can support a communications campaign process in the form of investment attraction
- Building the Economic Development and Tourism teams' visibility, presence and profile through public facing engagement (e.g., Business Concierge and Business Development and Resilience Officer working out in community)
- EDAC to feedback into Invest East Gippsland website identification of Business Leader profiles and case study examples
- · Building Council's reputation as being 'open for business'

Cr. Reeves thanked members for their input and advised that Council will note their recommendation.

Noted:

Action:

Ensure Council staff are maintain a strong presence in the business community including business networking events.

### 2.2 Bairnsdale 2050

Stuart McConnell, General Manager Place and Community

The committee were introduced to the Bairnsdale 2050 project and opportunities for engagement. As Manager Planning Martin Richardson was an apology, Stuart McConnell provided the group with an outline on the project.

Amber Parker, Planning Projects Support Officer, entered the meeting 3.39pm.

Council advised it is now time to revisit and update the Bairnsdale Growth Strategy. Council has engaged with SGS Consultants to help navigate the Bairnsdale 2050 project. The aim is to look at Bairnsdale's 2050-and-beyond timeline and a range of issues associated with the future of Bairnsdale such as:

- Function of the Bairnsdale CBD
- · Shift of retail in the CBD and online
- Land supply for development such as future housing
- Dealing with population growth
- Future of land supply for industrial purposes
- Working with private land holders to bring them through the market

The committee were also informed that Council is in the process of establishing a community panel to help guide the engagement of the Bairnsdale and beyond community and expressions of interest have now opened.

#### 3. General Business

## 3.1 Matters from Economic Development Advisory Committee members All

Members raised concern about accessing overseas workers. It was mentioned that 88-day Visas are not accessible for certain hospitality businesses due to post code locations. It was also noted that accommodation continues to be an ongoing challenge for seasonal workers. The Committee requested a coordinated approach for employment attraction, specifically for migrant workers.

Local provider, Regional Migration Australia, are looking at the options to bring overseas workers into different roles within the region.

A member raised the issue that in order to build (e.g. accommodation and housing) we require more workers. There has been a demand increase over the last couple of years which has affected capacity to build. Victoria's Big Build strategy is also putting a strain on the regional workforce as it is more enticing to exit the area. It is critical to keep funneling young people into all industries. There has been a major drop in apprenticeship interest. There needs to be more engagement by employers communicating with schools to give young people the opportunities to enter the workforce.

It was noted that the number of new dwelling approvals outweighs the number dwellings completed (refer to .id profile graph). One of the issues is businesses signing up a significant number of houses but not having the capacity to deliver.

It was also mentioned that currently land sales are the most challenging part of the market. Residential properties and farms are selling. There has been a significant drop in first home buyers over the past 18 months as they are nervous about interest rates and getting used to the rising costs of living.

A member raised the issue of the costs of managing wild deer and what we can do to make it an asset to the region. We need to find a market or social enterprise to take on the role of harvesting deer and make a brand of wild food for Gippsland.

Noted: Action:

Council to investigate barriers for businesses accessing overseas hospitality workers to inform advocacy to State and Federal Government.

#### 3.1 Updates

Stuart McConnell, General Manager Place & Community

#### • Transition Update

The query was raised about the psychology around industry transition, and to understand deep and intrinsic change.

#### · Credit card spending data

The credit card spending data for April – June 2023 is available on the Economic Development Advisory Committee Portal for members to access. The data is sourced from Spendmapp by Geographia.

#### · Housing construction data

The housing construction data and graph from .id profile was shown to members and spoken to in item 3.1.

#### New energy-request for proposal

A member suggested holding a large, facilitated conversation lead by competent futurists to explore the forward-facing challenges and opportunities for East Gippsland.

Noted: Action:

#### 3.2 EDAC Committee Conflict of Interest Declarations and Confidentiality

Stuart McConnell, General Manager, Place and Community

There have been some small changes made to the Conflict of Interest Declarations and Confidentiality Agreement. The Economic Development Committee Members will need to sign new agreement.

Noted: Action:

Updated agreement to be bought to next meeting for committee members to sign

#### 3.3 Economic Development and Tourism Department update

Acting Manager Economic Development and Tourism

A report on the Economic Development and Tourism department's current activities is provided at **ATTACHMENT 1**.

It was also noted that some members are having issues accessing the Economic Development Committee Portal and the papers uploaded to it. Committee Secretariat to investigate the problem.

Noted: Action:

Committee Secretariat to investigate Portal issues with ICT unit and resolve

#### 3.4 Actions from Previous Meeting

Acting Manager Economic Development and Tourism

There were no actions from previous meeting.

## 4. Meeting Close

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## Meeting Closed 4.50pm

Chair, Cr Mark Reeves

Next meeting: 19 February 2024

## 5.1.5 Agricultural Sector Advisory Committee Council Briefing

**Confirmed Minutes 17 August 2023 and Unconfirmed Minutes 16** 

November 2023

Authorised by General Manager Place and Community

#### **Conflict of Interest**

No Officer who has provided advice in the preparation of this report has disclosed a conflict of interest.

#### **Executive Summary**

This report provides minutes for the Agricultural Sector Advisory Committee (ASAC) meeting held 17 August 2023, and the 16 November 2023 both at 7.30am, Corporate Centre 273 Main Street, Bairnsdale VIC 3875.

A copy of the minutes for 17 August 2023 is presented at **Attachment 1** and a copy of the unconfirmed minutes for 16 November 2023 is presented at **Attachment 2**.

#### Officer Recommendation

That Council receives and notes this report and all attachments pertaining to this report.

### **Background**

The Agricultural Sector Advisory Committee (Committee) provides advice, guidance and recommendations to East Gippsland Shire Council (Council) on matters that affect the agriculture sector in East Gippsland and its communities.

The roles and responsibilities of the Committee are set out in the Agriculture Sector Advisory Committee Charter Version 2 (2021).

#### Legislation

As of 1 July 2021, all provisions of the *Local Government Act* 2020 commenced. Some provisions of the *Local Government Act* 1989, that have not been repealed, will remain applicable until such time as they are revoked.

The implications of this report have been assessed and are not considered likely to breach or infringe upon the human rights detailed in the Victorian Government's Charter of *Human Rights and Responsibilities Act* 2006.

#### **Council Plan**

This report has been prepared and aligned with the following strategic objectives set out in the Council Plan 2021-2025:

Strategic Objective 4: 4.3 Council's work with stakeholders fosters entrepreneurship and new business opportunities, particularly with communities facing change.

Strategic Objective 5: 5.2 Strong relationships with government, partners and stakeholders are maintained and strengthened to advocate for the community.

## **Council Policy**

This report is consistent with the Agriculture Sector Advisory Committee Charter Version 2 (2021).

#### **Options**

There are no alternate approaches for Council on this reporting requirement.

#### Resourcing

Financial

There are no direct financial implications associated with this report.

Plant and equipment

There are no plant and equipment requirements with this report.

**Human Resources** 

There are no direct resource implications associated with this report.

Risk

The risks of minutes have been considered and have been assessed as low.

## **Economic**

There are no direct economic implications stemming from this report. However, the agricultural sector is noted as a significant contributor to the East Gippsland economy.

### Social

This report is assessed as having no direct social impact.

Gender Impact Statement

This report is compliant with the obligations and objectives of the Victorian *Gender Equality Act* 2020 and has been assessed as not requiring a Gender Impact Assessment (GIA).

#### **Environmental**

There are no direct environmental implications stemming from this report.

## Climate change

This report is assessed as having no direct impact on climate change.

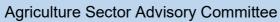
## **Engagement**

Not applicable

## **Attachments**

- 1. ASAC Unconfirmed Minutes 17 August 2023 [5.1.5.1 7 pages]
- 2. Amended Unconfirmed ASAC Minutes with Actions 16 November 2023 [5.1.5.2 8 pages]

## **DRAFT Unconfirmed Minutes**





Meeting Date:	Thursday 17 August 2023
Time:	7.30am – 9.30am
Venue:	Council Chambers, First Floor, 273 Main Street Bairnsdale
Chairperson:	Cr. John White
Secretariat:	Andie McCullagh

## 1 Procedural

1.1	Acknowledgement of Country:	Chair, Cr. John White					
1.2	Welcome:	Chair, Cr. John White  Welcomed members to the meeting Cr. White advised that the meeting is being recorded for the purpose of confirming accurate minutes and advised that the transcription will be deleted after minutes have been confirmed.					
1.3	Attendance: In Person	Anthony Basford (EGSC), Cr John White, David Caldwell, Graeme Dear, Ian Cane, Kaylene Wickham (EGSC), Ken Eckersley, Matthew Zagami, Stuart McConnell (EGSC)					
	Online	Bruce Weston (Ag Vic), Cr Mendy Urie, Cr Sonia Buckley and Nick Blanford					
	Apologies	Alison Gunn, Ben Gebert, Cr Mark Reeves, Jen Smith, and Trevor Caithness.					
1.4	Confirmation of previous minutes:	The minutes of meeting held at the 11 May 2023 meeting were accepted without modification.  Moved: Ken Eckersley Seconded: lan Cane Carried					
1.5	Declaration of conflict of interest:	Nil					

#### 2. General Business

#### 2.1 Sustainable Water Strategy Presentation

Gus Dear, Retiring CEO EGCMA

Members were given an overview on the ten-year Sustainable Water Strategy (SWS) which encompasses Melbourne and Western Victoria.

A short summary of the strategic intent of the SWS for Gippsland is as follows:

- Most surface and groundwater water sources are overallocated
- Consideration is given to climate change predictions when issuing licences
- Demand for water is likely to increase due to population increases, which could create a future shortage of water
- Latrobe Valley Mine rehabilitation will rely on water for either partial or complete fill, which will affect shortages in the medium term – say 20/30 years
- Desalinated water may be needed to supplement drinking water and an increased use of recycled water and stormwater for non-drinking uses like irrigation and watering parks and ovals may also be needed
- Water saving and efficiency initiatives must be considered to reduce water needs
- Many rivers require additional water returned to the environment to remain healthy
- Traditional Owner access to water is vital for Culture and Country and opportunities.

#### Strategic opportunities in the SWS

#### 1. Immediate Access to water:

There is an opportunity for access to surface water (water flowing in rivers) in the Mitchell River, Tambo River and some rivers East of Bemm River. Southern Rural Water have commenced a process to allocate the available water in the Tambo of approx. 1.5 G.L and in the Mitchell River of approx. 2.0 G.L. There is no proposed intention to allocate the water available in the Far East at this time.

#### 2. Future access to water:

There is an action for government to consider potential to provide more access to water from the Mitchell River in future (see appendix 1 – action 4.12). The SWS states that opportunities for additional consumptive water will be assessed for the Mitchell but does not state the quantum.

#### 3. Long Term Water strategies:

Water for irrigation and potable use links directly to the Shire Economic Development Strategy. Strategic positioning will be required by the Shire to ensure the best value for East Gippsland without adverse impact to the environment.

Question on allocation of limited resources.

There is detailed mathematical models for rivers that the government continually updates to show when there is water available that will not impact the environment. Also, the license itself has conditions i.e. if the river is not meeting triggers, everyone will take a share of the reduction in the water that is available. There are rules around how the shares are allocated.

Question on traditional owner usage of water allocation.

Traditional owners will develop a water plan over the next ten years which will include infrastructure to enable usage of their allocation.

Question on reducing salinity and reclaiming fresh water.

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That is outside policy. There have been two studies done on barriers in the Gippsland Lakes and the result has been that it is not going to work.

Question on managing the decline of flow in the future.

Regarding quantity, a smaller river is not necessarily unhealthy. We watch our water allocation framework, so we do not pressure the river.

To note: The river must be flowing at a certain level in winter before they can extract for the winter fill.

#### **Orbost Futures Water Presentation**

Matt Zagami, Avagrow Wairewa

Through the timber transition a number of areas in the Orbost district have been identified as having the potential for growth, however, one of the limiting factors in Orbost is water security. The Orbost system is healthy with few people irrigating or using their water allocation. We are trying to identify what are the barriers.

The loss of so many jobs is going to be a major impact of the transition and we are hoping agriculture is well placed to replace some of these.

- Trading of water allocations is possible in the district (pending individual circumstances and sub basin allocations)
- Off-stream water storage is possible (pending individual circumstances)
- There are no provisions in current policy to harvest flood water, this would require a
  policy change
- Winter fill can take place from July October (metered on the way into storage) with possibility for additional storage above a trigger level
- Irrigation professionally designed farm plans provide irrigators with the blueprint they need to achieve best practice on their farm
- Orbost is an unregulated waterway, and the volume of water available for diversion is based entirely on rainfall and runoff. Accessing water for irrigation from unregulated waterways in Victoria requires a take and use licence and may require a works licence
- Southern Rural Water are about to commence a process in the Southwest / Limestone with 850 licenced customers investigating why people are or are not trading water.

Stuart McConnell asked the committee if there is any advice or guidance they would like to provide to Council on the matter.

Actions could include:

- On farm storage advocacy
- Forming a stronger relationship with GLAWAC
- Do a tactical analysis of water opportunities
- Gather and evidence-based case study on the Mitchell River, Tasmania project, or Sunraysia Almond farmers
- Access the RMCG water security project conducted 10 years ago
- Liaise with Orbost Futures project to ensure consistent messaging
- Educate that water licence holders are able to 'lease' water to others.

Actions:

Locate the RMCG Lindenow Water Security paper Work in conjunction with Orbost Futures Project to provide education on the ability to lease licences

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#### 2.2 Productivity Case Study

Nicholas Blandford

Nick provided members with an overview of his farming operations. The 1400 hectare farm is located in Meerlieu, which is part leased. Annual rainfall is around 580mm. Main part of the production system is self-replacing highly fertile dual-purpose Merino flock with 2750 breeding ewes and 2750 weaned lambs on the farm. Over the past 10-15 years lamb marking percentage has increased from 80% to 114%. Each year the farm produces about 120-130 bales of 18 micron wool. The other production side of the business is sale of surplus stock including wether lambs and aged ewes. Just completed succession planning process and working on improving soil health. All the stock and domestic water is supplied from ground water resource.

Water consumption (up to):

Adult Sheep: 10 litres/day

Weaners: 6 litres/day

• Requirement for 50,000 litres/day

The farm is part of the Farm Emissions Action Plan with the Victorian State Government. Has an Emission's Profile and now need to look at how to minimise net annual emissions.

#### Challenges:

- Climate Adaptation and Mitigation
- Environment & Biodiversity Management
- Invasive Species Management
- Water Access and Efficiency
- Labour Availability
- Capital Growth of Land Assets
- Land Use Competition
- · Cultural Management
- Social License / Regulation

#### Opportunities:

- Carbon Neutrality
- Natural Capital Accounting
- Biodiversity Stewardship Program
- Federal and state government programs in development
- Diversification / Value adding
- Sustainability
- Traceability

Question on carbon neutrality.

It is through technology that we will see different sorts of processes come in to achieve this, although it is not likely to get to carbon neutrality by the target that has been set, but it is going to be vital that we get as close as we can.

Question on potential for a set of simple indicators for carbon neutrality.

That is one of the big challenges. You are relying on a calculator and the inputs you put in to work out where your sources and sinks are. There is talk about a device that can monitor the methane emissions at an individual animal level. We also have plantations on the property to assist in terms of a biodiversity and carbon neutrality. The standard sort of plantation that you would put in is probably not big enough to be make enough of a difference to be able to count it though.

Question in opportunity around blue carbon.

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Our neighbours have a project going with Deakin University that are looking into that, part of it is to reintroduce title slows too that system.

Question on heavy polluters using the rural sector as their offsets.

I do, I feel like it pushes a lot of emphasis on to the land use sector and especially farmers.

Question on salinity.

I think the salt was probably always there and through the late 90s, there was a lot of talk about the rising water table bringing salt to the surface. The ground water is good the deeper you go.

Actions:

No actions arising from the discussion

#### 2.3 Drought Preparedness Direction Discussion

Bruce Weston, Regional Leader South East Agriculture Victoria

Agriculture Victoria is progressing the following for drought preparedness:

- The Farm Business Resilience Program focuses on sound business planning, clear and early decisions points
- The approach is to address the proactive management of known risk, selfresponsibility, management and preparedness
- · Updating their managing dry seasons information and online tools
- The Gippsland Regional Drought Resilience Plan, one of the first Regional Drought plans in Australia has been allocated \$300,000 worth of funding to start implementing the first steps
- Working with industry groups such as GAGg, Dairy Australia and other future drought fund programs to try and deliver coordinated programs and to monitor the conditions and tailor services to meet the needs
- Also, through all programs we promote mental health and well-being awareness and resources.

Question asked about how will future funding recognise those that have invested in the infrastructure and resilience during the good times, so that the government response does not bail out those who have not invested?'

Bruce Western noted that there is current a review of the Victorian Drought Framework, in addition The National Drought Agreement is opened for consultation which will look at this issue.

In response to drought preparedness Council are coordinating a Leadership for Economic Resilience program to assist farmers identify how they make decisions and prepare for disasters. There are currently five positions left and this program which starts in September and Council will revisit the Looking Ahead Position with Wellington Shire Council.

Stuart McConnell asked the committee 'Are we heading to one of the driest years on record, is there any recommendations or advice you would like to provide to Council?'

Members discussed the dry conditions and the importance of Farm Preparedness Plans and the need to provide awareness in conjunction with Ag Vic, to address the proactive management of known risk, self-responsibility, management and preparedness. Need to source templates and provide messaging that if you have a plan, revise it for relevance now.

Actions:

Council to promote Farm Preparedness Plans to ensure farmers have a plan or an up-to-date plan include contact of agencies that can assist

### 3. Reports

#### 3.1 Council Updates

Stuart McConnell, GM Place & Community

#### **ASAC Committee**

Welcome Bec Hemming who has stepped into the role of CEO at the CMA advising that the ASAC Charter provides that there is a representative from CMA and we welcome Bec's input. The Chair thanked Gus Dear for his attendance and valuable input since the formation of the committee and wished him well in his retirement.

Council are going through the process of filling the three vacancies on ASAC. Five applications were received for the positions and the selection panel will meet next week to identify the preferred candidates.

#### Rural Land Use

The Rural Land Use Strategy has been adopted by Council. Stuart thanked the committee for their advice on the strategy. The next step will be getting the strategy into the Planning Scheme.

#### **ASAC Portal**

Andie McCullagh gave the committee an overview of the new Agriculture Advisory Committee Portal. The purpose of the portal is to give committee members access to agendas, minutes, and reference documents for meetings to review. There is a list of meetings dates for the year, a link to add to the agenda prior to meetings, in addition to quick links to information of relevance.

Andie also presented on the Remplan data that is in the portal. Remplan is a software that provides information about the region's economy with the data is sourced from the Australian Bureau of Statistics. It provides insight into the agriculture industry's role in East Gippsland's economy, how this sector contributes to employment, production, wages, and trade within the region.

A member requested all meeting documents be added to the calendar invite sent out.

Actions:

Include all relevant documents for upcoming meetings into the calendar invite.

#### 3.2 Circulated Reports were noted

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#### 4. Other Business

## 4.1 Opportunity for members to raise other matters

#### Public land and forestry

Concern over public land estate and where the forestry debate has ended and there is no plan from state government. Is there a role for the Council to hold a forum of where to go from here with public land management, and the health of the forest?

Stuart McConnell responded that there is a process underway to develop a new forest management plan with a commitment to set up an advisory group. Part of what Council has been advocating for is how the community continue to derive value from large pieces of land. There is a weekly coordination meeting at an East Gippsland level that is led by Regional Development Victoria.

#### Meat prices

Concern over the difference in farm gate price for livestock at the moment versus the retail price. Could council contact a higher level of government to ask why the discrepancy?

#### Actions:

Write to relevant body to ask why the discrepancy.

Moved: Ian Cane. Seconded: David Caldwell

#### Bushfire preparedness

Concern over time pressures for property preparation for the bushfire season. The fire brigade is receiving callouts in relation to people who are burning off and not registering their burns. It would be good to do promotion around fire preparation, developing fire plans and getting fire permits.

#### **Actions:**

Work with Emergency Management team to promote fire preparedness, fire plans and getting fire permits.

## 5. Meeting Close

#### 5 Meeting Closed 9.43am

Chair, Cr John White

Next meeting: 16 November

## East Gippsland Shire Council Agriculture Sector Advisory Committee

## **Unconfirmed Minutes**



For meeting held on Thursday 16 November 2023 7.30am to 9.30am Council Chambers 273 Main Street Bairnsdale

#### 1. Procedural

Attendees: Wayne Dredge, Ben Gebert (FFG), Cr Jane Greacen, Alison Gunn, Edward

Mauger, Stuart McConnell (EGSC), Andie McCullagh (EGSC), Prue McTaggart (EGSC), Emily Richardson, Jen Smith, Bruce Weston (Ag Vic), Kaylene Wickham

(EGSC) and Matthew Zagami.

**Online:** Cr Mendy Urie (entered the meeting at 8.40am)

Chair: Mayor, Cr Tom Crook

Minute taker: Andie McCullagh (EGSC)

Item 1.1 Acknowledgement of Country

Item 1.2 Welcome: Cr Crook welcomed members. New committee members were

introduced; Edward Mauger Agronomist, Emily Richardson from S & E Richardson's Farming and Wayne Dredge from Emerging Ag and Prue McTaggart Manager

**Economic Development and Tourism** 

Apologies: Anthony Basford, Nick Blandford, Trevor Caithness, David Caldwell, Ian

Cane, Ken Eckersley and Bec Hemming

Item 1.3 Confirmation of previous minutes

**Moved:** Matthew Zagami **Seconded:** Cr John White

Item 1.4 Conflict of Interest

There was no conflict of interest declared

### 2. Presentations/Discussion

## Item 2.1 Biosecurity and Preparedness Case Study

Alison Gunn, Veterinary

Rural veterinary sustainability is a complex, multifaceted and global issue with the roles in agriculture changing.

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#### Concerns:

- Disconnect between farming and veterinary services
- Provision of after-hours services
- Workforce shortage
- Attracting and retaining
- Financial challenges
- · Mental health and burnout
- Work placement opportunities
- Veterinary Education
- · Ability to provide surveillance and respond to EAD and climate changes

#### Local Solutions:

- Collaboration between farming and veterinary education partners (improve opportunities for student placements – funding, living arrangements, transport etc.)
- Building networks with interstate universities to attract students for placements
- · Scholarships for local (farm based) students to study vet
- Better return to work support and re-training for farm work (opportunities, insurances, equipment)
- Development of a steering committee within Gippsland, representing all sectors (veterinary, agriculture/industry, government, education, council) to help improve collaboration, networking, financial support and education.

A member raised that there is current Bill for consultation at state level around 'animal sentience'. It proposes to discuss whether all animals and some marine species in Victoria are to be classified as sentient which will affect animal and fisheries practices and justice.

Potentially there is a role for Council advocacy in this space to ensure that if that bill is introduced, that it is done with a degree of practicality and sensibility and properly resourced.

**Action:** Advocate to peak agriculture agencies, VFF, MLA, VFA about resourcing for the Animal Sentience Bill if passed and include note about lack of Vet support services in regional areas.

#### Item 2.2 Gippsland Drought Resilience Plan

Bruce Weston, Regional Leader Southeast Agriculture Victoria

The Gippsland Regional Drought Resilience aims to invest to improve preparedness and resilience of regional communities and industries to drought and other climate related factors, by building on on existing networks within regions who are best placed to identify and prioritize projects to be funded by the plan.

#### The five themes are:

- Resilient, connected and empowered communities
- Sustainable management and use of natural resources
- Resilient local businesses and regional economies
- Innovation, research, knowledge sharing and skills development
- Key enablers essential to effective collaboration and collective action

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The current operating model being considered is for Food and Fibre Gippsland to be the potential coordinating organisation to oversee the disbursement of those funds.

It would be timely for the Agriculture Advisory Committee to compile a prioritised list of projects, from an east Gippsland perspective, that address the priority areas identified in the Plan. Those priority projects can be considered during this and any subsequent funding opportunity.

Action: That a Gippsland Regional Drought Resilience ASAC subcommittee is formed of Ag Vic, EGCMA, FFG, GAgG and EGSC representatives to develop the short list for funding applications.

#### Item 2.3 Drought Preparedness Direction

Stuart McConnell, General Manager

There is an opportunity for members to share their insights into current industry transition issues and opportunities in view of the Minister signed Gippsland Drought Resilience Plan.

A member raised their concern that three years ago East Gippsland was excited to be the first region to provide the Drought Resilience Plan, but it has sat with the minister now for 8 months which has delayed the implementation.

Action: Council to write a letter to the minister advising that the delays in starting the implementation of the Gippsland Drought Resilience Plan is disappointing (given current seasonal challenges) however, we look forward to working with the state to deliver programs that build resilience in our communities (as we did during the 2017-2020 drought).

Advised that Wellington and East Gippsland Shire are looking at the relevance of the Looking Ahead document and whether it needs to be reviewed.

#### 3. Reports

#### Item 3.1 Council Updates

Stuart McConnell, General Manager

Emergency Management Preparations post October flood event

Council capitalised on the networks and structures that were put in place over the last couple of years to ensure the flood impacted farmers were kept up to date with information and the government informed of impacts.

The new MEMPC Relief and Recovery Subcommittee operated well led by local government, it was beneficial to be able to test these systems before a larger event occurred.

• \$1.2 million by the Federal Government's National Emergency Management Agency to enhance disaster preparedness and community resilience.

Council received funding from the Federal Government's Disaster Ready Fund for a project which will include climate risk analyses, emergency management

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dashboard, engagement with communities and additional generators for a one stop site in emergencies.

## Item 3.2 Gippsland Agricultural Group Update

Jen Smith, General Manager

Gippsland Agricultural Group (the Group) was awarded \$987,000 for the construction of the Agriculture Learning Centre, to note the fire services package came to \$247,000. Appreciate Council assisted additional funding. The Group has been given a provisional certificate of occupancy for two years – subject to the fire services being implemented. The opening of the facility will be at the East Gippsland Field Days.

The Group has also received funding from the Future Drought Fund to work with Australian Rural Leadership Program on a leadership action initiative for the operations group of the Agricultural Centre.

This year's Gippsland Red Meat Conference held in Sale received terrific feedback on the speakers at the event which was attended by 240 producers and 60 partners/sponsors. Spring Field Day saw 132 producers visit the research farm to view 100 plots of different grasses and the 27 projects taking place.

Future Drought Fund are funding four projects to be delivered over the next two years, Meat and Livestock Australia \$370,000 over the next 5 years and GRDC have just put their first investment into the research farm, this is significant because we do not have the grains receivable facility in the region.

#### Item 3.3 Circulated reports for noting by exception

- Food and Fibre Gippsland
- Agriculture Victoria
- East Gippsland Catchment Management Authority

A member raised concern around Orbost major flood class level ascending from 7.4m to 8.9m. It was advised that farmers need to be aware of this change so they can pay attention to the river level instead of whether it is moderate or major.

**Action:** Council to check with EGCMA about communications for the increase in Flood Class Levels and whether there are community consultations.

- · Agribusiness Development Officer
- Rural Agency Network Support Services Minutes 25 October 2023

#### 4. General Business

## Item 4.1 Opportunity for members to raise other matters

Chair, Mayor Cr Tom Crook

A member raised the importance of agriculture extension officers to help alleviate issues that limit production. The state model is now to host events on farms for farmers to gather and learn on site not one on one.

A member raised that there is a seed bank going in at Mount Taylor. Is it possible for the Shire to talk through the CRC or the funding group to tie it into the Agriculture Precinct at the Aerodrome site?

Action: Kaylene Wickham to follow up with the Mount Taylor seed bank.

#### Item 4.2 Actions from previous meeting

Kaylene Wickham, Agribusiness Development Officer

A report on actions arising is provided at ATTACHMENT 2

#### Item 5.1 Meeting closed at 9.41am

Next meeting: 8 February 2024

#### Agriculture Sector Advisory Committee Actions Updated 27 October 2023

Completed

New/On-going/Due Date Allocated

Overdue/Incomplete

	Overdue/inc						
MEETING DATE:	ITEM NO:	RESPONSIBLE OFFICER:	ISSUE:	ACTION REQUEST:	DUE DATE:	ACTIONS TAKEN:	QUESTIONS:
3/11/2022	7.1	Kaylene Wickham	Carbon in Soils	Invite Soil Carbon sequestration expert to present to members	Next year	Scoping out best person to present	Jen Smith any recommendations
3/11/2022	7.1	Jen Smith	Carbon in Soils	GAgG members to present on findings of current carbon trial underway with Melbourne University	Next Year	GAgG and Nexus findings will be available next year when the trial is completed	Jen Smith any updates
16/02/2023	7.2	Kaylene Wickham	Committee Membership	Coordinate a capability audit of members to target recruitment	21/06/2023	Spreadsheet developed	
11/05/2023	2.1	Kaylene Wickham	Strategic Direction	Report back to Committee/ Council every two years on achievements of group	Biannually	Report to be created biannually	
11/05/2023	2.2	Kaylene Wickham	Water Presentations	Consider option to have a Water Literacy open meeting post the next ASAC meeting	17/08/2023	Contacted partners, work being led by Orbost Futures project	
17/08/2023	3.1	Kaylene Wickham	Water Security	Work in conjunction with Orbost Futures Project to provide education on the ability to temporarily trade water licences	by December 2023	Underway. New Project Manager appointed Lissette Holmes	
17/08/2023	4.1	Kaylene Wickham	Water Security	Consider revisiting economic case for investment in provision of water from the Mitchell system	Ongoing	Conversations underway with relevant agencies.	
17/08/2023	2.3	Kaylene Wickham	Drought Preparedness	Council to promote Farm Preparedness Plans to ensure farmers have a plan or an up-to-date plan include contact of agencies that can assist	Now	Information included in Agrinews, Council Ebusiness Connect, circulated to Landcare and Gippsland Agriculture Group newsletters as well as Ag Vic, Leadership Program, Orbost Futures and Spring Field Days.	
17/08/2023	3.1	Andie McCullagh	Operational	Include all relevant documents for upcoming meetings into the calendar invite	Now	Apply ongoing	
16/11/2023	2.1	Kaylene Wickham	Biosecurity and Preparedness	Advocate to peak agriculture agencies, VFF, MLA, VFA about resourcing for the Animal Sentience Bill if passed include note about lack of Vet support services in regional areas	Now	Drafted	
16/11/2023	2.2	Kaylene Wickham	Gippsland Drought Resilience	That a Gippsland Regional Drought Resilience ASAC sub-committee is formed of Ag Vic, EGCMA, FFG, GAgG and EGSC representatives to develop the short list for funding applications.	Now	Emailed recommended representatives	
16/11/2023	2.3	Kaylene Wickham	Drought Preparedness Direct	Council to write a letter to the minister advising that the time lapse in the signing of the Gippsland Drought Resilience Plan was disappointing however, we look forward to working with the state to deliver programs that build resilience in our communities	Now	Drafted	
16/11/2023	3.3	Kaylene Wickham	East Gippsland Catchment M	Council to check with EGCMA about communications for the increase in Flood Class Levels and whether there are community consultations.	Now	Emailed EGCMA	
16/11/2023	4.1	Kaylene Wickham	Mount Taylor Seed Bank	Kaylene Wickham to follow up with the Mount Taylor seed bank	Now		

			Agricultu	re Sector Advisory Committee Completed Ac	ctions	
	Completed			•		
		ing/Due Date Allocated	i			
ITEM NO:	Overdue/In MEETING		ISSUE:	ACTION REQUEST:	DUE DATE:	ACTIONS TAKEN
II LWI NO.	DATE:	OFFICER:	1330L.	ACTION REQUEST.	DOL DAIL.	ACTIONS TAKEN
16/02/2023	6.1	Kaylene Wickham	Rural Land Use	ASAC resolved to endorse the ASAC submission for the Rural Land Use and table the submission as ASAC's advice to Council.	21/03/2023	Report prepared for Councillors
16/02/2023	6.2	Kaylene Wickham	Rates Working Group	Advise Rates Working Group when valuations are set to arrange a meeting with finance staff	22/11/2022	Advice provided to Working Group from Council Manager of Finance
16/02/2023	6.2	Kaylene Wickham	Rates Working Group	Kaylene to circulate the NSW rate rise article from ABC News 15 February 2023		Council rates to rise more than 100 per cent over two years in NSW regions, adding to inflation pain - ABC News
16/02/2023	6.3	Kaylene Wickham	Farmer Survey	Professional printed copies of the 2021 Farmer Survey Report to be distributed to committee	30/04/2023	Final version printed and mailed to farmers in the shire
16/02/2023	General Business	Kaylene Wickham	Biosecurity	Biosecurity workshop in Clifton Creek. Email invitation to ASAC members, saleyard staff, agencies and include in Agri-news	20/03/2023	Emailed members, saleyards staff, agencies and placed article in the agrinews
16/02/2023	7.2	Kaylene Wickham	Committee Membership	Prepare Council report noting vacancies and confirm process to replace members.	1/04/2023	Report presented to Councillors
16/02/2023	7.2	Kaylene Wickham	Committee Membership	Send thank you letter, Leecia Angus letter to include service on Rates Working Group and contribution to productivity and resilience discussions from members also	1/03/2023	Letters processed as per Council policy
16/02/2023	7.3	Kaylene Wickham	Digital Innovation and Smart Agriculture Forum	Confirm March 2024 with LGPro for Gippsland Digital Innovation and Smart Agriculture (DISA) Forum	1/03/2023	Email sent to Lisa Bennetto of Digital Divide advising new date in 2024 * 10 March 2024
11/05/2023	3.1	Kaylene Wickham	Rural Land Use Strategy	Advise when RLUS going to Council	29/05/2023	RLUS Council meeting email sent to members 6 June 2023
16/02/2023 & 11/5/23	General Business	Kaylene Wickham	Priority Agricultural Roads	Request if there is an opportunity to revisit priority agricultural roads for reseal and suppression	3/05/2023	Worked with Council team, sent email to members when Road strategy consultation commenced 22/5/23
16/02/2023 & 11/5/23	General Business	Kaylene Wickham	Sustainable Water Strategy	Graeme Dear to provide presentation of risk, opportunities and long-term issues from Sustainable Water Strateov released last year	11/05/2023, rescheduled to 17 August	Graeme and Matt Z to presented on SWS and Orbost Futures Water Literacy presented 17 August meeting
11/05/2023	4.2	Kaylene Wickham	Youth Agritech Expo	Send out Future Focused information		Emailed to members
11/05/2023	3.1	Kaylene Wickham	Road Safety Strategy	Circulate the link for the Road Safety Strategy public consultation	22/05/2023	Emailed to members to individually provide input
16/02/2023	5.2	Kaylene Wickham	Aging on Farm	Advocate for funding to deliver further succession expos in the Shire	Ongoing	Secured \$20,000 from EG Community Foundation for a further two workshops in 2024
17/08/2023	2.1	Kaylene Wickham	Water Security	Locate the RMCG Lindenow Water Security paper		Located and added to ASAC Portal
11/05/2023	2.1	Kaylene Wickham	Strategic Direction	Have Council report back on topics when raised with Councillors for more immediate feedback	Ongoing	Ongoing

17/08/2023	4.1	Kaylene Wickham	Commodity prices		Now	Contacted Andrew Moralli MLA who provided a list of articles on the topic Red meat moves against trend in third quarter food inflation - Beef CentralMLA's Jason Strong explains retail meat pricing disparity  Supermarkets are passing on savings as sheep prices plummet: MLA boss  Competition review urged to include scrutiny of livestock and food prices
				The Committee raised concern about the current difference in farm gate price for livestock, versus the retail price. Could Council contact a higher level of		Beef prices have barely moved at the supermarket  Woolies CEO promises cheaper groceries as meat and vegie
				Government to ask why the discrepancy		prices ease

#### 5.2 Chief Executive Officer

#### 5.2.1 Interim Appointment to the Destination Gippsland Limited Board

Authorised by Chief Executive Officer

#### **Conflict of Interest**

Officers preparing this report have no conflict of interest to declare.

### **Executive Summary**

Destination Gippsland Ltd (DGL) is the Regional Tourism Board and the peak tourism organisation for the Gippsland region. DGL is a public company limited by guarantee with six financial members (each Gippsland Council). DGL has reporting responsibilities to Australian Securities and Investments Commission (ASIC) as well as funding partners and Visit Victoria.

Council at its meeting on 2 June 2020, as a financial member of DGL, endorsed an amendment to the DGL Board constitution to enable the appointment of Anthony Basford, Chief Executive Officer, as a Director on the DGL Board.

With the resignation of the Chief Executive Officer, and to ensure that Council is represented on the Board, it is recommended, as an interim measure until a permanent Chief Executive Officer is appointed, that Stuart McConnell be appointed as a Director on the DGL Board given that the DGL focus best aligns with the Place and Community Directorate.

#### Officer Recommendation

#### That Council:

- 1. receives and notes this report;
- 2. authorises the interim appointment of Stuart McConnell as a Director on the Destination Gippsland Ltd Board;
- 3. notes that a further report will be presented to Council, after the appointment of an ongoing Chief Executive Officer in relation to their appointment to the Destination Gippsland Ltd Board; and
- 4. advises Destination Gippsland Ltd of Council's decision.

#### **Background**

DGL is the Regional Tourism Board and the peak tourism organisation for the region in eastern Victoria.

The organisation was established in 2008 with the support of Visit Victoria, Parks Victoria and the six Gippsland Councils. DGL's role is to grow and serve the Gippsland tourism sector and work in partnership with the industry and government to deliver rewarding and lasting economic, environmental, and social outcomes.

In 2019, DGL developed and launched the <u>Gippsland Destination Management Plan - 'A Blueprint for Growth'</u>. The development of the Plan identified seven strategic objectives including one on Governance and resolving the role of all major partners including local government.

Around the same time, the Victorian State Government instigated a <u>review of regional</u> <u>tourism boards</u>. The implementation of this review, as well as further work done on <u>Visitor Economy Recovery and Reform</u>, are currently in play. It is important that East Gippsland Shire Council, as a financial member of DGL, is represented and active in the planning and discussions at this strategic regional level.

DGL is a public company limited by guarantee with six financial members (each Gippsland Council is a member). DGL has reporting responsibilities to ASIC as well as funding partners and Visit Victoria.

DGL currently has a skills-based Board of Directors including the six Gippsland CEOs and observer positions for a representative from Visit Victoria, Regional Development Victoria, and Parks Victoria.

The current DGL Board structure and membership can be found at <a href="https://www.visitgippsland.com.au/destination-gippsland/about/our-board">https://www.visitgippsland.com.au/destination-gippsland/about/our-board</a>.

## Legislation

As of 1 July 2021, all provisions of the *Local Government Act* 2020 commenced. Some provisions of the *Local Government Act* 1989, that have not been repealed, will remain applicable until such time as they are revoked.

This report has been prepared in accordance with *Local Government Act 2020*, Division 1, Section 8 (1) and (4).

The implications of this report have been assessed and are not considered likely to breach or infringe upon the human rights detailed in the Victorian Government's Charter of *Human Rights and Responsibilities Act* 2006.

The implications of this report have been assessed and align with the principles and objects of the *Gender Equality Act* 2020.

It is important to note that the DGL Board is constituted under the *Corporations Act* 2001 (Cth) with its own constitution. The role of Director is required to fulfil the requirements of the *Corporations Act*, including their fiduciary responsibilities.

## **Collaborative procurement**

Not applicable to this report.

#### **Council Plan**

This report has been prepared and aligned with the following strategic objectives set out in the Council Plan 2021-2025:

Strategic Objective 5: 5.2 Strong relationships with government, partners and stakeholders are maintained and strengthened to advocate for the community.

## **Council Policy**

Not applicable to this report.

#### **Options**

Council has the following options for consideration:

- 1. appoint an interim Director as recommended in this report (preferred); or
- 2. not appoint an interim and wait for a new CEO to commence for appointment.

Membership or not of DGL has not been considered in this report.

#### Resourcing

**Financial** 

The cost to Council for membership of DGL is \$50,000 (excluding GST) for 2023/24. All Gippsland Councils contribute an equal amount in accordance with the current Tourism Services Funding Agreement. It should be noted that the agreement includes an increase aligned to the rate cap amount.

Any additional costs of this Board appointment will be borne by Council and would relate to items such as travel and/or incidental expenses incurred as a result of attendance at Board meetings.

Plant and equipment

Not applicable to this report.

Human Resources

Not applicable to this report.

Risk

The risks of this proposal have been considered.

A Director to the DGL Board needs to balance their duties as a contracted officer of the Council and their fiduciary duties to DGL under the *Corporations Act*. This has not posed any significant issues over the last 4 years.

Being an active member of DGL mitigates the risk of East Gippsland not benefiting from DGL's marketing of Gippsland to other parts of the State, Nationally and Internationally. DGL played a significant role in promoting East Gippsland after the Black Summer Fires and post-pandemic recovery of the East Gippsland visitor economy.

#### **Economic**

The Economic Development Strategy that includes a pillar relating to the Visor Economy and the Strategy is one of the three foundation strategies of the Council.

The Visitor economy plays an important part in the economic output and value of other Shire, thus participation on the DGL Board is an important role for Council.

#### Social

Not applicable to this report.

Gender Impact Statement

This report has been assessed as not requiring a Gender Impact Assessment (GIA).

## **Environmental**

Not applicable to this report.

Climate change

This report has been prepared and aligned with the following Climate Change function/category:

This report is assessed as having no direct impact on climate change.

## **Engagement**

Not applicable to this report.

#### **Attachments**

Nil

#### 5.3 Assets and Environment

## 5.3.1 Capital Works and Major Projects - Quarter Two 2023/24

Authorised by General Manager Assets and Environment

#### **Conflict of Interest**

Officers preparing this report have no conflict of interest to declare.

### **Executive Summary**

As part of the delivery and monitoring of the annual Capital Works and Major Projects (including Landfill Rehabilitation Projects) program, a quarterly review of the program is provided to Council.

This report, as outlined below, summarises the progress of Capital Works and Major Projects 2023-24 for the program up to the period ended 31 December 2023, Quarter Two.

At the end of Quarter Two 59.56% of the forecast budget, across a program of 244 projects, had been expended or committed. A snapshot of this activity is provided in the table below and is outlined in more detail through the body of the report and the attachments.

	Quarter Two to 31/12/23 (\$)
Total Revised Budget at 1 October 2023 – combined Capital Works and Landfill Rehabilitation Projects (including final carry forwards)	121,210,765
Less Identified Carry Forwards to 23-24	22,690,000
Plus Identified Bring Backs from 24-25 and 25-26	710,000
Less Other Budget variances 23/24	3,712,360
Revised Forecast	95,518,405
Actual Expenditure	26,533,248
Committed Expenditure	30,355,120
Percentage Capital Works Delivered or in Delivery (against Forecast)	59.56%
Percentage Capital Works Delivered or in Delivery (against Adopted Budget plus actual carry forwards of \$126,588,059 million)	44.94%

The report outlines risks across the program and how these risks are being managed. Details of all 244 projects that make up the program are also provided as **Attachment 1**.

This report also summarises contracts awarded under Delegation during the Quarter.

#### Officer Recommendation

That Council receives and notes the Capital Works and Major Projects (Landfill Rehabilitation Projects) Report 2023-24 for Quarter Two period ended 31 December 2023 and all attachments pertaining to this report.

## **Background**

This report details the progress of Capital Works and Major Projects (Landfill Rehabilitation Projects) 2023-24 for the period ended 31 December 2023. The report will also be provided to the Audit and Risk Committee for their consideration at the next Audit and Risk Committee meeting.

## **Budget Variances**

The revised forecast is a decrease of \$25,692,360 on the revised budget. This is summarised as follows:

	\$
Total Revised Budget at 1 October 2023 – combined Capital Works and Landfill Rehabilitation Projects (including final carry forwards)	121,210,765
Plus Bring Backs	710,000
Less Carry Forwards	22,690,000
Less Funding Changes	2,256,957
Less Budgets Transferred to Holding Account	334,285
Less funds transferred from Operating Accounts	1,121,118
Revised Forecast	95,518,405
Decrease	25,692,360

## **Changes to Funding**

During Quarter Two, the following funding changes have occurred:

Project	Amount \$	Notes
Sydenham Inlet Road Safety Improvements	-15,997	Project complete – final adjustment of funding based on 3:1 ratio
Lindenow South Recreation Reserve Lighting Upgrade	-2,500	Confirmed funding amount less than application requested
Glen Arte Road, Timber Bridge renewal	-11,537	Project complete – final adjustment of funding based on 80:20 ratio
Moroney Street Stage 2	-324,157	Project complete – funding to be reallocated to another suitable project
Marine Parade Stage 1, Lakes Entrance	-495,000	Variation not approved after Infrastructure Investment Program review
Marine Parade Stage 2, Lakes Entrance	-2,500,000	Variation not approved after Infrastructure Investment Program review
W B Line Track, timber bridge renewal	-6,263	Project complete – unused funding returned
Omeo Council Precinct	-100,000	Funding unsuccessful
Metung Bowling Green	-20,378	Project complete – unused funding returned
AJ Freeman Tennis Court – Short Term Upgrade	18,182	Contribution from the Tennis Club
Shaving Point Boat Ramp Upgrade, Metung	693	Project complete, minor funding adjustment
Various Reseal Projects 1,200,000		LRCI Funded, this has been transferred from the Buchan Recreation Reserve, to meet funding deadlines. Cash from the reseal program has been transferred to Buchan Recreation Reserve to compensate
Overall decrease in Funding	2,256,957	

## **Additional Funds from Operating Accounts**

During Quarter Two, a net total of \$1,121,118 was transferred from capital projects to operating budgets as detailed below (\$1,381,799 from capital to operating, \$260,681 from operating to capital).

Project	Amount \$	Notes
	From capit	tal to operating
Office Furniture	-1,799	
Reseal program	-1,200,000	Cash component, to offset change to LRCI funding. Buchan Recreation reserve
Asset Improvement Opportunity	-180,000	Funds transferred – contribution to Agriculture Group
	From oper	ating to capital
James Road Timber Bridge	100,000	Funds transferred from bridge maintenance program
Lindenow South Recreation Reserve	11,500	Funds transferred from community facilities budget
Lakes Entrance Landfill Capping Stage 1 & 2	70,000	Funds transferred from Waste Reserve
Lakes Entrance Landfill Aftercare	25,277	Funds transferred from Waste Reserve
Orbost Landfill Capping	31,904	Funds transferred from Waste Reserve
Benambra Playground 22,000 Shade Sail		Funds transferred from bushfire recovery budget
Overall decrease in capital budget	1,121,118	

## **Bought Forward**

During Quarter Two, three (3) projects were bought back from 24/25 to be undertaken in 23/24.

Project	Amount \$	Notes
Air Handling Unit, Lakes Aquadome	496,000	Award contract to complete works
Wests Road Timber Bridge Renewal	94,000	Commence works in 23/24
Mississippi Creek, Scriveners Road	120,000	Commence design in 23/24
Bought Back from 24/25	710,000	

#### **Holding Account Summary**

The Holding Account commences the financial year with a zero balance. It is used to record savings from completed projects and redistribute to projects identified as requiring additional or new budget.

During Quarter Two, savings from projects of \$1,820,510 were identified. Further to this, distribution to new projects or projects requiring additional funding totalled \$1,486,225. The balance of the Holding Account at 31 December 2023 is \$512,303. A summary of Holding Account transactions is provided as **Attachment 2**.

#### **Carry Forwards**

At the end of December 2023, the capital works program was reviewed and projects that are not expected to spend their 2023-24 budget are revised. Where a project is identified as unlikely to spend some or all its budget in the current financial year, the amount is 'carried forward.' These carry forward amounts will be available for expenditure in 2024-25. These adjustments are normal, especially for multi-year projects, when the spread of expenditure is different to original forecasts due to a range of factors i.e., weather delays, funding announcement delays, contractor availability, detailed community engagement and design delays.

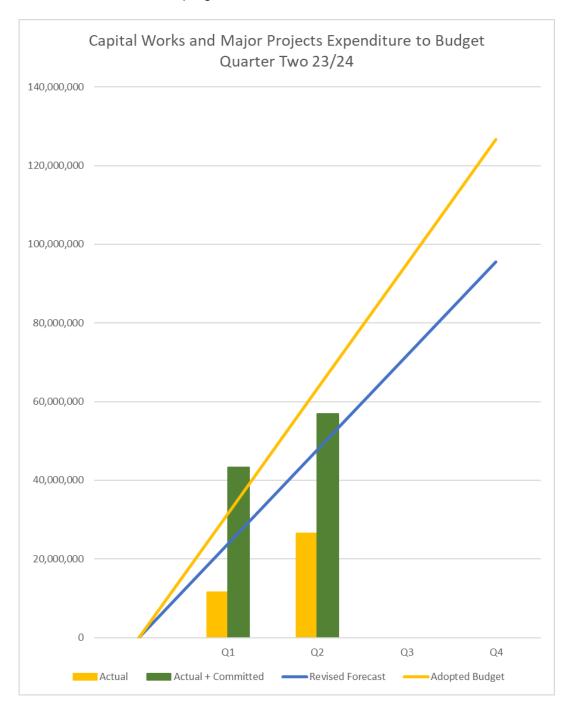
During Q2 \$22,690,000 of carry forwards were identified. This brings the total to \$24,916,858.

A detailed list of projects with identified carry forward is provided as **Attachment 3.** This report identifies the amount committed to date and uses a traffic light system to identify risk:

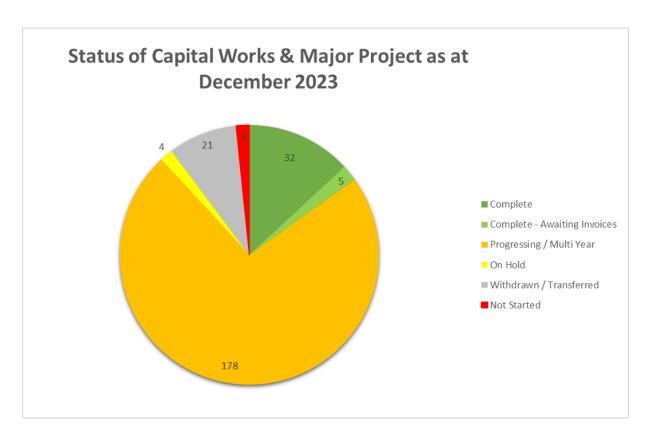
- Projects highlight green, are multi year. Construction contracts are awarded, and budget is moved to 24/25 to complete expenditure.
- Project highlighted yellow, are on track. They are either in the design phase or awaiting the award of construction contracts. They are not considered as behind schedule but are now multi-year projects; and
- Projects highlighted orange are delayed. These projects are on hold for reasons beyond the control of Council.

## **Project Status**

As at 31 December 2023, \$56,888,367 (59.56% of total revised forecast) was expended or committed to works within the program.



At the end of Quarter Two, the program covered 244 separate projects of which 37 projects had been completed, 178 are progressing, four projects are yet to commence, and 21 projects have been withdrawn or transferred. The remaining projects are on hold. A detailed list of all project status is provided at **Attachment 1**.



## **Capital Works Contracts Awarded Under Delegation**

The decision to award a contract can only be made by a delegate who has the authority (financial delegation) to commit the relevant sum of money. The decision is made after consideration of the tender evaluation panel report.

The Chief Executive Officer has a financial delegation of \$500,000 including GST. During Quarter Two a total of seven (7) capital works contracts were awarded under Chief Executive Officer Delegation, the contracts are listed below:

Project	Value \$ (ex GST)	Contractor
Lindenow South Recreation Reserve Oval Lighting - Design & Construct	339,858.00	WR & EL Jones Electrical Contractors Pty Ltd
Sarsfield Recreation Reserve & Hall Revitalisation Project (Design)	214,673.59	Vanovac Tuon Architecture Studio Pty Ltd
WORLD Soccer Precinct Design	334,110.00	Dock4 Pty Ltd atf Dock4 Trust
Construction of Off-Street Parking, Greer Street - Mallacoota	212,211.00	Jennings Civil Group Pty Ltd
McKean Street Pedestrian Crossing, Bairnsdale	414,614.08	Fulton Hogan Industries Pty Ltd
Irrigation Works Peppercorn Park Oval Bairnsdale	243,280.31	Frith's Plumbing & Civil Construction Pty Ltd
Garnetts Track Landslip Repairs	89,793.00	Fowlers Asphalting Pty Ltd

### Legislation

This report has been prepared in accordance with Local Government Act 2020.

The implications of this report have been assessed and are not considered likely to breach or infringe upon the human rights detailed in the Victorian Government's Charter of *Human Rights and Responsibilities Act* 2006.

In preparing this report the Victorian *Gender Equality Act* 2020 has been considered. The implications of the report have been assessed and are compliant with the obligations and principles of the *Gender Equality Act* 2020. The need for a Gender Impact Assessment has also been assessed.

The implications of this report have been assessed and align with the principles and objects of the *Gender Equality Act* 2020.

#### **Collaborative procurement**

Not applicable for this report.

#### **Council Plan**

This report has been prepared and aligned with the following strategic objectives set out in the Council Plan 2021-2025:

Strategic Objective 2:2.2 Infrastructure provision and maintenance supports a diverse range of current and future user needs and activities and is both environmentally and financially sustainable.

## **Council Policy**

Expenditure of the Capital Works program is undertaken in accordance with the adopted Council Budget 2023-24 and Council's Procurement Policy.

#### **Options**

Not applicable for this report.

## Resourcing

#### **Financial**

This report outlines the financial position of the 2023-24 Capital Works and Major Projects program as at 31 December 2023.

## Plant and equipment

The Capital program includes budget for the replacement of plant and equipment as per depreciation schedules.

## Human Resources

The development of this report has no impact on human resource levels. The delivery of the Capital program relies on the engagement of a number of project supervisors, that are engaged under various terms by Council.

#### Risk

Risk assessments are carried out on all projects within the Capital Program as part of the organisation's use of a Project Management Framework.

## Program Risk

As previously discussed with Council, the size of the 2023-24 program coupled with supply issues and escalation of costs triggered by the global pandemic present risks to individual projects and the program overall.

Significant risks within the program include:

- increase in market prices and contractor tendered prices;
- time delay between setting budget and going to market for tenders;
- project contract variations post award of contracts;
- availability of contractors;
- high component of the program grant funded, with external milestones and deadline requirements; and
- internal project management capacity.

To address or at least partially address this, the following practices are in place:

- 1. Design requests are set to 60% of available budget to factor in escalating costs between the design and contract award period;
- 2. Final designs for significant projects go through a final external cost estimate / QS process to value manage prior to putting the project to tender. Where the project design is identified as potentially being over budget, the scope is reduced prior to tender;
- 3. Use of provisional items within a tender. These are items that are separately costed in a tender and can be awarded subject to overall price being within budget or excluded from the contract;
- 4. Use of Best and Final Offer and other value management practices post tender, prior to contract award. This allows scope to be reduced where possible and tenderers to submit revised prices;
- 5. Regular review of the overall program to identify risk and to manage sequencing of projects. Where necessary projects that can be rescheduled and re-budgeted in future years are also identified;
- 6. Variation of time and scope milestones in grant funded projects through working closely with funding body representatives;
- 7. Annual workshops with contractors at the beginning of the financial year so they have some understanding of the forward program and likely tenders and can undertake their own resource planning;
- 8. Use of panel contracts to set some schedules of rates so that pricing is understood and can be budgeted for; and
- 9. Increased in-house resourcing with additional project supervisors; project design managers; procurement officers; and an additional business unit manager.

#### Climatic Risk

While eastern Australia was forecast to be entering an El Nino period, typically leading to reduced spring and early summer rainfall and warmer days, there has been a high level of rainfall leading to flooding across numerous localities. This has impacted on several projects, as well as the priorities and concerns of the community however have been managed to mitigate negative outcomes where possible.

#### **Economic**

Delivery of the Capital program includes the procurement of contractor services which stimulate the local economy and the betterment of areas of the shire that support business and industry growth. Many of the projects further stimulate the economy and investment by supporting access and connectivity, improving amenity, and enhancing liveability.

Additionally, all projects tendered use local content as one of the tender assessment criteria, which allows the contractors response to local procurement, employment, and community support to be considered.

#### Social

The delivery of a number of projects within the Capital program is seen to implement aspects of adopted strategies and plans; and delivers positive social outcomes for our communities.

#### Gender Impact Statement

Given that this report provides an overview of the entire Capital program, a gender impact assessment is not applicable. Gender Equity needs consideration at the project level, not at program level. Gender Equity consideration has therefore been built into the organisations Project Management Framework used to manage all capital projects.

#### **Environmental**

The delivery of a number of the projects within the program have been designed to consider and / or provide environmental benefits. Additionally, all projects tendered use environmental sustainability as one of the tender assessment criteria, which allows the contractors response to environmental sustainability to be considered.

### Climate change

This report has been prepared and aligned with the following Climate Change function / category:

Asset Management: Climate change is considered in the design and maintenance of assets and includes responses to direct and indirect impacts.

#### **Engagement**

No engagement has been undertaken in the compilation of this report. However, engagement with community members, agencies and stakeholders has been a critical element in the design and delivery of many of the projects in the 2023-24 Capital program. The Capital program was also part of deliberative engagement undertaken to develop the Council Plan and Budget.

## **Attachments**

- Capital Works and Major Projects Status Report Q 2 [5.3.1.1 8 pages] 1.
- Q 2 Summary of Holding Account Transactions [5.3.1.2 2 pages]
  Q 2 Summary of Carry Forwards [5.3.1.3 1 page] 2.
- 3.

Capital	Works and Landfill Rehabilitati	on Projects - Finance Report -	December 202	cemper 2023									
				СОММІТ	[MENTS	ADOPTED BUDGET (with Actual carryovers)	REVISED BUDGET	CHANGE			REVISED FORECAST	CARRY FORWARDS TO 2024/25	BRING BACK
Project No	Project Name	Status	YTD Actual Expenditure - 31 December, 2023	YTD Commitments - 31 December, 2023	YTD Actual Expenditure & Commitments - 31 December, 2023	Adopted Budget - Expenditure - 1 July, 2023	Expenditure - 1 October, 2023	Expenditure - Change	Income - Change	Council Cost - Change	Forecast Expenditure - 31 December, 2023	Expenditure Carry Forward	Funded from 2024/25 Budget
11928	Mallacoota Foreshore Holiday Park Toilet Block 3 D	Complete - awaiting invoices	221,073	29,410	250,483	285,284	285,284	-	_	-	285,284	-	-
11948	Omeo Caravan Park to Livingston Park Footpath	Complete - awaiting invoices	45,429	14,050	59,479	49,000	57,000	-	_	_	57,000	_	-
12091	Eastern Beach Caravan Park toilet Block	Complete - awaiting invoices	271,534	5,495	277,029	287,336	287,336	-	-	-	287,336	-	-
12254	Upper Wingan Road, timber bridge renewal	Complete - awaiting invoices	3,565	332,085	335,650	375,000	375,000	-		-	375,000	-	-
12172	Concrete Cricket Pitch upgrade	Complete - awaiting invoices	37,384	360	37,744	54,530	54,530	(16,786)	-	(16,786)	37,744	-	-
12148	Metung Bowling Green	Completed	180,751	-	180,751	216,255	216,255	(35,504)	20,378	(15,126)	180,751	-	-
11918	Cann River Roadside Rest Area	Completed	1,220,125	-	1,220,125	1,209,114	1,209,114	11,011	-	11,011	1,220,125	-	-
11926	Reinstatement of Mallacoota Coastal Infrastructure	Completed	252	_	252	112,088	22,088	-	_	_	22,088	_	_
12042	Chinamans Creek Open Space Toilet Upgrade	Completed	34,157	_	34,157	32,937	33,726	431	-	431	34,157	_	_
12072	R2R40 Moroney St Bairnsdale Stage 2	Completed	487,557	_	487,557	1,006,186	1,006,186	(518,629)	552,069	33,440	487,557	_	-
12094	Nowa Nowa Streetscape	Completed	-	-	-	16,650	-	- 1	-	-		-	-
12115	Static Water Tanks (Black Summer Grant)	Completed	_	_	-	-	300	-	_	-	300	_	
12128	Mallacoota Foreshore Holiday Park Toilet Block 1	Completed	3,842	-	3,842	11,085	11,085	(7,243)	-	(7,243)	3,842	_	-
12138	Nungurner Road Safety Improvements	Completed	95,216	_	95,216	129,489	93,934	1,319	-	1,319	95,253	_	-
12149	Metung Tennis Court Upgrade	Completed	-	-	-	-	2,922	(2,922)	-	(2,922)	-	-	
12152	Shaving Point Boat Ramp Upgrade, Metung	Completed	708,902	_	708,902	775,200	775,200	(66,298)	(693)	(66,991)	708,902	_	-
12154	Kalimna Foreshore Rockwall Protection & Upgrade	Completed	-	_	-	35,018	-	-	-	_	1	_	-
12166	Wallace Street, Bairnsdale - Footpath Installation	Completed	184,456	-	184,456	235,191	235,191	(50,735)	-	(50,735)	184,456	-	-
12180	R2R49 Pyke Street, Bairnsdale	Completed	4,067	-	4,067	-	5,000	(933)	-	(933)	4,067	-	-
12194	Mississippi Creek, Scriveners Road	Completed	-	-	-	-	-	-	-	-	-	-	-
12216	The Hub, Bairnsdale Drainage Renewal	Completed	113	-	113	-	113	-	_	-	113	-	-
12233	Portable Toilets	Completed	-	-	-	-	-	-	-	-	-	-	-
12234	Omeo Soldiers Hall - floor renewal	Completed	15,104	-	15,104	-	8,357	6,747	-	6,747	15,104	-	-
12237	Additional Excavator for Works Concrete Crew	Completed	91,268	-	91,268	110,000	110,000	(18,732)	_	(18,732)	91,268	-	-
12255	W B Line Track, timber bridge renewal	Completed	343,421	_	343,421	388,000	388,000	(44,579)	6,263	(38,316)	343,421	-	-
12257	Glen Arte Road, timber bridge renewal	Completed	339,008	-	339,008	388,683	388,683	(49,675)	11,537	(38,138)	339,008	-	-
12259	Suttons Access Road, Timber Bridge Renewal	Completed	310,786	-	310,786	320,682	320,682	(9,896)	-	(9,896)	310,786	-	-
12268	Display Screens Virtual Group Fitness – LARC	Completed	2,311	_	2,311	1,768	2,311	-	-	_	2,311	_	-
12270	Bouchers Lane Timber Bridge Renewal	Completed	337,566	-	337,566	350,000	337,775	-	-	-	337,775	-	-
12279	Noorinbee Storm Water Drainage investigations, Cann River	Completed	5,409	_	5,409	_	43,000	-	-	_	43,000	_	-
11672	Internal CCTV Renewal	Completed	2,177	-	2,177	287,000	287,000	-	-	-	287,000	-	-
11767	Design for Gymnastics Facility at Lucknow	Completed	4,965		4,965		4,106	859		859	4,965		

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Project No	Project Name	Status	YTD Actual Expenditure - 31 December, 2023	YTD Commitments - 31 December, 2023	YTD Actual Expenditure & Commitments - 31 December, 2023	Adopted Budget - Expenditure - 1 July, 2023	Expenditure - 1 October, 2023	Expenditure - Change	Income - Change	Council Cost - Change	Forecast Expenditure - 31 December, 2023	Expenditure Carry Forward	Funded from 2024/25 Budget
11920	Newmerrella Roadside Rest Area	Completed	19,674	-	19,674	18,073	19,676	(2)	-	(2)	19,674	-	-
12087	AJ Freeman Cricket Nets Upgrade	Completed	52,131	60	52,191	57,556	52,177	14	-	14	52,191	-	-
12122	Lake Road Landslip (Newmerella)	Completed	9,338	-	9,338	19,592	19,592	-	-	-	19,592	-	-
12124	Lindenow Sports Lighting	Completed	62	-	62	16,943	60	2	-	2	62	-	-
12139	Sydenham Inlet Road Safety Improvements	Completed	148,654	-	148,654	165,899	165,899	(17,245)	15,997	(1,248)	148,654	-	-
11906	QRF Dinni Birrak Walk - Backwater Ct Paynesville	Concept Design Progressing	482	-	482	143,000	143,000	-	_	-	143,000	-	-
11961	Foreshore Management Plan Implentation - Marlo	Concept Design Progressing	14,761	15,710	30,471	545,365	545,365	(250,000)	-	(250,000)	295,365	250,000	-
12013	LER - Livingstone Park Community	Concept Design Progressing	1.000	20.000	40.00=	4.540.000	4.540.011	(4.000.000	400.000	(000 000	510.011	4 000 000	
12052	Facilities Shaving Point Park Metung	Concept Design Progressing	1,063 6,634	39,622 29,500	40,685 36,134	1,516,011 31,735	1,516,011 31,735	(1,000,000) 5,000	400,000	(600,000) 5,000	516,011 36,735	1,000,000	-
12076	Forward Design Seawalls Shirewide	Concept Design Progressing	9.574	20,000	9,574	50,000	50,000	- 0,000	_	- 0,000	50,000	_	_
12078	Event Infrastructure -Fencing Aerdorme	Concept Design Progressing	13,424	-	13,424	150,000	150,000	-	-	-	150,000	-	-
12123	Air Handling Unit, Lakes Aquadome	Concept Design Progressing	21,024	1,103,349	1,124,373	516,702	516,702	608,000	-	608,000	1,124,702	_	(496,000)
12129	Gippsland Lakes Yacht Club	Concept Design Progressing	67,822	333,960	401,782	397,574	402,574	-	-	-	402,574	-	-
12134	LENGA Drainage	Concept Design Progressing	6,893	-	6,893	196,950	196,950	-	-	-	196,950	-	-
12157 12159	Krautungalung Walk Stage 2 Metung/Tambo Bluff/Kings Cove Trail	Concept Design Progressing  Concept Design Progressing	21	90	111	3,740,000	140,000	-	-	-	140,000	-	-
12171	Link Bairnsdale Composting Facility	Concept Design Progressing	927 5,525	5,300 261,961	6,227 267,486	5,273 476,738	5,273 476,738	-		-	5,273 476,738	-	-
12219	Eagle Point School Connection	Concept Design Progressing  Concept Design Progressing	5,525	50,306	50,306	549,473	549,473	(300,000)		(300,000)	249,473	300,000	-
12240	Lakes Entrance Service Centre - Courtyard Upgrade	Concept Design Progressing	_	- 30,300	- 30,300	25,000	25,000	(300,000)		(300,000)	25,000	- 300,000	
12249	Lindenow Sports Ground - Fire Services	Concept Design Progressing	-	-	-	128,000	128,000	-	-	-	128,000	-	-
12251	Relocation of Lakes Entrance Weighbridge to Bairnsdale	Concept Design Progressing	1,023	-	1,023	263,000	263,000	-	-	-	263,000	-	-
12296	Creation of Cormorant Drive, Metung	Concept Design Progressing	-	761	761	-	-	50,000	-	50,000	50,000	-	-
50016	Bairnsdale Cell 3A Capping Design	Concept Design Progressing	17,619	74,689	92,308	2,308,092	2,308,092	(2,000,000)	-	(2,000,000)	308,092	2,000,000	-
11395	Lakes Entrance Transfer Station Upgrade Penny Cuard Bails Non Specified	Delivery Progressing	225,790	1,946	227,736	205,268	205,268	22,469		22,469	227,737 100.000	-	
11589	Renew Guard Rails Non-Specified  Dust Suppression Seal Non-	Delivery Progressing	1,189	-	1,189	100,000	100,000	-	-	-	100,000	-	-
11591 11662	Specified LRCI3 Eastwood Playground	Delivery Progressing  Delivery Progressing	29,608 491,523	1,300 56,208	30,908 547,731	272,162 476,000	272,162 476.000	(40,000) 63,469	-	(40,000) 63,469	232,162 539,469	-	-
11679	Omeo Mountain Bike Trails - Stage 1	Delivery Progressing	638,368	1,015,216	1,653,584	2,267,165	2,267,165	00,409		55,409	2,267,165	_	
11698	Construction Cell 4 Bairnsdale Tip	Delivery Progressing	15,062	54,850	69,912	139,515	139,515	-	-	-	139,515	-	-
11774	Jemmy Point lookout infrastructure renewal	Delivery Progressing	1,123,403	547,754	1,671,157	1,956,641	1,956,641	-	-	_	1,956,641	-	-
11834	LRCI3 - Eagle Point Foreshore Hub	Delivery Progressing	2,629,592	218,770	2,848,362	2,531,449	2,631,449	405,000	-	405,000	3,036,449	-	-
11922	Orbost Forest Park Upgrade	Delivery Progressing	17,894	1,506,512	1,524,406	1,625,030	1,625,030	-	-	-	1,625,030	-	-
11950	WORLD Sporting Precinct Stage 1	Delivery Progressing	2,482,948	2,388,765	4,871,713	10,773,180	10,773,180	-	_	_	10,773,180	_	-
11962	Bruthen Streetscape	Delivery Progressing	16,181	5,323	21,504	229,824	229,824	-	-	-	229,824	-	-
11991	Bullock Island Masterplan Implementation	Delivery Progressing	2,563,758	290,122	2,853,880	1,828,907	1,828,907	899,287	-	899,287	2,728,194	_	-

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			ACTUALS	СОММІТ	TMENTS	ADOPTED BUDGET (with Actual carryovers)	REVISED BUDGET		CHANGE		REVISED FORECAST	CARRY FORWARDS TO 2024/25	BRING BACK
Project No	Project Name	Status	YTD Actual Expenditure - 31 December, 2023	YTD Commitments - 31 December, 2023	YTD Actual Expenditure & Commitments - 31 December, 2023	Adopted Budget - Expenditure - 1 July, 2023	Expenditure - 1 October, 2023	Expenditure - Change	Income - Change	Council Cost - Change	Forecast Expenditure - 31 December, 2023	Expenditure Carry Forward	Funded from 2024/25 Budget
12001	Lakes Entrance Foreshore Park	Delivery Progressing	7,133	242,542	249,675	1,634,186	1,634,186	(750,000)	750,000	-	884,186	750,000	-
12023	Lakes Entrance Slipway Upgrade	Delivery Progressing	350,204	20,408	370,612	921,646	466,646	-	-	-	466,646	-	-
12024	Buchan Streetscape	Delivery Progressing	20,434	1,445,202	1,465,636	1,127,163	1,507,163	-	-	-	1,507,163	-	-
12029	Community Resilience and	Delivery Progressing			.===								
12060	Development Program		13,243 103,322	4,545 1,772,558	17,788 1,875,880	208,809 2,027,693	208,809 2,027,693	(1,600,000)	1,550,000	(50,000)	208,809 427,693	1,600,000	-
12000	Krautungalung Walk Stage 1 Bairnsdale City Oval Changerooms	Delivery Progressing	103,322	1,772,556	1,075,000	2,027,093	2,027,093	(1,600,000)	1,550,000	(50,000)	427,093	1,600,000	
12065	Upgrade	Delivery Progressing	29,855	344,530	374,385	812,180	812,180	-	-	-	812,180	-	-
12066	LRCI3 Bairnsdale City Oval Lighting & Scoreboard Upgrade	Delivery Progressing	389,459	36,927	426,386	416,728	416,728	-	-	-	416,728	-	-
12080	Mallacoota Hall Upgrades	Delivery Progressing	26,136	56,997	83,133	820,688	820,688	-	-	-	820,688	-	-
12086	Bruce Road Depot - Safety Upgrades	Delivery Progressing	56,250	36,205	92,455	222,207	222,207	-	-	_	222,207	_	-
12096	Bemm River Footpath Connections	Delivery Progressing	13,456	942,394	955,850	1,047,782	1,047,782	-	-	-	1,047,782	-	-
12112	Lake Tyers Beach Hall Upgrade	Delivery Progressing	34,061	912,700	946,761	909,820	979,820	-	-	-	979,820	-	-
12116	Cann River Skatepark (Black Summer Grant)	Delivery Progressing	5,524	559,289	564,813	592,705	592,705	-	-	_	592,705	-	-
12119	Parks and Gardens Plants, Vehicle and Equipment	Delivery Progressing	202,827	116,932	319,759	416,408	416,408	-	-	-	416,408	-	-
12132	Entry Road & Parking at Lucknow Rec Res/Gymnastics	Delivery Progressing	571,755	89,662	661,417	689,340	689,340	-	-	_	689,340	_	-
12133	Bosworth Road West	Delivery Progressing	23,958	270,261	294,219	592,937	392,937	-	-	-	392,937	-	-
12136	Rural Road Improvement Program	Delivery Progressing	11,766	-	11,766	146,041	146,041	-	-	-	146,041	-	-
12137	Bogong High Plains Road Safety Improvements	Delivery Progressing	15,418	725	16,143	288,121	288,121	-	-	-	288,121	-	-
12144	LRCI3 Lindenow Footpath Connections	Delivery Progressing	730,484	232,917	963,401	627,229	977,229	-	-	_	977,229	_	-
12147	Jones Bay Southern Catchment WSUD (Crooke St Wetlands)	Delivery Progressing	520,251	1,483,337	2,003,588	2,009,436	2,009,436	(1,219,000)	535,000	(684,000)	790,436	1,300,000	-
12158	Omeo Mountain Bike Trails - Stage 2	Delivery Progressing	624,769	679,620	1,304,389	3,802,521	3,802,521	-	-	-	3,802,521	_	-
12161	Street Trees Program	Delivery Progressing	8,533	15,164	23,697	66,967	66,967	-	-	-	66,967	-	-
12188	Community Facilities - Emergency Power Project	Delivery Progressing	176,251	272,656	448,907	479,834	479,834	-	-	_	479,834	_	-
12191	Lochiel Park Sport Ground Lighting Upgrade	Delivery Progressing	211,340	36,961	248,301	197,886	197,886	50,875	-	50,875	248,761	_	_
12192	AJ Freeman Netball Tennis Changerooms	Delivery Progressing	60,774	1,605,926	1,666,700	1,579,378	1,723,378	_		_	1,723,378	_	
12224	Greer Street, Mallacoota	Delivery Progressing	8,239	213,651	221,890	170,000	405,000	-	-	-	405,000	-	-
12241	Orbost Service Centre - paint internal & external	Delivery Progressing	-	_	-	25,000	25,000	-	_	_	25,000	_	_
12245	Street Furniture Renewal (inc Signs)	Delivery Progressing	7,315	7,150	14,465	50,000	50,000	-	-	_	50,000	-	-
12250	Lindenow South Recreation Reserve, Lighting Upgrade	Delivery Progressing	10,261	339,858	350,119	361,285	361,285	9,000	2,500	11,500	370,285	_	-
12256	Little River Road, timber bridge renewal	Delivery Progressing	174,307	304,830	479,137	504,000	504,000	_	-	-	504,000	_	-
12258	Reedy Creek, timber bridge renewal	Delivery Progressing	-	948,019	948,019	1,010,000	1,010,000	-	-	-	1,010,000	_	
12271	Nicholson Street, Bairnsdale – Additional Parking	Delivery Progressing	4,396	_	4,396	30,000	30,000	82,000		82,000	112,000	_	_
12272	Lakes Entrance Gangway	Delivery Progressing	37,963	81,770	119,733	117,951	117,951	-	-	-	117,951	-	-
12276	Forge Theatre Lighting Board Renewal	Delivery Progressing	28,886	87,529	116,415	140,000	140,000	-	-		140,000	_	

		on Projects - Finance Report -	ACTUALS	соммі	[MENTS	ADOPTED BUDGET (with Actual carryovers)	REVISED BUDGET		CHANGE		REVISED FORECAST	CARRY FORWARDS TO 2024/25	BRING BACK
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12285	Road Rehabilitation Program	Delivery Progressing	255,605	88,906	344,511	-	500,000	-	-	-	500,000	-	-
12287	LRCI 1- Buchan Orbost Road Reseal	Delivery Progressing	1,111	-	1,111	-	178,000	-		-	178,000	-	-
12295	Benambra Playground Shade Sails - CRC SUPPORT FUNDING (2295)	Delivery Progressing	-	21,818	21,818	-	-	22,000	_	22,000	22,000	-	-
50008	Lakes Entrance Landfill Capping	Delivery Progressing	118,422	41,860	160,282	90,376	90,376	70,000	-	70,000	160,376	-	-
11900	Bullock Island Bridge Replacement Forward Design - Roads and	Delivery Progressing	294,159	(10,698)	283,461	862,446	862,446	(568,287)	-	(568,287)	294,159	-	-
11709 11712	Drainage  Marlo Township Drainage Design	Detailed Design Progressing  Detailed Design Progressing	7,544 8,997	14,738 19,700	22,282 28,697	416,525 536,013	74,310 536,013	(19,610)		(19,610)	54,700 536,013	-	-
11715	Progress Jetty Precinct Design	Detailed Design Progressing	7,980	41,483	49,463	270,552	270,552	-		-	270,552	-	
11823	Parking Design - Marine Parade, Lakes Entrance	Detailed Design Progressing	1,056	125,662	126,718	2,249,279	2,249,279	(795,000)	495,000	(300,000)	1,454,279	600,000	-
11930	Mallacoota Foreshore Holiday Park Fire Safety work	Detailed Design Progressing	-	_	-	431,636	431,636	-	_	_	431,636	-	-
11932	Council Managed Caravan Park - Fire Saftey Works	Detailed Design Progressing	20,320	2,805	23,125	300,000	300,000	-	-	-	300,000	_	-
11958	Cann River Waste Transfer Station	Detailed Design Progressing	453,460	2,626	456,086	1,458,281	1,458,281	(600,000)	-	(600,000)	858,281	600,000	-
11965	Bairnsdale Runway 04/22 Extension & Lighting Upgra	Detailed Design Progressing	41,241	65,610	106,851	5,266,452	5,266,452	(5,000,000)	4,900,000	(100,000)	266,452	5,000,000	-
11969 12018	Slip Road Maritime Precinct - Paynesville Mallacoota Streetscape	Detailed Design Progressing  Detailed Design Progressing	283,776 29,362	2,713,868 29,197	2,997,644 58,559	6,262,886 1,688,771	6,262,886 1,688,771	(3,000,000)	2,000,000 800,000	(1,000,000)	3,262,886 688,771	3,000,000 1,000,000	<u>-</u>
12043	Gilsenan Reserve Toilet Replacement	Detailed Design Progressing  Detailed Design Progressing	523	4,700	5,223	199,257	199,257	(1,000,000)	- 800,000	(200,000)	199,257	1,000,000	
12062	Integrated Water Management - Bairnsdale	Detailed Design Progressing	-	-	-	355,000	355,000	-	_	-	355,000	_	-
12067	Bastion Point Geotactile Groin Wall	Detailed Design Progressing	22,214	15,223	37,437	215,563	215,563	-	-	-	215,563	-	-
12071	Raymond Island Koala Experience	Detailed Design Progressing	49,991	17,761	67,752	383,209	383,209	-	-	-	383,209	-	-
12120	Mallacoota Mudbrick Pavilion (Black Summer)	Detailed Design Progressing	82,303	19,002	101,305	518,291	518,291	-	-	-	518,291	-	-
12135 12140	Tambo Upper Road, outside Primary School Power Station Road	Detailed Design Progressing  Detailed Design Progressing	1,576 9.861	27,210	28,786 9.861	559,424 300.000	28,404 300,000	-	<u>-</u>	-	28,404 300.000	-	-
12170	Bairnsdale Recycling Centre	Detailed Design Progressing  Detailed Design Progressing	5,191	233,480	238,671	583,913	933,913	-		-	933,913	-	
12173	Lindenow Scorers Box Access Improvements	Detailed Design Progressing	0,101	4.760	4.760	38.171	38,171	_			38,171		
12190	Upgrade Omeo Streetscape	Detailed Design Progressing	14,956	6,360	21,316	385,280	385,280	-	-	-	385,280	-	-
12193	Lakes Entrance Changing Places Development	Detailed Design Progressing	28,626		28,626	221,953	221,953			_	221,953	_	_
12195	Marine Parade Marlo, Drainage Repair	Detailed Design Progressing	13,426	5,185	18,611	316,123	316,123	-		_	316,123	_	-
12196	R2R53 Myer Street & service roads - urban road improvement	Detailed Design Progressing	68,184	1,073	69,257	810,846	810,846	-	-	-	810,846	_	-
12200	Connleys Road, Omeo - Rural Road Improvement	Detailed Design Progressing	15,213	105,243	120,456	96,022	119,022	-	_	-	119,022	_	_
12203	Apron & Taxiway C, Bairnsdale Airport	Detailed Design Progressing	2,825	93,446	96,271	2,238,897	2,238,897	(1,000,000)		(1,000,000)	1,238,897	1,000,000	-
12204 12205	Omeo Valley Road - Road Renewal	Detailed Design Progressing	31,323	18,180	49,503	20,227	50,227	- 7.400	-	- 7.400	50,227	-	-
12205	Bung Bung Lane - Road Renewal Howitt Avenue - Road Renewal	Detailed Design Progressing  Detailed Design Progressing	28,645 16,036	26,085 18,940	54,730 34,976	22,327 16,731	47,327 28,731	7,403 6,245	-	7,403 6,245	54,730 34,976	-	-

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Project No	Project Name	Status	YTD Actual Expenditure - 31 December, 2023	YTD Commitments - 31 December, 2023	YTD Actual Expenditure & Commitments - 31 December, 2023	Adopted Budget - Expenditure - 1 July, 2023	Expenditure - 1 October, 2023	Expenditure - Change	Income - Change	Council Cost - Change	Forecast Expenditure - 31 December, 2023	Expenditure Carry Forward	Funded from 2024/25 Budget
12207	Limestone Road - Road Renewal	Detailed Design Progressing	60,473	29,240	89,713	15,084	83,084	6,629	-	6,629	89,713	-	-
12208	Tambo Boulevard - Stormwater	Detailed Design Progressing			======		=				=,		
	Improvement Centre Goon Nure Road - Protective		36,035	14,354	50,389	26,662	51,662	-	-	-	51,662	-	-
12210	Treatment	Detailed Design Progressing	22,566	47,165	69,731	28,162	96,662	-	_	-	96,662	_	-
12211	Boundary Road - Protective Treatment	Detailed Design Progressing	36,981	31,600	68,581	28,481	95,581	-	-	-	95,581	-	-
12212	Comleys Road - Protective Treatment	Detailed Design Progressing	17,902	37,355	55,257	27,619	81,619	-	-	-	81,619	_	-
12213	Aerodrome road - Protective Treatment	Detailed Design Progressing	21,988	24,650	46,638	27,228	72,728	-	_	-	72,728	-	-
12214	Humphreys Road - Protective Treatment	Detailed Design Progressing	21,053	24,650	45,703	28,574	73,074	_		-	73,074	_	_
12215	Morrison Road - Protective Treatment	Detailed Design Progressing	23,988	14,378	38,366	22,703	59,803	-		-	59,803	_	-
12220	Replace Ferry Landings at	Detailed Design Progressing	40.700	22.465	42 402	426.756	426.756	(200,000)		(200,000)	46.756	200,000	
12223	Paynesville & Raymond Island R2R55 Moroney Street Stage 3	Detailed Design Progressing	18,728 35,294	23,465 1,165,431	42,193 1,200,725	436,756 1,062,727	436,756 1,385,200	(390,000)		(390,000)	46,756 1,385,200	390,000	
12227	Garnetts Track Landslip, Omeo	Detailed Design Progressing	10,092	1,100,401	10,092	287,526	287,526	-		-	287.526	-	
12229	Bairnsdale Cell 4a	Detailed Design Progressing	4,228	71,233	75,461	75,557	75,557	-	-	-	75,557	-	-
12235	Bairnsdale Airport Terminal (Air Ambulance Facility)	Detailed Design Progressing	920	115,800	116,720	160,000	160,000	-	_	-	160,000	-	-
12243	Eastwood Toilet Block	Detailed Design Progressing	3,110	4,105	7,215	172,900	172,900	(63,469)	-	(63,469)	109,431	-	-
12260	McKean Street Pedestrian Crossings	Detailed Design Progressing	3,239	415,726	418,965	110,000	510,000	-	_	-	510,000	-	(400,000)
12262	Eastern Beach Road Drainage Improvements	Detailed Design Progressing	2,334	34,900	37,234	62,967	62,967	-	_	-	62,967	-	-
12263	Robin Street, Lakes Entrance Drainage Renewal	Detailed Design Progressing	2,278	44,950	47,228	94,901	94,901	-	-	-	94,901	-	-
12264	35 Marlo Road, Drainage Renewal	Detailed Design Progressing	4,353	27,795	32,148	126,604	126,604	-	-	-	126,604	-	-
12275	Raymond Island Hall - Disabled Facility	Detailed Design Progressing	989	-	989	39,248	39,248	-	_	-	39,248	-	-
12277	18 Flounder Road, Lake Tyers Beach	Detailed Design Progressing	7,114	54,272	61,386	-	60,000	-		-	60,000	-	-
12283	Apex Park, Boat Ramp & Carpark, Lakes Entrance	Detailed Design Progressing	683	-	683	-	50,000	-	-	-	50,000	-	-
12284	Cann River – Changing Places Facility	Detailed Design Progressing	-	-	-	-	247,000	-	-	-	247,000	-	(67,000)
12286	Tambo Upper Road Black Spot Safety Improvements	Detailed Design Progressing	61,101	-	61,101	-	259,000	-	-	-	259,000	-	-
12289	Gay Street, Lakes Entrance – Drainage Renewal	Detailed Design Progressing	-	-	-	-	5,000	-	-	-	5,000	-	-
12290	Bogong Street, Lakes Entrance – Drainage Renewal	Detailed Design Progressing	-	-	-	-	5,000	-	-	-	5,000	-	-
12293	LRCI4 Portable Changeroom Wy Yung Oval	Detailed Design Progressing	6,695	9,697	16,392	-	232,900	_	-	-	232,900	-	-
12297	Mississippi Creek, Scriveners Road - Stage 2	Detailed Design Progressing	659	96,500	97,159			120,000		120,000	120,000	- 400 600	(120,000)
50022 11581	Bairnsdale Cell 3B capping Raymond Island Ferry Renewal	Detailed Design Progressing Progressing	-	4,995 197,663	4,995 197,663	2,400,000 350,000	2,400,000 350,000	(2,400,000)	-	(2,400,000)	350,000	2,400,000	-
	Quick Response Fund	Progressing Progressing	-	197,663	197,663	100,000	100,000	(12,727)		(12,727)	87,273	-	-
11940	Public Space CCTV Refresh	Progressing	3,399	575	3,974	151,859	151,859	- \	-	(12,721)	151,859	-	-
12130	Server Equipment Cloud Services	Progressing	118,167	-	118,167	254,000	254,000	-	_	-	254,000	-	-
12151	BARC Health Club Floor Upgrade	Progressing	-	-	-	65,000	65,000	-	-	-	65,000	-	-

						ADOPTED							
		ACTUALS	соммі	TMENTS	BUDGET (with Actual carryovers)	REVISED BUDGET	CHANGE			REVISED FORECAST	CARRY FORWARDS TO 2024/25	BRING BACK	
Project No	Project Name	Status	YTD Actual Expenditure - 31 December, 2023	YTD Commitments - 31 December, 2023	YTD Actual Expenditure & Commitments - 31 December, 2023	Adopted Budget - Expenditure - 1 July, 2023	Expenditure - 1 October, 2023	Expenditure - Change	Income - Change	Council Cost - Change	Forecast Expenditure - 31 December, 2023	Expenditure Carry Forward	Funded from 2024/25 Budget
	Benambra Streetscape Improvements	Progressing	_	_	_	25,000	25,000	_	_	_	25,000		-
	Be connected - 2023	Progressing	-	-	-	-	-	-	-	-	-	-	
11963 E	East Bairnsdale Play Area Renewal	Progressing	_	10,909	10.909	300,000	300,000	-	-	_	300.000	_	-
11456 F	Premiers Reading Challenge	Progressing	383	4,163	4,546	9,208	9,208	-	-	-	9,208	-	-
	Building Renewal	Progressing	74,170	102,609	176,779	761,404	681,404	-	-	-	681,404	-	-
	Plant Renewal	Progressing	657,184	812,801	1,469,985	2,996,773	2,996,773	-	-	-	2,996,773	-	-
	Vehicles Renewal	Progressing	937,296	317,815	1,255,111	1,055,974	1,097,974	124,000	-	124,000	1,221,974	-	-
11583 C	Office Furniture Non-Specified	Progressing	11,646	1,575	13,221	30,000	30,000	(1,799)	-	(1,799)	28,201	-	-
	Information Technology Infrstructure	Progressing	62,684	52,003	114,687	450,000	450,000	-		-	450,000	-	-
	Purchase Library Resources non- specified	Progressing	118,889	39,037	157,926	205,165	200,151	-	-	-	200,151	-	-
	Gravel Road Resheet Non-Specified	Progressing	422,261	38,387	460,648	1,000,000	1,000,000	-	-	-	1,000,000	_	-
	Roads Resealed Non-Specified	Progressing	640,275	41,549	681,824	2,460,000	2,282,000	206,216	(1,427,912)	(1,221,696)	2,488,216	-	-
	Skip Bins	Progressing	-	-	-	108,000	108,000	-	-	-	108,000	-	-
	Strategic Property Acquisitions	Progressing	1,055	61,853	62,908	201,243	263,243	-	-	-	263,243	-	-
	Omeo Justice Precinct	Progressing	-	24,162	24,162	110,303	110,303	-	-	-	110,303	-	-
11/38	Property Acquisitions (Admin Services)	Progressing	-	-	-	304,049	304,049	-	-	-	304,049	-	-
	Photocopiers / Printers Renewal	Progressing	3,534	-	3,534	190,000	190,000	-	-	-	190,000	-	-
11007 s	Renewal and upgrade to corporate systems	Progressing	225,755	175,494	401,249	1,400,041	1,650,041	122,664	-	122,664	1,772,705	-	-
11625	Kerb and Channel Replacement, Shire-wide	Progressing	219,615	19,434	239,049	400,000	200,000	40,000	-	40,000	240,000	-	-
	Street Litter Bins	Progressing	23,638	-	23,638	9,231	9,231	14,407	-	14,407	23,638	-	-
	CCTV Commerical Marinas	Progressing	-	-	-	165,000	165,000	-	-	-	165,000	-	-
	Network Equipment - Footprint Consolidation	Progressing	69,056	-	69,056	130,011	130,011	-	-	-	130,011	-	-
	East Gippsland Trail Network	Progressing	21,652	14,658	36,310	106,905	106,905	-	-	-	106,905	-	-
	Mobile devices for Out door crew	Progressing	14,894	-	14,894	121,635	121,635	-	-	-	121,635	-	-
	EV Charge Points -Streetscapes Omeo Netball Court Upgrade (Black	Progressing	1,700	189,928	191,628	350,316	350,316	-	-	-	350,316	-	-
12117	Summer Grant)	Progressing	-	70,554	70,554	148,037	148,037	-	-	- (100 577)	148,037	-	-
	Asset Investment Opportunity	Progressing	-		400 100	880,880	880,880	(180,000)	-	(180,000)	700,880	- 0.000.050	-
	Digital Services	Progressing	95,215	34,894	130,109	3,845,000	1,608,379	-	-	-	1,608,379	2,226,858	-
	Final Seal Program Mobile Library Bus	Progressing Progressing	-	53,259	53,259	200,000 78,382	200,000 78,382	-		-	200,000 78.382	-	-
12242 F	Paynesville Service Centre - upgrade	Progressing	-	33,239	33,239			-			-,	_	
0	outdoor space	<u> </u>	764	-	764	18,000	18,000	-	-	-	18,000 300,000	-	-
	Rural Road Maintenance Seal R2R54 Stirling / David Road Metung,	Progressing	764	-	764	300,000	300,000	-		-	300,000	-	-
12201	Drainage upgrade	Progressing	105,468	87,482	192,950	232,786	232,786	-		-	232,786	-	-
12274 L	AJ Freeman Tennis Court Short Term Upgrade	Progressing	63,816	1,544	65,360	35,700	35,700	29,660	(18,182)	11,478	65,360	-	-
	Skidale Reserve	Progressing	257	-	257	53,000	53,000	-	-	-	53,000	-	-
	People Counter - Library	Progressing	5,014	-	5,014	-	5,014	-	-	-	5,014	-	-
12291 T	Omeo Service Centre – Female Toilets Upgrade	Progressing	-	-	-	-	80,000	-	-	-	80,000	_	-
12292 V	Wests Road Bridge	Progressing	102,485	-	102,485	-	-	102,485	-	102,485	102,485	-	(94,000)
12294 J	James Road, Timber Bridge Renewal	Progressing	-	96,000	96,000	_	-	100,000	_	100,000	100,000	_	-

	Works and Landin Renabilitati	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	ACTUALS		TMENTS	ADOPTED BUDGET (with Actual carryovers)	REVISED BUDGET		CHANGE		REVISED FORECAST	CARRY FORWARDS TO 2024/25	BRING BACK
Project No	Project Name	Status	YTD Actual Expenditure - 31 December, 2023	YTD Commitments - 31 December, 2023	YTD Actual Expenditure & Commitments - 31 December, 2023	Adopted Budget - Expenditure - 1 July, 2023	Expenditure - 1 October, 2023	Expenditure - Change	Income - Change	Council Cost - Change	Forecast Expenditure - 31 December, 2023	Expenditure Carry Forward	Funded from 2024/25 Budget
12298	Goal Storage Compound - Howitt Park Oval	Progressing	13,109		13.109			13,109		13.109	13.109		
50004	Orbost Landfill Capping	Progressing	6,700	76,686	83,386	51,482	51,482	31,904		31,904	83,386	-	
50009	Bosworth Road Aftercare	Progressing	11.993	12.871	24.864	40.000	40.000	- 01,304		- 01,004	40.000	-	-
50011	Orbost Landfill Aftercare	Progressing	4,120	1,000	5,120	10,000	10,000	-	-	-	10,000	-	-
50012	Mallacoota Landfill Aftercare	Progressing	716	1,680	2,396	7,000	7,000	-	-	-	7,000	-	-
50015	Cann River Landfill Capping	Progressing	-	37,491	37,491	1,590,000	1,590,000	(1,500,000)	-	(1,500,000)	90,000	1,500,000	-
50017	Bairnsdale Cell 1 Aftercare	Progressing	5,555	7,550	13,105	28,919	28,919	-	-	-	28,919	-	-
50018	Bairnsdale Cell 2 Aftercare	Progressing	5,555	7,550	13,105	30,000	30,000	-	-	-	30,000	-	-
50020	Lakes Entrance Landfill Aftercare	Progressing	41,196	89,048	130,244	104,967	104,967	25,277	-	25,277	130,244	-	-
12280	LRCI4 Portable Changeroom West	Progressing											
12082	Bairnsdale Oval Hinnomunjie Bridge Restoration	On Hold	59,134 1,751	11,626 27,289	70,760 29,040	300,000 993,414	67,100 993,414	-	-	-	67,100 993,414	-	-
12082			1,/51	27,289	29,040	993,414	993,414	-	-	-	993,414	-	-
12160	Bairnsdale Streetscape - Nicholson to Bailey St	On Hold				100,000	100,000				100,000		
12230	Dragway Demolition	On Hold	-	42,760	42,760	83,760	83,760	-		-	83,760	-	
12252	Raymond Island Township Road & Drainage Upgrade	On Hold	1,838	-	1,838	57,901	57,901	_	_	_	57,901	_	-
12238	Upgrade existing facilities for	Not Started											
	accessibility & Female Friendly		-	-	-	125,000	125,000	-	-	-	125,000	-	-
11592	Culvert Renewal Non-Specified	Not Started	-	-	-	100,000	100,000	-	-	-	100,000	-	-
12045	Omeo Council Precinct	Not Started											
12239	Redevelopment Omeo Service Centre - Floor	Not Started	-	-	-	200,000	200,000	(100,000)	100,000	-	100,000	-	-
	Replacement		-	-	-	30,000	30,000	-	-		30,000	-	-
11584 11670	Equipment Renewal BARC Asset Management System	Transferred Transferred	-	-	-	47,000 150,000	47,000	(47,000)	-	(47,000)	-	-	-
11820		Transferred	-	-	-	350,000	-	-		-	-	-	-
11937		Transferred		-	-	122,664	122,664	(122,664)		(122,664)			
	Protective treatments for roads				_	122,004	122,004	(122,004)		(122,004)			
12141	vulnerable to changing climate	Transferred	-	-	-	200,000	-	-	-	-	-	-	-
12247	Renewal Program	Transferred	-	-	-	50,000	50,000	(50,000)	-	(50,000)	_	-	-
12265	New Areas WSUD detailed design	Transferred	-	-	-	81,000	81,000	(81,000)	-	(81,000)	-	-	-
12199	Orban improvement	Withdrawn	-	-	-	26,677	-	_	-	_	-	-	-
11929	Block Renewal D	Withdrawn	-	-	-	367,215	367,215	(367,215)	-	(367,215)	-	-	-
11990	Lakes Entrance Marine Parade Upgrade Upgrade Bairnsdale Landfill	Withdrawn	-	-	-	2,698,000	2,698,000	(2,698,000)	2,500,000	(198,000)	-	-	-
12070	Compliance Works	Withdrawn	-	-	-	800,000	-	-	_	-	-	-	-
12107	Settlement Road	Withdrawn	3,605		3,605	124,683	3,500	105	_	105	3,605		_
12155		Withdrawn	-	-	-	150,000	150,000	(150,000)	_	(150,000)	-	-	_
12201	Lower Goon Nure Road - Rural Road Improvement	Withdrawn	-	-	-	16,519	722	(722)	-	(722)	-	-	-
12202	Improvement	Withdrawn	_	_	_	17,419	-	_		-	_	_	_
12209	Improvement	Withdrawn	-	-	-	18,558	-	-		-	-	-	
12231		Withdrawn	-	-	-	143,660	143,660	(143,660)	-	(143,660)	-	-	-
12246	Purchase of Land - Encroachment, Marlo	Withdrawn	-	-	-	62,000	-	-	-	-	-	-	-

oupitui	Aprilar Works and Landin Relabilitation Projects - I mance Report - December 2025												
				СОММІТ	TMENTS	ADOPTED BUDGET (with Actual carryovers)	REVISED BUDGET	CHANGE			REVISED FORECAST	CARRY FORWARDS TO 2024/25	BRING BACK
Project No	Project Name	Status	YTD Actual Expenditure - 31 December, 2023	Commitments -	YTD Actual Expenditure & Commitments - 31 December, 2023	Adopted Budget - Expenditure - 1 July, 2023	Expenditure - 1 October, 2023	Expenditure - Change	Income - Change	Council Cost - Change	Forecast Expenditure - 31 December, 2023	Expenditure Carry Forward	Funded from 2024/25 Budget
	Seventh Parade Carparking, Raymond Island	Withdrawn	_	-	-	160,615	160,615	(160,615)	-	(160,615)	_	_	-
12267	Renewal Program	Withdrawn	_	_	-	500,000	500,000	(500,000)	-	(500,000)	-	_	-
12282	Plant for composting facility	Withdrawn	-	-	-	250,000	-	-	-	-	-	-	-
Grand T	Grand Total		26,533,248	30,355,120	56,888,367	126,588,059	121,210,765	(25,692,360)	13,191,957	(12,500,403)	95,518,405	24,916,858	(1,177,000)

# **Holding Account Transactions Q2 2022-23**

Opening Balance 1 October 2023	178,018
Sydenham Inlet Road Safety Improvements Glen Arte Road, timber bridge renewal Seventh Parade Carparking, Raymond Island	1,118 37,946 160,615
Council Operational Facilities Renewal Program	500,000
Bairnsdale Cell	150,000
Eagle Point CP Amenities Block	367,215
Mallacoota Foreshore Holiday Park Toilet Block	7,240
Wallace Street, Bairnsdale Footpath Installation	50,570
Mallacoota Foreshore Holiday Park Toilet	3
Sydenham Inlet Road Safety Improvements Wallace Street, Bairnsdale FootpathInstallation	130 165
Pyke Street, Bairnsdale	933
Glen Arte Road, timber bridge renewal	192
Metung Tennis Court Upgrade	2,922
Lower Goon Nure Road	857
Suttons Access Road, Timber BridgeRenewal Additional Excavator for Works ConcreteCrew W B Line Track, timber bridge renewal Shaving Point Boat Ramp Upgrade, Metung Eagle Point Beach Regeneration Lakes Entrance Marine Parade UpgradeStage 2 Newmerrella Roadside Rest Area Chinamans Creek Open Space Toilet Upgrade Hard Wicket Upgrade	9,896 15,994 38,316 66,991 143,660 198,000 17 30 16,786
Additional Excavator for Works Concrete Crew Quick Response Fund Bullock Island Masterplan	2,738 12,727 713
Forward Design Master Plan	19,610
Metung Bowling Green	15,126
Total Savings end of Q2	1,820,510
Vehicle Fleet Replacement Program	124,000
Street Litter Bin Enclosure Project	14,407
Bullock Island Masterplan Implementation Lochiel Park lighting upgrade	320,000 10,875
Nungurner Road Safety Improvements Calulu Road Intersection	1,319 105
Chinaman's Creek Open Space Toilet Upgrade	461
Gymnastics Pavilion	27
Newmerella Roadside Rest Area	15
AJ Freeman Cricket Nets Upgrade	1
Lindenow Sports Lighting	2
Lower Goon Nure Road	135
Omeo Soldiers Hall Floor Renewal	372
Eagle Point Foreshore Hub	405,000

## **Holding Account Transactions Q2 2022-23**

	ll
Marine Parade Stage 1, Lakes Entrance Lochiel Park Sport Ground Lighting Upgrade	300,000 40,000
Lakes Entrance Waste Transfer Station Upgrade	20,000
Cann River Roadside Rest Area	11,011
Omeo Soldiers Hall - floor renewal	2,909
Lucknow Gymnastics Facility	275
Creation of Cormorant Drive, Metung	50,000
Lakes Entrance Waste Transfer Station Upgrade	2,469
Design for Lucknow Gymnastics Facility	557
Shaving Point Park Metung	5,000
AJ Freeman Cricket Net Upgrades	13
AJ Freeman Tennis Court - Short Term Upgrades	11,478
Air Handling Unit, Lakes Aquadome	15,000
Omeo Soldiers Hall - floor renewal	3,466
Wests Road Timber Bridge Renewal	8,485
Bullock Island Bridge	11,713
Bung Bung Lane	7,403
Howitt Avenue (from Flinns Road to Balmoral Crescent)	6,245
Limestone Road road Renewal	6,629
Goal Storage Compound - Howitt Park Oval	13,109
Nicholson Street Parking	82,000
Moroney Street - Stage 2	11,744

#### Total Additional Budget Allocated end of Q2 1,486,225 Leisure Facility Equipment -47,000 Reallocation - No Change to overall Aquatic Facility Plant Equipment Renewal Program -50,000 Air Handling Unit, Lakes Aquadome 97,000 Scanner Refresh -122,664 Renewal of Corporate Systems 122,664 Roads reseal program -21,696 Moroney Street Stage 2 21,696 New WSUD Design -81,000 Crooke Street Wetlands 81,000 Eastwood Toilet Block -63,469 Eastwood Playground 63,469 **Bullock Island Bridge** -580,000 580,000 Bullock Island Masterplan Kerb & Channel 40,000 **Dust Suppression** -40,000 Reallocation - No Change to overall budget 0

Closing Balance 31 December 2023

512,303

## Carry Forwards as at 31 December 2023

Project		CFWD	Commitment	Comments
11969	Slip Road Maritime Precinct	3,000,000	2,708,645	Multi Year project - revised contract let, works to recommence on site
12060	Krauatungalung Walk - Stage 1	1,600,000	1,772,558	Multi Year project - contracts let, works to commence May and be complete by November
11823	Marine Parade Stage 1 , Lakes Entrance	600,000	125,662	Multi Year project - construction contract to be awarded in Q3 23/24
11958	Cann River Waste Transfer Station	600,000	22,825	Multi Year project - construction contract to be awarded in Q4 23/24
11961	Foreshore Management Plan Implementation - Marlo	250,000	15,710	Multi Year project - works to commence in 23/24 and be complete in first half of 24/25
12001	Lakes Entrance Foreshore Park	750,000	242,542	Multi Year project - project to be delivered by inhouse crews, commencing May 2024.
12013	Livingstone Park Community Facilities	1,000,000	39,622	Multi Year project - construction contract to be awarded in Q4 23/24
12018	Mallacoota Streetscape	1,000,000	29,197	Multi Year project - construction contract to be awarded in Q3 23/24
12147	Jones Bay Southern Catchment WSUD (Crooke St Wetlands)	1,300,000	1,483,337	On hold pending redesign - contract let for construction
12203	Apron & Taxiway C, Bairnsdale Airport	1,000,000	76,846	Multi Year project - construction contract to be awarded in Q3 23/24
12219	Eagle Point School Connection	300,000	50,306	Multi Year project - currently in design - initial construction works to commence late Q4 23/24
12220	Replace Ferry Landings at Paynesville & Raymond Island	390,000	21,432	Multi Year project - currently in design
11965	Bairnsdale Runway 04/22 Extension & Lighting Upgrade	5,000,000	57,610	Multi Year project - pending outcome of EPBC process to secure permits.
12131	Digital Services	2,226,858	16,744	On hold - pending outcome of IT review
50015	Cann River Capping	1,500,000	37,491	On hold - Waste Transfer Station to be built first
50016	Bairnsdale Cell 3A Capping	2,000,000	74,689	On hold - Waste Transfer Station to be built first
50022	Bairnsdale Cell 3B capping	2,400,000	4,995	On hold - Waste Transfer Station to be built first
		24,916,858	6,780,211	

## **6 Urgent Business**

## 7 Confidential Business

Council will close the meeting to the public in accordance with the provision of section 66(2) of the *Local Government Act* 2020 to consider the following list of items:

## 7.1 Personnel Matter (1)

Under section 66(2) of the *Local Government Act* 2020 a meeting considering confidential information may be closed to the public. Pursuant to sections 3(1) and 66(5) of the *Local Government Act* 2020, the information contained in this report is confidential because it contains personal information that would, if released, result in the unreasonable disclosure of information about personal affairs.

## 7.2 Personnel Matter (2)

Under section 66(2) of the *Local Government Act* 2020 a meeting considering confidential information may be closed to the public. Pursuant to sections 3(1) and 66(5) of the *Local Government Act* 2020, the information discussed in this meeting is confidential because it contains personal information that if released would result in the unreasonable disclosure of information about personal affairs.

## 8 Close of Meeting