

Seymour Solar Farm Landscape and Visual Assessment

Goulburn Valley Water 26 March 2024

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Acknowledgement of Country

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Executive summary

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Introduction

Goulburn Valley Water (GVW) engaged GHD Pty Ltd (GHD) to undertake a Landscape and Visual Impact Assessment (LVIA) for the proposed solar farm facility within its Seymour GVW owned land located in Seymour, adjacent to Wastewater Management Facilities (WMF). Goulburn Valley Water (GVW) is seeking to install a largescale solar facility within its Seymour Wastewater Management Facility (WMF) site.

The intent of the solar PV system is to provide GVW with maximum energy yield so that GVW can offset their carbon footprint and generate revenue by selling electricity to the market. The Study Area for this report is generally confined to the likely extent of visibility of the Project within the surrounding context (approximately 5 km radius from the site).

Method

This assessment is informed by a desktop review, site inspection (on the 21 November 2023) and identified landscape character units and values. Due to the Project's rural setting, multiple sensitive receptors were identified within the assessment, including residents and road users.

The LVIA considers potential impacts of the proposed works from seven viewpoints (sensitive receptor locations) and three Landscape Character Areas. The findings of the assessment include recommendations and management measures to inform the design process and reduce potential negative impacts of the Project.

Proposal Summary

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The Project will include a large scale solation structure integration and reticulation systems computing of the following yiew as

- Fixed tilt or Single Axis Tracking (SAT) PV arrays located within GVW land, and ancillary infrastructure
- Control and switching room brideligecument must not be used for any
- Associated civil and structural works at the social any
- Integration into the DNSP electrical network for uting the substantial portion of this being in GVW land)
- Access roads & pavement
- Landscaping
- Security fencing at all perimeter boundaries to restrict access

LVIA Findings

The Project site is located in the northeast fringe of the township of Seymour, Victoria, approximately 100 km northwest of Melbourne. Seymour is located on the banks of the Goulburn River, at the junction of the Hume Freeway and Goulburn Valley Highway. The topography of the area generally flat with gradual falls towards the natural valley of the Goulburn River and ascends towards the Tallarook Ranges to the south and Mount Stewart to the east. Mount Tallarook is located approximately ten km south of the study area.

A total of three landscape character areas were identified within the study area: Seymour Township (LCA1), Farmland (LCA2) and Goulburn River (LCA3). Impacts of LCA2 where assessed as **Low**, as it is unlikely that this development would have an adverse effect on the landscape character and introduction of components may be new but would not be uncharacteristic within the existing land. Overall, this assessment found there to be no significant landscape character impacts from the Project.

Sensitive visual receptors in the study area include road users, residents and outdoor workers. Seven viewpoints were chosen to assess the visual impact of the Project. The assessment found that the visual impacts ranged from **Moderate - Low** to **Negligible.** The most significant impacts where **Moderate-Low** within the vicinity of VP02 (Back Mountain Road) and VP04 (Dead Horse Lane) due to residents that place value upon the open rural landscape and enjoyment of views of their setting.

Recommendations and Management Measures

The following section recommends mitigation measures that respond to issues arising within the assessment that have potential to adversely impact on the character of the landscape or views from nearby sensitive visual receptors. The following mitigation recommendations address the most visual elements of the Project as well as referencing any relevant considerations drawn from the legislation and policy review.

General considerations for the detailed design phase include:

- Utilise design strategies to minimise the visual prominence of new components affecting views to and from Back Mountain Road, Dead Horse Lane and Tarcombe Road.
- Ensure Project design, siting and materiality is of high quality and sympathetic to the existing heritage context of the station precinct and contributes positively to the existing landscape character values.

On-site mitigation recommendations

- Retain vegetation.
- Perimeter screen planting
- Material selection

Construction activity and storage

- Take all practical measures to ensure construction equipment, stockpiles of stored materials, and other visible elements located in the construction laydown area near the sensitive receptors.
- Fencing for the compound site is to include hoarding or screening material
- The site compound will be kept tidy and general tidiness will be maintained at the end of each shift
- All materials and equipment will be stored within the site compound or within designated work areas.

Conclusion

The recommendations and management measures provided within the LVIA should be considered within the design process to reduce the landscape and visual impacts of the Project.

This report is subject to, and must be read in conjunction with, the limitations set out in section 1.4 and the assumptions and qualifications contained throughout the Report.

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Contents

1. Introduction

- 1.1 Overview of the Project
- 1.2 Purpose and scope of this report
- 1.3 Report structure
- 1.4 Limitations
- 1.5 Assumptions

2. Methodology

- 2.1 Standards and guidance
- 2.2 Study area
- 2.3 Legislation and policy context
- 2.4 Existing landscape and visual environment
 - 2.4.1 Desktop analysis of the project, landscape and visual environment
 - 2.4.2 Site inspection
 - 2.4.3 Description of existing landscape and visual environment
- 2.5 Landscape impact assessment
 - 2.5.1 Landscape character areas
 - 2.5.2 Landscape effects
- 2.6 Visual impact assessment
 - 2.6.1 Viewpoint selection
 - 2.6.2 Visual effects
- 2.7 Significance of impact
- 2.8 Panorama and photomontages
- 2.9 Cumulative impacts

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PLAN

1

1

1

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2

2

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3 3

5

5

5 5

5

6 6

7

8

8

8

10

10

11

11

11

12

12

13

13

14

2.9.1 Study area for cumulative impact assessment2.9.2 Criteria definition

- 10 Mitigation measures and recommend
- 2.10 Mitigation measures and recommendations
- 2.11 Response to key legislation and policy
- 2.12 Stakeholder engagement
- 2.13 Assumptions and limitation

3. Project description

4.

- 3.1 The project site 14 3.2 **Project Overview** 16 3.2.1 **Construction Phase** 16 3.2.2 Operation phase 17 3.2.3 Buildings and above ground infrastructure 17 3.2.4 Access roads and pavements 17 Legislation and policy context 19 State legislation and policy 4.1 19 Planning and Environment Act 1987 4.1.1 19 4.1.2 Victorian Planning Policy Framework (PPF) 19 4.2 Local legislation, policy and guiding documents 20 4.2.1 Local Planning Policy Framework - Mitchell Shire Planning Scheme 20 4.2.1.1 Zoning and Overlays 20
 - GHD | Goulburn Valley Water | 12579414 | Seymour Solar Farm iv

	4.3	Other relevant policy	This copied document to be made available	21	
		4.3.1 Seymour Structure Plan 3660	its consideration and review as	21	
5.	Existing	g landscape and visual environment	part of a planning process under the	22	
	5.1	Land use and built form	Planning and Environment Act 1987.	22	
	5.2	Topography and Hydrology	The document must not be used for any	22	
	5.3	Vegetation	purpose which may breach any	22	
	5.4	Visual analysis	copyright	26	
		5.4.1 Sensitive visual receptors		26	
-		5.4.2 Rey visual leatures		20	
6.	Landsc	ape impact assessment		27	
	6.1	Landscape character area 1: Seymour To	wnship	29	
	6.2	Landscape character area 2: Farmland		32	
	6.3	Landscape character area 3: The Goulbui	n River, creeks and floodplains	35	
7.	Visual i	impact assessment		38	
	7.1	Viewpoint selection		38	
	7.2	Viewpoint location 01 (VP01) Back Mount	ain Road	40	
	7.3	Viewpoint location 02 (VP02) Back Mount	ain Road/Dead Horse Lane	42	
	7.4	Viewpoint location 03 (VP03) Tarcombe R	Road	44	
	7.5	Viewpoint location 04 (VP04) Dead Horse	Lane	46	
	7.6	Viewpoint location 05 (VP05) Dead Horse	Lane	48	
	7.7	7 Viewpoint location 06 (VP06) Delatite Road			
	7.8 Viewpoint location 07 (VP07) Avenel Road				
8.	Cumula	ative impact assessment		55	
	8.1	Mangalore Solar Farm		55	
	8.2	Inland Rail Beveridge to Albury		55	
9.	Mitigati	on measures and recommendations		57	
•	9.1	General recommendations		57	
	9.2	On-site mitigation recommendations		57	
		9.2.1 Retain vegetation		57	
		9.2.2 Perimeter screen planting	ADVERTISED	57	
		9.2.3 Material selection	DIAN	57	
		9.2.4 Construction activity and storage	PLAN	57	
10.	Respor	nse to key legislation and policy		59	
11.	Conclu	sion		60	
12.	Referer	ices		62	
				Ű	
Tal	ole inc	lex			
T	- 0.4			~	
1001	n / 1			1	

Table 2.1	Landscape value	6
Table 2.2	Landscape susceptibility to change	7
Table 2.3	Magnitude of change criteria (landscape)	7
Table 2.4	Sensitivity to change criteria (visual)	9
Table 2.5	Magnitude of change criteria (visual)	9
Table 2.6	Significance of impact matrix (landscape and visual)	10

Table 3.1	Key proposed buildings and above ground infrastructure	17
Table 8.1	Cumulative impacts	55
Table 8.2	Cumulative impacts	56
Table 11.1	Summary of impacts to landscape character impacts	60

Figure Index

Figure 2.1	Study Area		4
Figure 3.1	Project Location plan	ADVERTISED	15
Figure 3.2	Proposed Seymour site layout plan	DIAN	18
Figure 5.1	Land use and built form	FLAN	23
Figure 5.2	Topography and hydrology		24
Figure 5.3	Vegetation		25
Figure 6.1	Landscape character zones		28
Figure 7.1	Viewpoint location		39
Figure 7.2	VP01 location map		40
Figure 7.3	Photomontage showing proposed view from	Back Mountain Road	40
Figure 7.4	Redline overlay showing proposed view from	n Back Mountain Road	41
Figure 7.5	VP02 loca tion map		42
Figure 7.6	VP03 location map	vailable	44
Figure 7.7	VP04 location map. the sole purpose of enablin	ng	46
Figure 7.8	Redline overlay showing proposed view from	Dead Horse Lane	47
Figure 7.9	Redline overlap at owing propase overwinder	r Dead Horse Lane	48
Figure 7.10	VP05 location Plapping and Environment Act 1	1987.	48
Figure 7.11	Photomontage showing proposed view from	Dead Horse Lane	49
Figure 7.12	Redline overlay showing proposed view from	Dead Horse Lane	49
Figure 7.13	VP06 location map		51
Figure 7.14	VP07 location map		53

Photo index

Photo 6.1	View from intersection of Avenel Road and Tarcombe Road	29
Photo 6.2	View High Street, Seymour looking north	29
Photo 6.3	View from Wallis Street, Seymour looking west	29
Photo 6.4	View from Wallis Street, Seymour looking north	29
Photo 6.5	View from Emily Street, Seymour looking north	29
Photo 6.6	View from High Street, Seymour looking north at the school	29
Photo 6.7	View from Back Mountain Road facing south showing project site	32
Photo 6.8	View from Dead Horse Lane facing west showing agricultural land	32
Photo 6.9	View from Tarcombe Road facing south showing associated farming	
	infrastructure	32
Photo 6.10	View from Delatite Road facing east showing old agricultural machine and current land used for agricultural purposes	32

Photo 6.11	View from Tarcombe Road facing south showing associated agricultural	
	components	32
Photo 6.12	View from Avenel Road facing east showing native vegetation in agricultural land	32
Photo 6.13	View from the banks of the Goulburn River facing north	35
Photo 6.14	View from boat ramp jetty facing north	35
Photo 6.15	View from Lions Park facing North showing the local walking area associated with the Goulburn River	35
Photo 6.16	View from the banks of the Goulburn River off Manners Street looking North showing the vegetated banks of the river	35
Photo 6.17	View from walking track associated with the Goulburn River trial facing west	35
Photo 6.18	View from the Goulburn River walking track looking north showing the varied	
	bank heights and vegetation	35
Photo 7.1	Back Mountain Road existing view	40
Photo 7.2	Back Mountain Road near Dead Horse Lane, existing view	42
Photo 7.3	Tarcombe Road existing view	44
Photo 7.4	Dead Horse Lane existing view	46
Photo 7.5	Dead Horse Lane existing view	48
Photo 7.6	Delatite Road existing view	51
Photo 7.7	Avenel Road existing view	53

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Appendices

Appendix A Photomontages

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Terminology

Terminology	Definition	
Impact	The effect of a proposal, which can be adverse or beneficial, when measured against an existing condition.	
Landscape	All aspects of a tract of land, including landform, vegetation, buildings, villages, towns, cities and infrastructure.	
Landscape character	The combined quality of built, natural and cultural aspects which make up an area and provide its unique sense of place.	
Landscape character zone	An area of landscape with similar properties or strongly defined spatial qualities, distinct from areas immediately nearby.	
Landscape character type	Multiple similar landscape character zones repeated within a larger study area, grouped to avoid repetition in their description.	
Landscape and Visual Impact Assessment (LVIA)	A tool used to identify and assess the likely significance of the effects of change resulting from development both on the landscape as an environmental resource in its own right and on people's views and visual amenity.	
Magnitude	The measurement of the scale, form and character of a development project when compared to the existing condition. In the case of visual assessment this also relates to how far the project is from the viewer. Combines with sensitivity, magnitude provides a measurement of impact.	
Photomontage	A visualisation which superimposes an image of a proposed development upon a photograph or series of photographs.	
Project	The Chins foreign and ware ation of the ada is build by build be	
Sensitivity	The sensitivity of a landscape character zone or view and its capacity to absorb change of the nature of the proposal. In the case of visual impact this also relates to the type of viewer and number of viewers? Complete With Magnificate sensitivity provides a measurement of impact.	
Study area	Consists of land the vicinity of, and including, the Project site. The study area is a wider area surrounding the project site as defined in this assessment, including land that has the potential to be indirectly impacted by the Project.	
Significant	In the context of EIA, after analysing the extent (type, size, scope, intensity and duration) and nature (predictability, resilience of the environment, reversibility, ability to manage/mitigate, level of public interest) of a proposal, an expected level of impact of a proposal project which requires an EIS to be undertaken. The term should be avoided in landscape character and visual impact assessments if the expected level of impacts is below the threshold.	
Study area	Consists of land in the vicinity of, and including, the proposed Project site. The study area is a wider area surrounding the proposed Project site as defined in this assessment, including land that has the potential to be indirectly impacted by the Proposal.	
Susceptibility	The ability of a defined landscape or visual receptor to accommodate the specific proposed development without undue negative consequences.	
Visual amenity	The overall pleasantness of the views people enjoy of their surroundings, which provides an attractive visual setting or backdrop for the enjoyment of activities of the people living, working, recreating, visiting or travelling through an area.	
View	The sight or prospect of a landscape or scene.	
Viewpoint	The point from which a view is observed that represents a visual receptor.	
Visibility	The state or fact of being visible or seen.	
Visual impact	The impact on the views from residences, workplaces and public places.	
Visual receptors	Individuals and/or defined groups of people who have the potential to be affected by a proposal.	



Abbreviations

Abbreviations	Definition	
3D	Three dimensional	
AHD	Australian height datum	
CGIA	Central Goulburn irrigation area	
DNSP	Distributed Network Service Provider	
EES	Environmental Effects Statement	
EIS	Environmental Impact Statement	
GVW	Goulburn Valley Water	
GIS	Geographic Information System	
GPS	Global Positioning System	
HV	High-voltage	
km	Kilometre	
LVIA	Landscape and Visual Impact Assessment	
LCVIA	Landscape Character and Visual Impact Assessment	
LCA	Landscape Character Areas	
LEP	Local Environmental Plan	
LEP	Local Environmental Plan	
LGA	Local Government Authority	
М	Metre	
PV	Photovoltaic	
PPF	Planning policy framework	
RFI	Request for Information	
SATRFI	Single Axis Tracking Request for Information	
WMF	Wastewater Management Facility	
VP	Viewpoint	

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1. Introduction

The following sections provide an overview of the Project, the purpose and scope, and the structure of the report.

1.1 Overview of the Project

Goulburn Valley Water (GVW) is seeking to install a large-scale solar facility within its Seymour GVW owned land located adjacent to Wastewater Management Facilities (WMF). The intent of the solar PV system is to provide GVW with maximum energy yield so that GVW can offset their carbon footprint and generate revenue by selling electricity to the market.

The site is located within GVW owned land and all power generated by the solar facilities will be exported directly to the national electricity transmission network. The proposed solar development system size will be <5MW to meet the targeted annual electricity generation volume.

GHD Pty Ltd (GHD) has been engaged by GVW to undertake a Landscape and Visual Impact Assessment for the proposed solar farm at Back Mountain Road in Seymour, within GVW owned land.

1.2 Purpose and scope of this report

The purpose of this report is to provide a Landscape and Visual Impact Assessment (LVIA) on the Project, including an assessment of the existing landscape and visual context and an assessment of the impacts to the landscape character and visual environment as directed by Clause 53.13 of the Mitchell Shire Council for the approval of the planning permit (Renewable Energy Facility).

An application to use and develop land for the purpose of a Solar Energy Facility must be accompanied by a design response that includes accurate visual simulations illustrating the development in the context of the surrounding area and from key public view on the must not be used for any

A Landscape and Visual Impact Assessment (IV)A) imperdmented by address the application requirements and decision guidelines provided in Clause 53.13. copyright

This LVIA assesses the landscape character and visual impacts of the project, with particular consideration for sensitive landscape and visual receptors, in the area surrounding the project. The report comprises the following:

- An understanding of the landscape and visual attributes of the study area.
- Identification of sensitivities of landscape and visual receptors in the vicinity of the project.
- Assessment of potential landscape and visual impacts associated with the project.
- Provision of recommendations for mitigating or managing any identified landscape and visual impacts arising from the project.

It is intended that this report accompany a town planning submission by GVW to the Mitchell Shire Council

1.3 Report structure

This report comprises of the following sections:

Section 1 – Introduction: provides background information and an overview of the Project and assessment.

Section 2 - Methodology: describes the methodology used for the purposes of this report.

Section 3 – Project description: describes the proposed development, with emphasis on identifying the key sources of potential impacts relevant to this assessment.

Section 4 – Legislation and policy context: provides a summary of relevant legislation and policy affecting the study area.

1

Section 5 – Existing landscape and visual context: provides an analysis of the existing landscape character and visual environment of the study area in the context of the Project.

Section 6 – Landscape character assessment: landscape character areas are defined and assessed against the proposed development.

Section 7 – Visual impact assessment: viewshed analysis is described and representative viewpoint locations are identified and assessed.

Section 8 – Cumulative impacts: provides a discussion of potential cumulative impacts.

Section 9 – Mitigation measures and Recommendations: mitigation measures and recommendations are provided in response to issues arising in the assessment of the construction and operation phases of the Project.

Section 10 – Conclusion: presents a summary of the LVIA.

1.4 Limitations

This report: has been prepared by GHD for Goulburn Valley Water and may only be used and relied on by Goulburn Valley Water for the purpose agreed between GHD and Goulburn Valley Water as set out in section 1.2 of this report.

GHD otherwise disclaims responsibility to any person other than Goulburn Valley Water arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report (refer section 1.2 of this report). GHD disclaims liability arising from any of the assumptions being incorrect.

Accessibility of documents

If this report is required to be accessible in any other format, this can be provided by GHD upon request and at an additional cost if necessary.

1.5 Assumptions

This assessment includes the following assumptions and limitations:

- There is no single guidance document on the assessment of landscape and visual impacts specific to Australia, however, the industry typically refers to the guidelines outlined in section 2.1.
- The assessment aims to be objective and to describe any potential changes factually. While potential changes resulting from the Project are defined, the significance of these changes requires qualitative (subjective) judgements. This assessment's conclusion therefore combine objective measurement and professional interpretation. While this assessment aims to be objective, it is recognised that visual assessment can be subjective and individuals are likely to associate different visual experiences to the study area.
- The assessment is based on the information provided to GHD at the time of writing.
- Existing conditions were assessed in the field on 21 November 2023
- This assessment does not include landscape and visual impacts from lighting.

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2. Methodology

The following sections outlines the methodology for this assessment.

2.1 Standards and guidance

The methodology for the LVIA has been set out to respond to specific project requirements and constraints including scale and nature of the project.

There is no general (legislated) guidance on the assessment of landscape and visual effects produced by an independent body specific to Australia. Therefore, the methodology for the LVIA, including impacts, was derived from the *Guidelines for Landscape and Visual Impact Assessment, Third Edition* (The Landscape Institute and the Institute for Environmental Management and Assessment, 2013).

Terminology, assessment methods and nomenclature have also been derived from the following:

- Solar Energy Facilities Design and Development Guideline, (Victoria State Government, Department of Environment, Land, Water and Planning, October 2022).
- Guidance Note for Landscape and Visual Impact Assessment, (Australian Institute of Landscape Architects, 2018).

2.2 Study area

Identifying the catchment within which the project may be seen was achieved through a conservative approach in a desktop study that considered the following:

- Aerial photographs
- Topographic maps
- Landform and land cover (screening)
- Potential maximum visibility for this type of development

For LVIA, this becomes the study area, which for this assessment has been set at five kilometres, based upon previous studies of a similar nature and relevant guidelines.

This preliminary visual catchment is then used to identify sensitive receptors with potential views of the project.

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Data source: GHD, UHA, 2023; DEECA, Voniep, 2023; Neamop Imagery, 2024 Created by: legenther

2.3 Legislation and policy context

A review of key planning designations, policies and guidance was undertaken in relation to landscape and visual amenity. The emphasis of the review was to identify designations, protections, values, and objectives relevant to the landscape and visual environment of the study area, including scenic amenity values, refer to section 4.

2.4 Existing landscape and visual environment

Desktop analysis of the project, landscape and visual 2.4.1environment

Existing data was gathered and reviewed, including:

- Project design information
- Topography, land use, and vegetation information
- Google Earth and Google Street View
- Publicly available information of other similar developments within Victoria
- Review of other similar developments within the region

Using this data, a preliminary assessment of the landscape and visual environment was undertaken to inform the site inspection.

2.4.2Site inspection

A site inspection was undertaken the two is and scape with the safethe all the safethe and dappled clouds in a blue sky. During the sittle inappotion ftee albidg cape architects drove and walked the study area to gain representative views of the Registed for the line was saved and the purpose of the inspection part of a planning process under the was to:

- Planning and Environment Act 1987. Inspect the study area and appreciate views to and from the project site Inspect publicly accessible locations ideatived in the desired for any
- Identify sensitive visual receptor locations copyright
- Assess the landscape character of the study area and identify landscape sensitivities
- Undertake site photography suitable for photomontage preparation

The coordinates of each viewpoint were recorded during the site inspection. At each location a photographic record of landscape features, key views and receptors was obtained along with field notes and sketches.

Description of existing landscape and visual environment 2.4.3

The description of the existing landscape and visual environment establishes a baseline against which the Project is assessed. A landscape existing conditions assessment was undertaken to determine the existing natural and cultural features within the study area. This includes determination of key landscape and spatial elements, features and values. Aspects considered include:

- Land use and built form
- Landform, topography and hydrology
- Vegetation
- Views
- Historical features

A visual analysis was also undertaken to establish:

- The key views
- Project viewsheds



- Other visual features within the study area

Section 5 outlines the description of the existing landscape and visual environment.

2.5 Landscape impact assessment

2.5.1 Landscape character areas

Landscape character considers common landscape types defined by typical features and characteristics identified during the desktop assessment and site inspection. Defining landscape character areas identifies areas sharing the same homogenous environmental or cultural qualities or pattern such as topography, vegetation, hydrology, land use and settlement, built form, scale and character, cultural and recreational characteristics.

This approach has been used to establish the existing landscape character around the project site and to provide a framework for measuring the impact of the project. This assists in:

- Defining landscape elements that contribute to defining character
- Defining landscape character attributes
- Identifying landscape value

The assessment of the existing environment also considers factors which have influenced landscape change in the past and those that are likely to do so in the future. The landscape character areas are defined in section 6.

Landscape value

As part of the existing conditions the value of the landscape is defined for each Landscape Character Area (LCA). The value of the landscape is described in Table 2.1.

When defining landscape character areas, the value attached to the landscape also forms the baseline for which the significance of the impact is measured. Landscape value looks at designated and undesignated landscapes and holistically at all the elements such as the environmental, cultural, historical and visual/sensory elements that form the landscape. The value of the landscape trom an international, national, local and community level is considered when applying a landscape value. The following factors are taken landscape value (Land Use Consultants and Swanwick, C. 2011): purpose which may breact any

- Landscape quality (physical state of the landsqape) ht
- Scenic guality (appeal of the landscape to the senses)
- Rarity (presence of rare elements)
- Representativeness (distinct character or features of landscape)
- Conservation value
- Recreation value
- Perceptual aspects/qualities
- Associations (with particular people, artists, events in history)

The landscape values for each LCA are described in section 6

Table 2.1Landscape value



Landscape Value	Definition
High	Landscape character elements in good or above average condition and/or that make a strong positive contribution to landscape character. May include nationally important features.
Medium	Landscape character elements in reasonably good condition and/or that make an average contribution to the local character, which may include locally important landscape features.
Low	Landscape character elements in below average condition and/or that are not particularly distinctive local features.

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2.5.2 Landscape effects

Landscape character refers to a distinct and recognisable pattern of elements that occur consistently in a particular type of landscape. Particular combinations of geology, landform, soils, vegetation, land use and human settlement create character, which makes each part of the landscape distinct and gives each its particular sense of place.

Assessment of landscape effects deals with the effect of change and development on landscape as a resource. The concern is with how the project will affect the elements that make up the landscape, the aesthetic and perceptual aspects of the landscape and its distinctive character. The consideration of potential impacts on landscape character is determined based on the sensitivity of the existing landscape and the magnitude of change that is likely to occur.

The sensitivity of a landscape is judged on the landscape value (refer Table 2.1) and the landscapes susceptibility to change (refer Table 2.2) from a particular type of development. A judgement on the level of sensitivity is made and a rating of high, moderate or low applied.

The magnitude of change to landscape character depends on the nature, scale and duration of the change expected to occur. The magnitude of change also depends on the loss, change or addition of any feature to the existing landscape. It is based on that part of the landscape character area which is likely to be impacted to the greatest extent by the project.

The sensitivity and magnitude of landscape effects address the following specific criteria:

- Sensitivity of landscape to proposed change, based on the susceptibility to change, and the value of landscape (refer Table 2.1 and Table 2.2 respectively)
- Magnitude of landscape effect, based on the size or scale of change, the geographical extent of effects, and the duration and reversibility of effects (refer Table 2.3)

A judgement is made on the overalific significant to the existing conditions.

The assessment criteria have been derived from the *Guidelines for Landscape and Visual Impact Assessment, 3rd Edition* (Landscape Institute and Institute of Environmental Management & Assessment, 2013).

Landscape susceptibility	Definition copyright		
High susceptibility to change	The type of development proposed could have a detrimental effect on the landscape character, condition or value. Mitigation measures are unlikely to reduce the impacts of the change.		
Moderate susceptibility to change	Any change caused by the type of development would be unlikely to have a significant adverse effect on the landscape character, condition or value that could not be mitigated.		
Low susceptibility to change	ment of this type is unlikely to have an adverse effect on the landscape character, condition Mitigation measures would be effective in neutralising adverse effects.		

Table 2.2Landscape susceptibilitiesLandscape susceptibilities

 Table 2.3
 Magnitude of change criteria (landscape)

Rating	Criteria
High	A substantial/obvious change to the landscape character due to total loss of, or change to, elements, features or characteristics of the landscape. Would cause a landscape to be permanently changed and its quality diminished.
Moderate	Discernible changes in the landscape character due to partial loss of, or change to elements, features or characteristics of the landscape, however, has potential to be partly mitigated. The change would be out of scale with the landscape character, and at odds with the local pattern and landform and would leave an adverse impact on the landscape character.
Low	Minor loss or alteration to one or more key landscape character elements, features or characteristics, or the introduction of components that may be new but may not be uncharacteristic within the existing landscape character.
Negligible	Almost imperceptible or no change in the landscape character as there is little or no loss of/or change to the elements, features or characteristics of the landscape.

2.6 Visual impact assessment

2.6.1 Viewpoint selection

Assessment of visual impacts deals with the effects of change and development on the views available to people and their visual amenity. It assesses how the surroundings of individuals or groups of people may be specifically affected by changes in the context and character of views as a result of the change or loss of existing elements of the landscape and/or the introduction of new elements.

Visual receptors have been considered in terms of the views they are likely to obtain from within the study area including consideration of any key vantage points, such as lookouts, where there is particular interest in the view. Visual receptors are identified based on:

- Proximity of the receptors to the project, as the most affected visual receptors are anticipated to be located closest to the project, unless located at an elevated vantage point
- Type of receptor, as different viewer types would have different perceptions of the change

Based on the analysis of the existing landscape and visual environment, sensitive visual receptors were identified and viewpoint locations selected as representative locations for assessment. Viewpoints are selected in order to:

- Represent views of particular landscape and /or visual features of importance
- Represent fixed or transient views
- Represent views from public viewpoints (including open land, buildings, public footpaths)
- Represent views from transport routes from private vehicles and public transport,
- Represent views from where people work and spend extended amounts of time
- Represent views from recreditional preceditors and tast parks to wrist abreas), and
- Represent views from residential feetboose purpose of enabling

The views available from each viewpoint wars in the views available from each viewpoint wars in the stablish the aviaus has a view of the stablish the aviaus has a view of the stablish the aviaus of the stablish the stab

- Location
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- Landform / significant features
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- Vegetation
- Water
- Land use, infrastructure, built form
- Visual context

Refer to section 7 for the viewpoint locations and section 22 for existing conditions.

2.6.2 Visual effects

The evaluation of potential impacts on the visual environment is based on the sensitivity of the viewpoint (and the visual receptor it represents) to change, and the magnitude of change that is likely to occur.

The sensitivity of each viewpoint is considered to be dependent on the:

- Importance of the view, its existing scenic qualities and the presence of other existing human-made elements in the view
- Type of visual receptor and their likely interest in the view.
- The visual receptors viewing duration and opportunity (i.e. prolonged and regular viewing opportunities versus short-term and transient viewing opportunities)

The magnitude of change to views and the visual environment depends on the nature, scale and duration of the change that is expected to occur. The magnitude of a change also depends on the loss, change or addition of any feature in the field of view of the receptor including an assessment of the level to which the change contrasts with

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the existing view or expected view of the landscape. This includes the degree of any change to the backdrop to, or outlook from a viewpoint.

The assessment considers the likely impacts of the project. The level of effects on a view depends on factors such as the extent of visibility, degree of obstruction of existing features, degree of contrast with the existing view, angle of view, duration of view and distance from the project.

Steps undertaken to assess visual effects include:

- Identify and map viewpoint locations
- Undertake assessment of visual effects, comprising:
 - Sensitivity of visual receptor to proposed change, based on susceptibility of visual receptors to change, and value attached to views (refer Table 2.4)
 - Magnitude of visual effect, based on size or scale of change; geographical extent of effects, and duration and reversibility of effects (refer Table 2.5)

An assessment is undertaken of the overall level of significance of the visual effects in relation to the existing view.

 Table 2.4
 Sensitivity to change criteria (visual)

Rating	Criteria				
High	Occupiers of residential properties, at home or going to or from, with long viewing periods, within proximity to the proposed development; Communities that place value upon the landscape and enjoyment of views of their setting.				
Moderate	Outdoor workers who have a key focus on their work who may also have intermittent views of the study area; Viewers at schools, or similar, when outdoor play and recreation areas are located within close proximity but viewing periods are limited; Occupiers of residential properties with long viewing periods, at a distance from or screened from the study area.				
Low	Road users in motor vehicles, trains or on transport routes that are passing through or adjacent to the study area and therefore have short term views; Viewers indoor at their place of work, schools or similar.				
Negligible	Viewers from locations where there is screening by vegetation or structures where only occasional screened views are available and viewing times are short; Road users in motor vehicles, trains or on transport routes that are passing through/adjacent to the study area and have partially screened views and short viewing times.				

Table 2.5 Magnitude of change criteria (visual)

Rating	Criteria
High	A substantial/obvious change to the existing view due to total loss of, or change to, elements, features or characteristics of the view. Would cause a view to be permanently changed and its quality diminished.
Moderate	Discernible changes in the existing view due to partial loss of, or change to elements, features or characteristics of the view, however, has potential to be partly mitigated. The change would be out of scale with the existing view and would leave an adverse impact on the view.
Low	Minor loss or alteration to one or more key view elements, features or characteristics, or the introduction of components that may be visible but may not be uncharacteristic within the existing view.
Negligible	Almost imperceptible or no change in the view as there is little or no loss of/or change to the elements, features or characteristics of the view.

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2.7 Significance of impact

The combination of sensitivity and magnitude determines the significance of the impact on the landscape character or representative viewpoint. Refer Table 2.6 for the matrix used to determine the significance of impact.

 Table 2.6
 Significance of impact matrix (landscape and visual)



Magnitude of impact

2.8 Panorama and photomontages

All photographic images were captured using a 50 mm fixed focal length lens on a 35 mm full frame format camera at a camera height of 1.7 m, as **Telesconded wither ENA guidelines** (18/14) 2002). All photograph locations were for the sole purpose of enabling

A series of seven viewpoint locations were chosen and the existing views represented at these viewpoints using a panorama technique. This technique involves the stitching together pto-number of adjoining images using the Adobe Photoshop software program. All images are represented with an 80-degree horizontal field of view and an 18-degree vertical field of view

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Of the seven viewpoint locations, three viewpoints veresseletected for the production of photomontage images to represent proposed views following the completion of the project. The software used to model and render the photomontages was Autodesk 3D Studio Max. In order to achieve an accurate photomontage of the project and surrounding landscape, a digital terrain model with a one metre contour interval was used to model the surrounding landform.

Once the 3D model incorporating both the landscape and new project elements was created, a virtual camera was placed in the software at the same location the photographs were taken. The film, focal lens and height of the virtual camera matches the real camera utilised to take the photographs. The photographs of the site were used in 3D Studio Max as a background to accurately match the 3D model with the project elements to the perspective of the photographs. From the camera view, rendered images of the project were produced to match the daylight exposure of the photographs. The rendered images were imported into Adobe Photoshop for post-production editing and collation of the photomontages.

The final result is the 3D model of the project shown in the correct 3D location in the photographs. The final images were produced to a high resolution, suitable for printing. Refer to Appendix A for photomontages of the project.

Site photography, panorama and photomontage were prepared with reference to the following guidance:

Visual Representation of Development Proposals, Technical Guidance Note 06/19 (Landscape Institute, 2019)

In addition, a redline overlay has been incorporated to illustrate the project's location within the landscape. This overlay is strategically employed in cases where views may be obscured by topography, vegetation, or the position of the viewpoint, providing an understanding of the project's integration into the surrounding landscape.

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Cumulative impacts 2.9

A cumulative impact assessment was undertaken to assess the impact of the project as a result of additional changes to the landscape or visual environment in conjunction with other developments, or actions that are existing, planned or approved.

Cumulative effects can be described as the additional changes caused by a proposed development in conjunction with other similar developments or as the combined effect of a set of developments, taken together (Scottish National Heritage, 2012).

The primary concern is whether or not the project, together with other developments in the area intensifies the landscape and/or visual impacts more so than the sum of each individual development. The emphasis remains on the main project being assessed and whether it adds to or combines with the other development to create a significant cumulative effect.

2.9.1Study area for cumulative impact assessment

A study area of five kilometres was used to consider cumulative impacts of existing, planned and approved in accordance with the scoping requirement.

Criteria definition 2.9.2

The following sections describe the criteria that have been used to assess the cumulative landscape and visual impact of the project against each individual development identified within the cumulative impact study area. The individual assessments were then used to produce a summary of cumulative landscape and visual impact for the project.

Similarity to project in scale and form for the sole purpose of enabling

The similarity of the project to other projectmidentificio insteading view and form would affect the overall part of a planning process under the

cumulative impact. The following classifications have been applied to this criteria.

ient must not be used for any

- High Both projects are very similaring scalbiehold faimbend may yead as one development
- Moderate Both projects are moderately sife and form
- Low Both projects are very different in terms of scale and form
- Negligible Both projects are incomparable in scale and form

Timing of development

The effect of many projects being implemented within a similar timescale or concurrently would have a significant cumulative impact. This would create a sense of the landscape undergoing a process of rapid development. The inverse would be a scenario where development takes place one project at a time over an extended period, such that the change in landscape character would virtually go unnoticeable and not beyond what would be normally expected.

Developments that are at the pre-planning or scoping stage have not generally been considered in the assessment of cumulative effects because firm information on which to base the assessment is not available and the associated uncertainty about what would actually occur. Developments with planning consent or a valid planning application have been considered as the likelihood of implementation is high.

The following classifications have been applied to this criteria:

- High It is highly likely that both projects would be implemented concurrently or have overlapping construction programs
- **Moderate** There is a reasonable possibility that both projects may be implemented within a similar or overlapping timescale
- Low Both projects are not likely to be implemented within a similar or overlapping timescale

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Negligible – There is no possibility for both projects to be implemented within a similar or overlapping timescale

Likelihood of combined visibility

The ability to view two or more developments from the same viewing location would result in a greater cumulative impact than where only one development is visible from a given location. Furthermore, being able to see two or more developments while looking in one direction would have a greater cumulative impact than if a viewer has to turn to look in different directions to see all of the developments.

Assumptions have been made about the appearance of the various proposed or approved developments without the aid of visual materials.

The following classifications have been applied to this criteria:

- High Both developments would be clearly visible together in views from one direction from a given location and/or could possibly be interpreted as part of the same development
- Moderate There is a reasonable possibility of being able to see both developments by turning to look in different directions, but not while looking in the same direction
- Low It is unlikely that both developments would be visible from the same viewing location, either while looking in one direction or having to turn to look in different directions
- Negligible It is not possible for both developments to be visible from the same viewing location

Likelihood of sequential visibility

Sequential visibility refers to the ability to view two or more developments in succession whilst moving along a linear route such as a road, track or pathway

The following are types of sequential views that may be experienced; allable

- Frequently sequential: where two of the reverse receiption of the reverse receiption of the reverse receiption of the reverse receiption of the reverse revers between instances as the viewer is noving different of the viewpoints is short
- Occasionally sequential: where longer time lapses between views of two or more developments occur as the viewer is moving slowly and/or there are larger distances between the viewpoints Rarely sequential: the time lapses between views of two each are so great that the
- developments would seen completely disconnected

The following classifications have been applied to this criteria:

- High Views of both developments would be frequently sequential
- Moderate Views of both developments would be occasionally sequential
- Low Views of both developments would be rarely sequential
- Negligible Sequential views of both developments would not be possible

Mitigation measures and recommendations 2.10

Mitigation measures and recommendations were developed that respond to and reduce and minimise the impacts identified within the assessment (refer section 9).

Potential mitigation measures may include:

- Adopting alternative designs or architectural design to prevent and/or minimise negative impacts
- Remedial measures such as colour and textural treatment of structural features
- Compensatory measures such as landscape design to compensate for unavoidable negative impacts and to attempt to generate long-term positive impacts

2.11 Response to key legislation and policy

The Project was reviewed against the key legislation and policy identified in Section 4 and an overview of how the Project responds to the key legislation and policy provided.

2.12 Stakeholder engagement

Stakeholders, including the community, Taungurung RAP, and the adjacent landholders, were consulted to support the preparation of the project planning process and inform the project's development and understanding of potential impacts.

2.13 Assumptions and limitation

This assessment includes the following assumptions and limitations:

- There is no single guidance document on the assessment of landscape and visual impacts specific to Australia, however, the industry typically refers to the guidelines outlined in section 2.1.
- The assessment aims to be objective and to describe any potential changes factually. While potential changes resulting from the Project are defined, the significance of these changes requires qualitative (subjective) judgements. This assessment's conclusion therefore combines objective measurement and professional interpretation. While this assessment aims to be objective, it is recognised that visual assessment can be subjective and individuals are likely to associate different visual experiences to the study area.
- The assessment is based on the information provided to GHD at the time of writing.
- Existing conditions were assessed in the field on 21 November 2023.

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3. Project description

The following section provides a summary of the Project and includes the detail relating to the main visual components that have potential to affect the landscape character and visual amenity of the study area.

3.1 The project site

The Project is located in Seymour, approximately 100 km north of Melbourne, in the southern end of the Goulburn Valley in the Shire of Mitchell (refer Figure 3.1) The township services the surrounding agricultural industries as well as the nearby military base of Puckapunyal.

The project site would be located on GVW owned land, north of the existing Wastewater Management Facilities (WMF). The project site is south on the corner of Back Mountain Road and Dead Horse Lane. Back Mountain Road is an unsealed road accessed from Avenel Road. The proposed site at Seymour WMF contained several tree plantations managed by GVW, the plantation was irrigated throughout its lifespan using effluent water from the wastewater treatment process. GVW have completed a project to harvest the trees and remove the stumps from the solar farm site area. A sewage treatment plant is located on GVW owned land, south of the existing WMF on Tarcombe Road.

The nearest residential dwellings are located on Back Mountain Road north of the project site. The Hume Freeway is situated approximately two kilometres north of the project site, as part of the National Highway network it's a key transportation route connecting Seymour to Melbourne.

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Dele source: OHD, UVIA, 2003; DEBCA, Vionep, 2003; Neamep Imagery, 2003 Created ity: Agenther

3.2 Project Overview

Goulburn Valley Water (GVW) is seeking to engage a reputable Engineer Procure Construct (EPC) Contractor to provide two new ground mounted solar Photovoltaic (PV) generating systems and associated grid connection infrastructure.

The systems are to be located on GVW owned land located adjacent to Wastewater Management Facilities (WMF) at Tatura and Seymour. The intent of the solar PV system is to provide GVW with maximum energy yield so that GVW can offset their carbon footprint and generate revenue by selling electricity to the market.

This report assesses the proposed location in Seymour (Figure 3.1)

The Project will include a large scale solar photovoltaic (PV) generation plant, high voltage (HV) infrastructure integration and reticulation systems comprising of the following:

- Fixed tilt or Single Axis Tracking (SAT) PV arrays located within GVW land
- Power stations comprising of inverters, transformers, ring main units, controls, communication systems, AC/DC reticulation and other balance of plant
- Control and switching room building
- Associated civil and structural works at the Solar Farm; and
- Integration into the DNSP electrical network including HV cabling (above and underground), conduits, pits (a substantial portion of this being in GVW land)
- Meteorological station
- Access roads & pavement
- Landscaping (extent and location to be confirmed)
- Security fencing at all perimeter boundaries to restrict access

3.2.1 Construction Phase

Construction activities are expected to include:

- Site preparation and establishment of temporary ancillary construction infrastructure including:
 - Fencing
 - Site office and amenities
- Removal of topsoil, softened or loose material, material that does not meet required bearing pressure requirements, grassroots, vegetation or other organic matter, rubble, debris, and all unsuitable material below foundations and roads
- Stockpile suitable topsoil for re-use to 1500 mm maximum height
- Construction of foundations including slabs on ground, slabs/footings of the substations and external slabs on ground supporting electrical and other equipment
- Construction of steel structures for PV module supporting structures and any other required ancillary structures or site access specifics
- Construction of pavement areas for car park, hardstand and access roads
- Construction of storage areas
- Temporary and permanent sediment and erosion control measures

Construction and delivery timeframes will be subject to the contractors responsible for the detailed design, construction and ongoing operation and maintenance of the facility. With construction to be undertaken during an approximate duration of seven to nine months. Use of the site for temporary works and construction plant, including working and storage areas, location of offices, workshops, sheds, roads and parking are restricted to areas approved by GVW.

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3.2.2 Operation phase

During operation the maintenance of diverse elements such as PV modules, combiner boxes, inverters, low-voltage panels, security systems, meteorological stations, and other critical components will be undertaken. The frequency of inspections and tasks ranges from daily to yearly, encompassing visual checks, electrical parameter controls, thermography inspections, and specific tests to ensure optimal performance, safety, and longevity of the solar infrastructure.

Electrical & Solar (operation and maintenance):

Operation and maintenance include, but not limited to, PV modules, power conversion units, cabling (DC and AC), combiner boxes, MV switchgear, protection relays, auxiliary supply transformers, alarm and fire systems, UPS, battery backup, mechanical systems, earthing and bonding, SCADA, remote monitoring, LV metering, and meteorological stations.

Civil/Structural (operation and maintenance):

Operation and maintenance include, but not limited to, PV mounting structures, access roads, fences, gates, hardstands, foundations, structural supports, drainage, sediment and erosion control, vegetation management, wildlife prevention, and tank maintenance (including ensuring adequate filling)

3.2.3 Buildings and above ground infrastructure

Buildings would be of metal clad demountable buildings, with a maximum height of 5.4 m Buildings would also be set back a minimum of 30 m from the adjacent roads.

Туре	Height	
PV modules and solar tracker	Less than 2.60 m (approximately)	
Admin building	5.40 m (approximately)	
Ancillary infrastructure including switch room, and auxiliary supply transformers.	Less than 2.0 m (approximately)	
Fence and gate	1.20 m (approximately)	

3.2.4 Access roads and pavements

The primary access road entrance is located on Back Mountain Road, with secondary entrances located on Tarcombe Road on the south and Dead Horse Lane on the west. Road widths, including three internal roads, are set at approximately six metres, unsealed, and composed of cement-treated crushed rock at a minimum of 200 mm deep. Pavements which have minimum loading for light passenger vehicles and infrequent trafficking by heavy vehicles, including access tracks and hardstand areas are constructed from a mix of crushed rock and cement.

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4. Legislation and policy context

A detailed review of government policies was undertaken to inform and identify key objectives for the landscape and visual impact assessment.

This is not intended to be a thorough review of the planning scheme, mechanisms and planning related triggers. The emphasis of the review was to identify designations, protections, values, and objectives relevant to the landscape and visual environment of the study area, including scenic amenity values.

4.1 State legislation and policy

4.1.1 Planning and Environment Act 1987

The Planning and Environment Act 1987 serves as foundational legislation, establishing the legal structure for Victoria's planning system. It facilitates the creation of the Victoria Planning Provisions and local planning schemes. Additionally, it sets forth procedures for various aspects, including:

- Obtaining planning permits under planning schemes
- Compensating for land required for public purposes
- Handling state-significant projects

4.1.2 Victorian Planning Policy Framework (PPF)

The provisions and respective believes of the victoria to be made evaluable mework (PFF) discussed in this section are considered relevant to the study area and prepared recommendations. The PPF seeks to ensure that the objectives of planning in Victoria (as set out in section and for the planning and Environment Act 1987) are fostered through appropriate land use and development planning policies and practices which integrate relevant environmental, social, and economic factors in the interests of net community benefit and sustainable development.

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The following provisions and associated objectives of the RFF and are relevant to the study area:

Clause 12.05-2S Landscapes

The objective of 12.05-2S is To protect and enhance significant landscapes and open spaces that contribute to character, identity and sustainable environments.

The relevant strategies of this Clause relating to visual amenity, character and environment include:

- To protect and enhance significant landscapes and open spaces that contribute to character, identity and sustainable environments
- Ensure development does not detract from the natural qualities of significant landscape areas
- Improve the landscape qualities, open space linkages and environmental performance in significant landscapes and open spaces, including green wedges, conservation areas and non-urban areas
- Recognise the natural landscape for its aesthetic value and as a fully functioning system
- Ensure important natural features are protected and enhanced

Clause 19.01-2S Renewable energy

The objective of 19.0-2S is to support the provision and use of renewable energy in a manner that ensures appropriate siting and design considerations are met.

The relevant strategies of this clause is to:

- Facilitate renewable energy development in appropriate locations.
- Protect renewable energy infrastructure against competing and incompatible uses.
- Set aside suitable land for future renewable energy infrastructure.

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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 project on the local community and environment.

4.2 Local legislation, policy and guiding documents

The study area is subject to the provisions of the Mitchell Shire Planning Scheme (the 'planning scheme').

4.2.1Local Planning Policy Framework - Mitchell Shire Planning Scheme

As the project site falls within the Mitchell Shire Planning Scheme, the Council's objectives regarding land use, development, and land protection are expressed by adhering to the Local Planning Policy Framework. The Project will be evaluated against the following landscape and visual environment criteria:

4.2.1.1 Zoning and Overlays

The entirety of the proposed project falls within the PUZ1 - Public use and service and utility as defined in the Planning Scheme. Solar farm facilities are deemed permissible, contingent on the renewable energy project meeting the stipulations outlined in Clause 53.13 about Renewable Energy Facilities (Other than Wind Energy Facilities).

Clause 53.13 Renewable energy facility (other than wind energy facility)

The objective of 53.13 To facilitate the establishment and expansion of renewable energy facilities, in appropriate locations, with minimal impact on the amenity of the area.

The relevant strategies of this clause: for the sole purpose of enabling

- Accurate visual simulations illustriating discidencion and trieving context of the surrounding area and from key part of a planning process under the public viewpoints.
- The impact of the Project on significant views, including visual confiders and views, including visual confiders, including visual con

The document must not be used for any The study area comprises of defined zones sach with specific chiecity is relating to the landscape and visual environment. The following overlays are positioned on the southern side of the site within the study area and connected to the Goulburn River tributaries. These associations encompass:

UFZ – Urban Flooding zone

- To identify waterways, major flood paths, drainage depressions, and high-hazard areas within urban areas with the most significant risk and frequency of flooding.
- To ensure that any development maintains the free passage and temporary storage of floodwater minimises flood damage and is compatible with flood hazards, local drainage conditions and the minimisation of soil erosion, sedimentation, and silting.

ESO3 – Environmental significance overlay - schedule 3

- Ensure development does not occur on land liable to flooding
- Restrict the intensity of use and development of land and to activities which are environmentally sensitive and which are compatible with potential drainage or flooding hazards

Defined zones associated with the visual and landscape environment, emphasizing the protection and importance of existing vegetation, are situated on the Project site's northern (Back Mountain Road) and western (Dead Horse Lane) boundaries. This overlay includes:

VP01 – Vegetation protection overlay

- To recognise vegetation protection areas as locations of particular significance, natural beauty, interest, and importance.
- To maintain and enhance habitat and habitat corridors for indigenous fauna.

4.3 Other relevant policy

4.3.1 Seymour Structure Plan 3660

In 2018, the Mitchell Shire Council compiled a structural report outlining a 10 to 20-year vision to guide future planning in the area. A primary objective of the Structure Plan is to facilitate Seymour's future growth and development 'while preserving Seymour's character, heritage, and natural beauty.' The town's 'country' character, deemed crucial, is chiefly shaped by Seymour's natural and rural surroundings, including the riverine features of the Goulburn River corridor, the agricultural landscapes of the floodplain and lowlands, and the distinctive landforms of the surrounding hills. Agricultural areas in lower-lying regions provide visual contrast to the riverine landscape and foothills and play a vital role in enhancing the scenic quality of the setting in critical locations.

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5. Existing landscape and visual environment

5.1 Land use and built form

The Project site is located in the northeast fringe of the township of Seymour, Victoria, approximately 100 km northwest of Melbourne. Seymour is located on the banks of the Goulburn River, at the junction of the Hume Freeway and Goulburn Valley Highway. The study area is within the Mitchell Shire LGA. The predominant land use zoning surrounding the Project site is Farming Zone (FZ), with the project site marked as Public Use Service and Utility (PUZ1). The Project site encompasses the existing GVW Wastewater Management Facilities (WMF). The township covers approximately 8,000 hectares, which is comprised of existing urban, residential, public use, commercial, rural, and undeveloped land.

Seymour's development history is linked to its location along the Goulburn River, the construction of the Seymour Railway Line and the nearby Puckapunyal Military base, located approximately ten kilometres west of the Project site (Mitchell Shire Council, 2016).

5.2 Topography and Hydrology

The topography of Seymour is characterised by diverse features, including significant slopes towards the Goulburn River, foothills located to the northeast, east, and south of the township, and existing hills and ridges.

The topography within the township of Seymour is generally flat with gradual falls towards the natural valley of the Goulburn River. High points within the study area include Seymour Hill at approximately 230 AHD is located between Hume Freeway and Northwood Road, and Whiteheads Hill at 250 AHD is located three kilometres east of the Project site. The topography ascends towards the Tallarook Ranges to the south and Mount Stewart to the east. Mount Tallarook is located approximately ten kilometres south of the study area.

The hydrology is influenced by the presence of the Goulburn River and its riverine floodplains - creeks and drainage corridors, including Goulburn River, Whiteheads Creek, and Back Creek.

5.3 Vegetation

The study area sits within the Victorian Riverina Bioregion and the Central Victorian Uplands Bioregion. Remanent vegetation associated with the bioregions mostly occurs along the waterbodies and drainage areas. The river landscape uniquely provides an immediate escape from the surrounding context, with large established overarching Red River Gum trees and meandering cycling and walking paths along the banks.

Farmland practices adjacent to the Project site comprise of flood plains visually prominent within the vast paddocks with perimeter windrow planting for weather protection.

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Figure 5.1	Land use and built form	Paper Size ISO A4 0 1 2 Kilometers	Ň	GHD	Goulburn Valley Water Goulburn Valley Water Solar Farms	Project No. 12597414 Revision No. A Date 07/12/2023
		Map Projection: Transverse Mercator Horizontal Datum: GDA2020 Grid: GDA2020 MGA Zone SS	¥		Land use and built form	Figure 5.1

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Cele source: OHD, UVA, 2022, DEBCA, Vonap, 2022, Nearriso Imagery, 2025 Dealed by: Agendron



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Dela source: GHD, UHA, 2022; DEBCA, Vicinae, 2022; Hearings Imagery, 2026 Dreated by: Agenther





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Delta source: OHO, (24A, 2023), DEBCA, Viones, 2023), Newmap Imagery, 2027 Created by: Agenther
5.4 Visual analysis

5.4.1 Sensitive visual receptors

The site inspection revealed the likely viewshed for the Project would primarily be confined to areas within close proximity to the project site, such as road users on Back Mountain Road and Dead Horse Lane. The presence of the perimeter windrow planting for weather protection would provide some screening of the Project from these directions.

Key views are typically achieved from open setting locations along the roads adjacent to the Project site. Of particular note are the following:

- Local filtered views along Back Mountain Road and Dead Horse Lane and Tarcombe Road
- Likely private filtered views from rural residential areas along Back Mountain Road and Delatite Road
- Likely private distant and filtered views from the residences west of Avenel Road
- Static and direct views from the adjacent GVW WMF facilities

5.4.2 Key visual features

Based on the desktop review and project site inspection, the key visual features in the study area were identified as:

- The study area is largely influenced by the natural setting of the Goulburn River corridor and its riverine floodplains. The river provides a critical visual reference and link to the history of the township.
- Whiteheads Creek, Back Creek and its tributaries are an important feature of Seymour landscape setting.
- Areas of agricultural land located on the lower lying areas of Goulburn River provide visual contrast to the riverine landscape and in key locations, are an important contributor of the scenic quality of the landscape setting.
- Farmland practices adjacent to the Project site mainly comprises of rearing livestock and agricultural cropping with flood plains visually prominent within the vast paddocks. These spaces have a sense of openness with relatively flat topography, allowing for open long views from the adjacent roads.
- Extensive open plains and undulating hills containing remanent native grassland and scattered woodland vegetation.
- Scattered large sheds, warehouses, fencing, silos, and storage areas related to agricultural practices are visible within the open farmland.
- Several irrigation channels cut a deep and narrow gully through the landscape and meandering ephemeral creeks.

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6. Landscape impact assessment

Based on the review of the existing landscape context, landscape character areas (LCA's) were defined.

The following LCA's were identified for the study area:

- LCA1 Seymour Township
- LCA2 Farmland
- LCA3 The Goulburn River, Creeks and Floodplains

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Deb source: OHO, UKA, 3003; DEBCA, Visinali, 2003; Reaming Pracery, 2008 Crestel by: Aperter



6.1 Landscape character area 1: Seymour Township

The key features of LCA1 are described below and the characteristic can be seen in Photo 6.1 to Photo 6.6. Refer to Table 6.1 for LCA1 analysis.



Photo 6.1 View from intersection of Avenel Road and Tarcombe Road



Photo 6.2

View High Street, Seymour looking north



Photo 6.3

View from Wallis Street, Seymour looking west

Photo 6.4

View from Wallis Street, Seymour looking north



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LCA1 primarily encompasses the urbanised area of the township of Seymour, approximately one kilometre west of the Project site. Seymour is located in the southern end of the Goulburn Valley at the base of the Tallarook Ranges. Seymour is the major northern township of Mitchell Shire and has traditionally played the role of a regional service centre for its residents and surrounding rural populations.

Table 6.1	Key characteristics	of LCA1
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Character element	Description
Landform	The township topography is relatively flat with an average elevation of 150 m AHD. Highpoints within the landscape are located to the south between Anzac Avenue and Goulburn River, and to the west towards Seymour Hill.
Vegetation	Remnant native vegetation (Environmental Vegetation Classes) within the LCA includes:
	Box Ironbark Forest, located on high elevations around the railway corridor; north of Tarcombe Road and along the Goulburn valley Highway.
	Grassy Woodlands, scattered throughout the study area including along the Hume Freeway and Goulburn Valley Highway corridors.
	There are several overlays that apply to the study area and protect significant vegetation.
Waterways/ Reserves	The LCA1 features a network of creek corridors with the Goulburn River being the major natural waterway located west of the LCA1. These provide significant habitat for local flora and fauna. Scattered open spaces, including Seymour Reserve and Lions Park, comprise low-lying and modified landscapes formed around the waterway corridors.
	Public recreational facilities, small reserves and playgrounds are scattered through the residential neighbourhoods of LCA1. Chittick Park and Kings Park comprise modified landscapes that accommodate open fields used for various sporting events. While vegetation and mature planting are common, these are found at the perimeter edges of the active sporting facilities.
Land use	The township services the surrounding agricultural industries such as cattle, sheep, equine and wine, as weip acome deansy minute to ase produce apulyate the west.
	Transport is a key shaping element for the town shap. The Hume Freeway bypasses Seymour to the west and connects with Melbotime and Sydney. As ditionally, regional train services connect the township to Malaoung Palaning process under the
	A mix of established and cherging residential melobourhoods are located within the LCA1. Residential areas our rounding the rail corridor comprise one-storey post-war dwellings on large allotments with a strong garden setting. These detached dwellings are mainly constructed with brick and weatherboards and are affected by a Heritage Overlay. Emerging residential areas are primarily located east of the Gall 2518 for and comprise of a more compact housing typology, with a greater presence of semi-detached dwellings.
	Seymour town centre is located in three retail clusters along Anzac Avenue. The Anzac Avenue retail centre and commercial strip along Station Street provide services and amenities for the surrounding residential neighbourhood. Additional community and educational facilities including: Seymour College, Seymour Trade Training Centre, St Mary's Parish Seymur, Seymour Health Hospital and Seymour Racecourse.
	Puckapunyal military base is located approximately 12 km west of the Project site and has a population of 1,180, it's an important training centre for the Australian Army.
Cultural and characteristics	Seymour tourism assets predominantly emphasize the heritage character of the military and railway history, along with nature-based tourism.
	The major attractions are the Vietnam Veterans Commemorative Walk, the Light Horse Memorial Park and the Goulburn River Walk.
	Within the broader context regional attractions include the Great Victorian Rail Trail, Tallarook State Forest, Kinglake Ranges/Mt Disappointment, Strathbogie Ranges/Lake Nagambie and wineries in Heathcote, Mitchelstown, Avenel and Tahbilk.
Spatial qualities	The flat topography and banks of the Goulburn River allow scenic distant views towards the Tallarook Ranges, which defines the western boundary of the township.
	Within the commercial strips and residential areas to the north of Anzac Avenue present primarily closed views with some long views to the farmland landscape to the north.

Township rural character elements are in reasonably good condition and/or make an average contribution to the local character, including locally important landscape features and historical landmarks and dwellings, therefore LCA1 has a **Medium** landscape value.

Table 6.2 Landscape impact assessment

Criteria	Assessment
Anticipated change	The Project would occur outside LCA1 and therefore would not directly impact the landscape character. During construction and operation distant, filtered views may be achieved from Tarcombe Road of light vehicles traveling to and from the site.
Landscape susceptibility to change	Low , as the anticipated change would be unlikely to have a significant adverse effect on the landscape character, condition or value that could not be mitigated.
Sensitivity of the landscape to change	The sensitivity of a landscape is judged on a combination of the landscape value and the landscape's susceptibility to change from the type of proposed development. The sensitivity would be Low , as the susceptibility to accommodate the proposed change is considered Low, the landscape value is medium, and the development is not within LCA1.
Magnitude of change	The magnitude of change would be Negligible , as there would be no change to existing landscape character as the Project is outside of LCA1. Although views to the construction and operation of the Project may be achieved, views to LCA2, where the Project is located, are not a key feature of LCA1 and therefore the anticipated changes do not significantly impact the landscape character.
Significance of impact	The significance of impact would be Negligible , as the sensitivity is Low and the magnitude is Negligible .

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6.2 Landscape character area 2: Farmland

The key features of LCA2 are described below and the characteristic can be seen in Photo 6.7 to Photo 6.12. Refer Table 6.3 for LCA2 analysis.



Photo 6.7 View from Back Mountain Road facing south showing project site



Photo 6.8 View from showing ac

View from Dead Horse Lane facing west showing agricultural land



Photo 6.9 View from Tarcombe Road facing south showing associated farming infrastructure Photo 6.10

View from Delatite Road facing east showing old agricultural machine and current land used for agricultural purposes



Photo 6.11 View from Tarcombe Road facing south showing associated agricultural components



Photo 6.12

View from Avenel Road facing east showing native vegetation in agricultural land



LCA2 is located primarily surrounding the township of Seymour and the around the floodplains of the Goulburn River. The Project site is situated within this LCA. Agriculture is a valuable and important contributor to the local economy and contribute to the overall rural character of the study area. LCA2 features expansive paddocks dedicated to agriculture activities and wine growing areas.

Table 6.3	Key characteristics	of LCA2
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Character element	Description
Landform	The farmland topography is characterised by flat stretches and gentle undulations within the paddocks. Within the broader context the topography has a consistent, gradual rise towards the east and southeast towards the Tallarook Ranges. The landscape ascends from approximately 160 m AHD at the Project site to 460 m AHD at Mount Alexina to the east.
Vegetation	The LCA is modified, native vegetation has generally been cleared for pastoral crops and agricultural activities. Scattered throughout the farmland paddocks of the LCA there are remaining patches of native vegetation. Perimeter windrow planting for weather protection is typically located along the property boundaries of the paddocks.
Waterways/ Reserves	The network of irrigation channels and small dams divert from the Goulburn River floodplain, The irrigation network for agricultural practices and small ephemeral tributaries and are main water features of the LCA.
Land use	Agricultural practices adjacent to the Project site comprise of a diverse range of farming industries including crops, fruit, vegetable cultivation, dairy, sheep and cattle. Additionally, vineyards and wineries, part of the Goulburn Valley wine region, are located in close proximity to the north of the study area. A limited number of rural residents within the study area, are situated on large allotments. Dwellings are widely dispersed and typically screened with perimeter windrow planting for weather protection. It is noted that Back Mountain Road, north of the Project site, has a number of private access roads (nominally eight) to the neighbouring rural residences. Ancillary sheds, equipment and other structures associated with farming practices are present. Fencing mostly consists of standard post and wire fencing around paddocks and property
Cultural and characteristics	Seymour's agricultural heritage traces back to the 1850's, marked by the establishment of The Seymour Agricultural and Pastoral Society, which was founded in 1858. Before colonisation, the
	land provided the local indigenous peoples of The Taungurung Clans with sources of food, water and shelter.
Spatial qualities	LCA1 agricultural land use and low-lying vegetation allow for distant scenic views of the Tallarook Ranges to the south. The paddocks within the LCA present open settings with some scattered remanent trees that allow for expansive views that contribute to the rural character.

Values associated with LCA1 include limited areas of ecological value, particularly habitat links and corridors along the scattered river tributaries and ephemeral watercourses. Despite policies emphasising the preservation of spatial qualities in rural landscapes, there is some existing infrastructure associated with the treatment of waste water and irrigation within the area. This LCA has scenic qualities and long views to undulating terrain, but also displays modified agricultural landscapes, and therefore has a **moderate** landscape character value.

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Table 6.4 Landscape impact assessment

Criteria	Assessment
Anticipated change	The Project is located within LCA2.
	Anticipated changes to landscape character during construction works will include the delivery of materials, in-situ concrete pouring, trenching and construction of new switch room and control room, as well as temporary storage areas, fencing and signage. A proposed construction laydown area on the primary entrance road located on Back Mountain Road and the corner of the northern internal road will be partially visible during construction from the adjacent roads.
	During operation, close-range screened views may be achieved from Dead Horse Lane of the proposed solar PV modules, HV switch room and control room, transformers, above ground cabling, and all required ancillary equipment.
	During operation, light vehicles may be present traveling to and from the site, and within the site using the proposed six-metre unsealed roads.
	During construction and operation, views from Dead Horse Lane may be partially screened by the existing vegetation lining the site boundary. Additionally existing perimeter tree planting partially screens views towards the Project site.
Landscape susceptibility to change	The susceptibility to change is Low, as it is unlikely that this development would have an adverse effect on the landscape character, condition, or value. Mitigation measures such as appropriate screening within the proposed 30 m minimum buffer zone would be effective in neutralising adverse effects and impacts of construction would be short-term.
Sensitivity of the landscape to change	The sensitivity of the landscape to change is considered Moderate-Low , as the susceptibility is Low and the value is Moderate. This agricultural landscape is modified by human intervention, however after construction it would retain the sense of open agricultural plains.
Magnitude of change	The magnitude of change would be Low , as the introduction of components may be new but would not be uncharacteristic within the existing land use within the site. New movement of people and vehicles would be in keeping with existing light industrial activities. Construction impacts are short-term and therefore do not significantly impact the magnitude.
Significance of impact	The significance of impact would be Low , as the sensitivity is Moderate- Low and the magnitude is Low .

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6.3 Landscape character area 3: The Goulburn River, creeks and floodplains

The key features of LCA3 are described below and the characteristic can be seen in Photo 6.13 to Photo 6.18. Refer to Table 6.6 for LCA3 analysis.





Photo 6.13 View from the banks of the Goulburn River facing north

Photo 6.14

View from boat ramp jetty facing north



Photo 6.15

View from Lions Park facing North showing the local walking area associated with the Goulburn River

Photo 6.16

View from the banks of the Goulburn River off Manners Street looking North showing the vegetated banks of the river



Photo 6.17 View from walking track associated with the Goulburn River trial facing west



Photo 6.18 View from the Goulburn River walking track looking north showing the varied bank heights and vegetation The Goulburn River is a major inland perennial river of the Goulburn Broken catchment, part of the Murray-Darling basin. The headwaters of the Goulburn River rise in the western end of the Victorian Alps, below the peak of Corn Hill before descending to flow into the Murray River near Echuca, making it the longest river in Victoria at 654 km. The significant natural character of Goulburn River is an important habitat and recreation resource and provides a critical visual link to Seymour.

Character element	Description
Landform	The natural valley of Goulburn River forms a crease in the otherwise generally flat landscape, as well as the Whiteheads Creek to a lesser extent.
Vegetation	 River red gums are a dominant feature of the streamside zone along the length of the Goulburn River. These trees shade the river and provide habitat for many species, Native vegetation (Environmental Vegetation Classes) within the LCA includes: Floodplain Riparian Woodland, located generally along the floodplains of the Goulburn Valley Creek line Grassy Woodlands, located along Whiteheads Creek and Back Creek
Waterways/ Reserves	Goulburn River, Whiteheads Creek, and Back Creek and their associated parklands are a distinctive natural fixture that define the valued landscapes of Seymour. Whiteheads Creek and Back Creek are tributary of Goulburn River and are predominantly low lying and modified landscapes with scattered mature trees along the riparian area. Further east of the Project site the creeks have little direct built form interfaces as the waterway disperses into flood basis within the farmland. Goulburn River passes through or adjacent to the regional cities and towns of Alexandra, Seymour, Murter Diver pass
	Murchison, Shepparton–Mooroopna before reaching its confluence with the Murray River near Echuca. Within the study area, the farmland surrounding the river are very productive as a result of irrigated agriculture. Goulburn River interfaces with the western residential area of LCA1.
Land use	The Goulburn River Trail runs along the river for approximately 3.4 km one-way, from the Emily Street and Manse Hill Road intersection to Whiteheads Creek. The flat track is suitable for walking, running and cycling. Trail amenities include picnic and barbecue areas, car parking and several entrance points. Adjoining land uses are primarily floodplains and agricultural practices with some sections of the river interfacing residential and light industrial areas.
Cultural and characteristics	The Goulburn River is integral to the identity and character of Seymour and the region. The river is used by local residences for activities such as bushwalking, fishing, boating and camping. Areas of Cultural Heritage Sensitivity (CHS) are notably located within 200 m of rivers and creeks including the Goulburn River and its floodplain, Back Creek and Whiteheads Creek.
Spatial qualities	The river has a natural form, winding through the densely vegetated valley and around the steeper escarpment. Views of the water are not always clear though the vegetation coverage and the narrow with of the river. To the south of the township, open and generally cleared open spaces line the vegetated river alignment.
	Ecological value is associated with diverse, established, multi-storey vegetation within the existing water natural features.

The Goulburn River and its floodplain play an important role in defining both the local and regional cultural, visual and environmental landscape values. A culturally significant waterway for the Taungurung people. Locally this landscape feature is heavily used and valued by residents of Seymour, therefore LCA3 has a **High** landscape value.

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Table 6.6 Landscape impact assessment

Criteria	Assessment
Anticipated change	The Project would occur outside LCA3 and therefore would not directly impact the landscape character. During construction and operation distant, filtered views may be achieved from Back Creek, however existing infrastructure is already present within the adjoining LCA.
Landscape susceptibility to change	Low , as the anticipated change would be unlikely to have a significant adverse effect on the landscape character, condition or value that could not be mitigated.
Sensitivity of the landscape to change	The sensitivity of a landscape is judged on a combination of the landscape value and the landscape's susceptibility to change from the type of proposed development. The sensitivity would be Moderate , as the susceptibility to accommodate the proposed change is considered Low, the landscape value is high, and the development is not within LCA3.
Magnitude of change	The magnitude of change would be Negligible , as there would be no change to existing landscape character as the Project is outside of LCA3. Although views to the construction and operation of the Project may be achieved, views towards LCA2 are not a key feature of LCA3 and therefore the anticipated changes do not significantly
Significance of impact	The significance of impact would be Negligible , as the sensitivity is Moderate and the magnitude
	is Negligible.

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7. Visual impact assessment

7.1 Viewpoint selection

Based on the visual analysis and site visit undertaken, the locations in Table 7.1 were selected for visual assessment. Three of these viewpoints were selected for the production of photomontage images to represent proposed views following the completion of the Project (refer to Appendix A). Refer to Figure 7.1 for the location of viewpoints.

Viewpoint Location Sensitive Receptor **VP01** Back Mountain Road Residence, Farmers, road users **VP02** Back Mountain Road / Dead Horse Lane Residence, Farmers, road users **VP03** Tarcombe Road Farmers, road users **VP04** Dead Horse Lane Farmers, road users **VP05** Dead Horse Lane (B) Farmers, road users **VP06 Delatite Road** Residence, Farmers, road users **VP07** Avenel Road Road users

Table 7.1Viewpoint locations







Dele source: OHD, UVIA, 2003; DEBCA, Visnee, 2003; Nesmies Imagery, 2009 Created by: Agenther

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7.2 Viewpoint location 01 (VP01) Back Mountain Road

VP01 is located on Back Mountain Road and is facing south as shown in Figure 7.2 refer to Table 7.2 for assessment.



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Figure 7.2 VP01 location map



Photo 7.1 Back Mountain Road existing view



Figure 7.3 Photomontage showing proposed view from Back Mountain Road



Figure 7.4 Redline overlay showing proposed view from Back Mountain Road

Table 7.2 Viewpoint location VP01 assessment

Criteria	Assessment
Location and view direction	GPS location: E 337234 N: 5903581 Elevation: 182 m VP01 is situated approximately 500 m from the Project on Back Mountain Road and is facing south. This viewpoint provides a representative view of road users on Back Mountain Road and nearby workers and residents in the residential and farmland areas
Description of existing view	The foreground is comprised by an unsealed road that expands to the left lined with scattered thin- trunked eucalyptus trees. The viewpoint has direct open views towards the existing GVW Seymour waste management facility site. The grassed earth mound in the midground of the view conceals background views towards the industrial pond and irrigation channels. The viewpoint presents an open rural setting typical of the surrounding farmland, with the Project site located in the centre of the background, screened by the existing topography and vegetation of the site.
Anticipated change to view	It is unlikely that the operation of the Project would cause any changes to the view from this location, due to the existing mound significantly screening the view and the distance from the Project site. The introduced secondary access road on Back Mountain is not uncharacteristic to the surrounding farmland setting. Any changes to the view would be almost imperceptible during operation. However, construction vehicles, cranes, machinery and a work crew may be temporarily visible travelling to and from the Project site along Back Mountain Road during construction.
Sensitivity to change	The sensitivity is Moderate , due to residents on Back Mountain Road that place value upon the open rural landscape and enjoyment of views of their setting.
Magnitude of change	The magnitude of change would be Negligible as it is anticipated that the Project would not be visible from this location, due to the topography.
Significance of impact	While glimpses of views may occur during the construction phase due to the presence of construction vehicles, cranes and machinery, it is expected that the overall impact of the Project on VP01 is assessed as Negligible , as it is anticipated that there would be almost imperceptible change in the view.

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7.3 Viewpoint location 02 (VP02) Back Mountain Road/Dead Horse Lane

VP02 is located on intersection of Back Mountain Road and Dead Horse Lane facing southeast as shown in Figure 7.5 refer to Table 7.3 for assessment.



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Data source: GHD: Vewpoint (2023), Naamap WMS Server: Created by Agarterer
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Figure 7.5 VP02 location map



Photo 7.2 Back Mountain Road near Dead Horse Lane, existing view

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Table 7.3 Viewpoint location VP02 assessment

Criteria	Assessment
Location and view direction	GPS location: E: 336896 N: 5903582 Elevation: 177 m VP02 is situated approximately 600 m from the Project on the corner of Back Mountain Road and Dead Horse Lane and faces southeast. This viewpoint represents road users on Back Mountain Road and Dead Horse Lane, workers, and residents in the residential and farmland areas.
Description of existing view	Back Mountain Road verge extends across the foreground of the view lined by a boundary wire fence delineating the GVW waste management site. An unsealed road sits across the midground, parallel to Back Mountain Road, informally lined on either side with mature Eucalyptus species. The industrial pond and irrigation channels in the midground and background are screened by the topography and established trees in the foreground. The view presents a relatively open modified rural setting. The Project site is located across the background view, screened by the existing vegetation and topography.
Anticipated change to view	During construction , temporary visual impacts may be associated with in-situ concrete pouring and the establishment of new structures, access road and ancillary infrastructure related to the PV- generating systems. The construction laydown area is located to the middle of the background and would be visible at this stage. Additionally, construction vehicles, machinery and a work crew may be temporarily visible while travelling to and from the Project site on Back Mountain Road. During operation , the proposed Project and associated structures would be located across background of the view. The access road would be a minor permanent change to the view. However, this would not be uncharacteristic for the area. The road would be located towards the right of the midground view.
Sensitivity to change	The sensitivity is Moderate , due to residents on Back Mountain Road that place value upon the open rural landscape and enjoyment of views of their setting, and outdoor workers of the surrounding farmland.
Magnitude of change	The magnitude of change would be Low , as the proposed access road would be partially visible; however, it would not be uncharacteristic for the area.
Significance of impact	While glimpses of views may occur during the construction phase due to the presence of construction vehicles and machinery, it is expected that the overall impact of the Project on VP02 is assessed as Moderate – Low .

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7.4 Viewpoint location 03 (VP03) Tarcombe Road

VP03 is located on Tarcombe Road and is facing north as shown in Figure 7.6 refer to Table 7.4 for assessment.



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Photo 7.3 Tarcombe Road existing view

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Table 7.4 Viewpoint location VP03 assessment

Criteria	Assessment
Location and view direction	GPS location: E: 336970 N: 5902145 Elevation: 164 m VP03 is situated approximately 250 m from the Project on Tarcombe Road and faces north. This viewpoint represents road users on Tarcombe Road, workers, and residents in the residential and farmland areas.
Description of existing view	The Tarcombe Road verge extends across the foreground of the view, lined by a boundary fence delineating the GVW waste management site. A sign for the GVM site is located to the right of the fence. In the centre of the view, there is a significant human-made topographic rise, approximately 12 m high, associated with the GVW reservoir wall structure. To the left of the mound, an area of densely planted Eucalyptus extends into the background.
	The view presents a modified rural setting. The project site is located across the background, behind the industrial pond, screened by the existing topography.
Anticipated change to view	It is unlikely that the construction and operation of the Project would cause any changes to the view from this location, due to the topographic nature of the water reserve embankments and existing roadside vegetation. However, construction vehicles, machinery and a work crew may be temporarily visible while travelling to and from the Project site on Dead Horse Lane, to the left of the view.
	Any changes to the view during operation would be imperceptible from this viewpoint.
Sensitivity to change	The sensitivity is Low , although the viewpoint is located in close proximity to the Project site, road users have passing views of the Project site. The focus of the road users is away from the Project site.
Magnitude of change	The magnitude of change would be Low to Negligible due to the existing topography, roadside vegetation and relatively low height of the proposal. It is anticipated that there would be no change to the key elements, features, or characteristics of the existing view.
Significance of impact	While glimpses of views may occur during the construction phase due to the presence of construction vehicles and machinery, it is expected that the overall impact of the Project on VP03 is assessed as Negligible , as it is anticipated that there would be almost imperceptible change in the view.

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7.5 Viewpoint location 04 (VP04) Dead Horse Lane

VP04 is located on Dead Horse Lane and is facing east as shown in Figure 7.7 refer to Table 7.5 for the assessment.



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Data source: GHD. Viewpoint (2023), World Imagery, Maxar Nearmap WMS Server: Created by kgarther



Photo 7.4 Dead Horse Lane existing view



Figure 7.8 Photomontage showing proposed view from Dead Horse Lane



Figure 7.8 Redline overlay showing proposed view from Dead Horse Lane

Table 7.5 Viewpoint location VP04 assessment

Criteria	Assessment
Location and view direction	GPS location: E: 336900 N: 5902640 Elevation: 173 m VP04 is situated approximately 150 m from the Project on Dead Horse Lane and is facing east. It is representative of Dead Horse Lane Road users, and workers and residents in the surrounding residential and farmland areas.
Description of existing view	The view is facing east directly into the GVW Project site. The foreground of the viewpoint comprises of an open and expansive rural setting with some scattered young Eucalyptus species and unsealed meandering tracks within the private property. To the right, the existing GVW WMF industrial pond is partially screened by the low-lying vegetation and gentle undulating topography. Also present in the setting is a utility pole, overhead powerlines and a boundary wire fence surrounding the pond. In the background, a low ridge line is visible, extending towards the left. The view has an open and expansive landscape alike to the surrounding agricultural landscape. The Project is located throughout this view in the middle ground.
Anticipated change to view	During construction, temporary visual impacts may be associated with in-situ concrete pouring and the establishment of new structures, a secondary access road and ancillary infrastructure related to the PV-generating systems. Construction vehicles, machinery and a work crew may be temporarily visible while travelling to and from the Project site. To the left of view, a construction lay down area may be visible along with the associated chain wire mesh security fencing. During operation to the right-hand side of the view, a secondary access road may be visible. To the left of the view an electrical switch room and other ancillary infrastructure may be visible within the background view, partially screened by the proposed 30 m buffer zone in the foreground.
Sensitivity to change	The sensitivity is Low , due to residents on Avenel Road and outdoor workers of the surrounding farmland that place value upon the open rural landscape and enjoyment of their setting, however these would be long distant views.
Magnitude of change	The magnitude of change is Moderate as there would be discernible changes in the existing view due to partial loss of, or change to elements, features, or characteristics of the view, however, has potential to be partly mitigated. Due to the low-profile form of the majority of the Project, the changes would not be out of scale with the existing view and it is anticipated that the changes would not leave an adverse impact on the view.
Significance of impact	While glimpses of views may occur during the construction phase due to the presence of construction vehicles and machinery, it is expected that the overall impact of the Project on VP04 would be Moderate-Low , as the sensitivity to change is Low and the magnitude of change Moderate . It is expected that proposed 30m vegetated buffer would screen views during the operation phase.

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7.6 Viewpoint location 05 (VP05) Dead Horse Lane

VP05 is located on Dead Horse Lane and is facing east as shown in Figure 7.10 refer to Table 7.6 for assessment.



Figure 7.9 Redline overlay showing proposed view from Dead Horse Lane



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Data source: GHD: Vewpoint (2023); World Imagery: Maxar Nearmap WMS Server: Created by ligarither

Figure 7.10 VP05 location map







Figure 7.11 Photomontage showing proposed view from Dead Horse Lane



Figure 7.12 Redline overlay showing proposed view from Dead Horse Lane

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Table 7.6 Viewpoint location VP05 assessment

Criteria	Assessment
Location and view direction	GPS location: E: 336695 N: 5903277 Elevation: 180 m VP05 is situated approximately 250 m from the Project on Dead Horse Lane and is facing east. This viewpoint is representative of road users on Dead Horse Lane and workers and residents in the surrounding residential and farmland areas.
Description of existing view	The Dead Horse Lane verge stretches across the foreground of the view, bordered by a boundary wire fence delineating the GVW waste management site. The scene reveals an expansive open setting adorned with scattered young trees and partially visible irrigation channels. The landscape gently slopes to the right, ultimately leading to a densely vegetated area in the background. The viewpoint presents an open rural setting typical of farmland, with the Project site situated to the right in the midground.
Anticipated change to view	During construction , temporary visual impacts may be associated with earthworks, in-situ concrete pouring and the establishment of new structures, ancillary infrastructure related to the PV-generating systems. Construction vehicles, machinery and a work crew may be temporarily visible while travelling to and from the Project site. During this time, storage stockpile and laydown areas may be visible to the right of the midground. Additionally, administration building, fencing, barricades and lightning may also be visible. There may be additional dust generated as result of construction works which may also have a visual impact.
	During operation , the access road may be visible across the midground view. The administration building, carpark, switch room, perimeter fencing, and PV - system array may be partially visible to the right of the midground.
	A minimum vegetation buffer zone of 30 m is expected to provide filtered views into the Project. Through this vegetation screening, various components of the Project may be seen for short periods by road users.
Sensitivity to change	The sensitivity is Low. Outdoor workers of the surrounding farmland place value upon the open rural landscape and enjoyment of their setting. Residents on Avenel Road and Delatite Road are 300-800m away from VP05 and would place value upon the views, however these would be long, distant and highly filtered views.
Magnitude of change	The magnitude of change is Low as there would be discernible changes in the existing view due to partial loss of, or change to elements, features, or characteristics of the view, however, has potential to be partly mitigated.
	Due to the low-profile form of the majority of the Project, the changes would not be out of scale with the existing view and would not leave an adverse impact on the view.
Significance of impact	While glimpses of views may occur during the construction phase due to the presence of construction vehicles and machinery, it is expected that proposed 30m vegetated buffer would screen views during the operation phase and therefore the overall impact of the project on VP05 is assessed as Low .

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7.7 Viewpoint location 06 (VP06) Delatite Road

VP06 is located on Delatite Road and is facing east as shown in Figure 7.13 refer to Table 7.7 for assessment.



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Photo 7.6 Delatite Road existing view

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Table 7.7 Viewpoint location VP06 assessment

Criteria	Assessment			
Location and view direction	GPS location: E: 344507 N: 5903414 Elevation: 167 m VP06 is situated approximately 900 m from the Project on Delatite Road and is facing east. This viewpoint represents the views of road users on Dead Horse Lane, as well as the workers and residents in the surrounding residential and farmland areas.			
Description of existing view	The view presents a modified rural open setting, with a sense of vastness on flat topography with a slight rise in undulation to the left of the midground and slightly undulating topography in the background. A piece of old farming machinery in the left foreground of view indicates the landscape's agricultural history and character. Scattered mature Eucalyptus species are visually prominent within the vast paddock. The relatively open view of a landscape cleared of many trees allows for background views of the Mount Alexina and One Tree Hill. A dwelling and associated small sheds are located to the right of the view, in front of the perimeter windrow planting. The canopies from the mature vegetation lining Dead Horse Lane are visible behind the open paddock. The Project is located to the right of the view, behind the existing vegetation lining Dead Horse Lane and undulating topography.			
Anticipated change to view	During construction , construction activities are not likely to be visible from this location. During operation the proposed Project and associated structures would be located to the background of the view. However, it is anticipated that these would not be visible from this location due the existing vegetation, topography, distance from the Project and the proposed 30 m vegetation buffer.			
Sensitivity to change	The sensitivity is Low , as outdoor workers of the surrounding farmland place value upon the open rural landscape and enjoyment of their setting, as well as the residents on Avenel Road with backyards towards the east. However, views would be long, distant views.			
Magnitude of change	The magnitude of change would be Negligible as there may be no change in the view due to the distance, topography and vegetation			
Significance of impact	While glimpses of views may occur during the construction phase due to the presence of construction vehicles and machinery, it is expected that the overall impact of the Project on VP06 is assessed as Negligible , as it is anticipated that there would be almost imperceptible change in the view.			

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7.8 Viewpoint location 07 (VP07) Avenel Road

VP07 is located on Avenel Road and is facing south east as shown in Figure 7.14 refer to Table 7.8 for assessment.



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Photo 7.7 Avenel Road existing view

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Table 7.8 Viewpoint location VP07 Avenel Road

Criteria	Assessment			
Location and view direction	GPS location: E: 336036 N: 5903480 Elevation: 172 m VP07 is situated approximately one kilometre from the Project on Avenel Road and is facing south. This viewpoint represents the views of road users on Avenel Road and the workers and residents in the surrounding residential and farmland areas.			
Description of existing view	The view presents a partially open setting with scattered Eucalyptus species with sparse and dry grasses, on a gently undulating topography. The middle ground comprises scattered Eucalyptus trees with small, visually open spaces between plantings. The undulating topography in the midground conceals views towards Dead Horse Lane, and the GVW site. This view has a semi-enclosed setting with scattered inclusions of native and remnant vegetation. The Project sits in the background, behind the topographic rise.			
Anticipated change to view	During construction , construction activities are not likely to be visible from this location. During operation , the Project and associated structures would be located to the background of the view. Due to the low-profile form of the majority of the Project, views towards the Project would be by the existing vegetation and topography.			
Sensitivity to change	The sensitivity is Low . There are residents located on Avenel Road that may place value upon the open rural landscape, however they are located approximately 900m from the Project and views would be long distant filtered views, through existing vegetation and through a proposed 30 m vegetated buffer.			
Magnitude of change	The magnitude of change would be Negligible as it is anticipated there may be very little change in the view, due to the topography, distance and vegetation			
Significance of impact	While glimpses of views may occur during the construction phase due to the presence of construction vehicles on Avenel Road, it is expected that the overall impact of the Project on VP07 is assessed as Negligible , as it is anticipated that there would be almost imperceptible change in the view.			

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8. Cumulative impact assessment

Cumulative impacts can be defined as the successive, incremental, and combined effect of multiple impacts, which may in themselves be minor, but could become significant when considered together. The study area for the cumulative visual assessment included projects potentially within the same view or landscape.

8.1 Mangalore Solar Farm

Mangalore Solar Farm is located approximately eight kilometres northeast from the project site at the intersection of O'Connor's Road and Seymour-Avenue Road. The facility will comprise approximately 18,256 low reflective PV panels and a battery storage facility.

 Table 8.1
 Cumulative impacts

Similarity to the Project in scale and form	The proposed solar farm infrastructure is similar in scale and form to the Project. As both projects are related to the same industry is likely to draw a connection between the two developments.
Timing of development	On February 2022 Tetris Energy received approval from the Minister of Planning to progress the development of the Mangalore Renewable Energy Project.
	The commence date would likely be prior to the commencement date of the Project, however due to the scale of both projects, it is possible that the projects would overlap with the approximate 6 to 12 months for the project construction
Combined visibility	Changes associated with the solar farm occur outside the study area, approximately eight kilometres north of the Project within the agricultural setting. Due to the distance between them, the developments would not be visible together and would not be interpreted as part of the same development.
	Changes from both developments would be similar in type and combined, are not likely to have a considerable effect on the landscape character, condition, or value of the agricultural setting.
Sequential visibility	Potential for sequential visibility includes distant views from Seymour-Avenel Road. Road users travelling between Avenel and Seymour on Seymour-Avenel Road, may experience views of the of the Mangalore Solar Farm associated infrastructure elements including partial filtered views of the solar array and storage batteries, prior to experiencing distant filtered views of the Project, east of the highway.

The overall rating is **negligible**. Even though there is a similarity in scale and form of the developments, these are eight kilometres apart and therefore it is anticipated that they would not be visible together.

8.2 Inland Rail Beveridge to Albury

From North to South, the Beveridge to Albury project will follow the existing rail corridor running close to the Hume Freeway from the Murray River at Wodonga to Beveridge, about 40 kilometres north of Melbourne.

The Seymour-Avenel Road Bridge will allow clearance for double-stacked freight trains, the design is about 3.2 m higher than the existing structure.

During construction, the Seymour-Avenel Road bridge will be closed with a detour in place. The detour will start from 22 January 2024 for approximately 12 months or until works are safely completed. Vehicles will be detoured via Avenel Road and High Street during this time, approximately 1.5 km northwest of the Project.



Table 8.2 Cumulative impacts

Similarity to the Project in scale and form	The Inland Rail is not similar in scale or form to the Project. The Inland Rail new single-track would accommodate double-stalked freight trains up to 1,800 m long and 6.5 m high and would include a 40 m rail corridor. In contrast, the Project would mostly be concealed from view.
Timing of development	The estimate construction will begin after 2024. Due to the scale and construction process of the Project, the Seymour-Avenel Road Bridge, it is possible that the projects would overlap with the expected 6 to 12 months for the project construction.
Combined visibility	Changes associated with the Inland Rail, Seymour-Avenel Road Bridge occur within LCA1, however the proposed detour during construction would occur within LCA2, in close proximity to the Project. Changes from both developments would be of different type, and combined are not likely to have a considerable effect on the landscape character, condition or value of LCA2.
Sequential visibility	There may be some locations along Avenel Road located 1.5 kilometres west of the Project area, where there may be a sequential view of both projects. The occurrence of sequential views however is likely to be limited, due to the local vegetation along Back Mountain Road, Tarcombe Road and Avenel Road.

The overall rating is negligible due to the difference in appearance and scale of both projects, low likelihood of the visibility of both projects, and low-level combined changes to the landscape character.

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9. Mitigation measures and recommendations

The following section recommends mitigation measures that respond to issues arising within the assessment that have potential to adversely impact on the character of the landscape or views from nearby sensitive visual receptors. The following mitigation recommendations address the most visual elements of the Project as well as referencing any relevant considerations drawn from the legislation and policy review.

9.1 General recommendations

General considerations for the detailed design phase include:

- Utilise design strategies to minimise the visual prominence of new components affecting views to and from Dead Horse Lane, Avenel Road and Back Mountain Road.
- Ensure Project design, siting and materiality is of high quality and sympathetic to the existing context of the landscape and contributes positively to the existing landscape character values.

9.2 On-site mitigation recommendations

9.2.1 Retain vegetation

Retain vegetation, particularly the mature avenues trees on the boundary of Dead Horse Lane, as they screen the Project. The buffer zone has been set back from the property boundary, allowing for existing vegetation to be retained.

9.2.2 Perimeter screen planting

To mitigate views from high sensitivity viewpoints, screen planting around the western boundary of the Project, within the proposed 30 metre wide 'vegetation buffer zone', is recommended. The Project has partially exposed boundaries to the west to Dead Horse Lane, and to Back Mountain Road to the north.

The solar PV array, ancillary infrastructure and wire fence are located approximately 100 m from the western boundary on the Dead Horse Lane side. Planting within the proposed 30 m minimum buffer zone will mitigate impacts to VP04 and VP05, the receptors with the highest level of visual impact. The low-profile form of the majority of the Project, primarily the solar array, will allow for planting to provide screening within a relatively short period of time.

The 30-metre vegetation buffer should be planted with a mixture of tall tree species and lower shrub planting, providing a dense screen of native planting, across a range of different heights.

Ideally, this 30m perimeter vegetation buffer should be planted as part of the early works, so that any constructionphase impacts can also be partially screened and partially mitigated.

9.2.3 Material selection

Although the majority of the Project is of a low profile, with a reflective finish through necessity, taller elements such as administrative building and switch room should be clad with non-reflective materials and be finished in a natural or neutral colour, as found in the landscape of the setting.

9.2.4 Construction activity and storage

General considerations for construction activity and storage include:

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- Take all practical measures to ensure construction equipment, stockpiles of stored materials, and other visible elements located in the construction laydown area near the sensitive receptors, particularly VP04 and VP05, are kept tidy and incorporate screening measures, where possible.
- Fencing for the compound site is to include hoarding or screening material.
- The site compound will be kept tidy and general tidiness will be maintained at the end of each shift.
- All materials and equipment will be stored within the site compound or within designated work areas.

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10. Response to key legislation and policy

The Solar Energy Facilities Design and Development Guideline DELWP stipulates:

- An assessment of the visual impact of the proposal on the surrounding landscape
- An assessment of the visual impact on abutting land that is described in a schedule to the National Parks Act 1975 and Ramsar wetlands and coastal areas.

The Mitchell Shire Planning Scheme *Clause 53.13 - Renewable Energy Facility (other than wind energy facility)* recommends that the development application includes:

- Accurate visual simulations illustrating the development in the context of the surrounding area and from key public view points.
- An assessment of the impact of the proposal on significant views, including visual corridors and sightlines.

This Landscape and Visual Impact Assessment (LVIA) is the response to these development and planning scheme requirements. It assesses the landscape character and visual impacts of the proposal, with particular consideration for sensitive landscape and visual receptors, in the area surrounding the proposal.

Refer to the following sections of the report for more detail:

 Table 10.1
 Relevant legislation and policy

Relevant features/objectives	Response	
An understanding of the landscape and visual attributes of the study area.	Refer to section 5 - Existing landscape and visual environment	
Identification of sensitivities of landscape and visual receptors in the vicinity of the proposal.	Refer to section 5.5 - Visual analysis.	
Assessment of potential landscape and visual impacts associated with the proposal.	Refer to section 6 - Landscape impact assessment section 7 - Visual impact assessment.	
Provision of recommendations for mitigating or managing any identified landscape and visual impacts arising from the proposal.	Refer to section 9 - Mitigation measures and recommendations	
Accurate visual simulations illustrating the development in the context of the surrounding area and from key public viewpoints.	 Refer to section 7 - Visual impact assessment: Viewpoint location 01 (VP01) Back Mountain Road Viewpoint location 04 (VP04) Dead Horse Lane Viewpoint location 05 (VP05) Dead Horse Lane 	

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11. Conclusion

This report has been prepared to assess the potential landscape and visual impacts of a large-scale solar facility for Seymour Goulburn Valley Water (GVW) owned land, located adjacent to their Wastewater Management Facilities (WMF).

The purpose of this report is to provide a Landscape and Visual Impact Assessment (LVIA) for the Project, including an assessment of the existing landscape and visual context and an assessment of the impacts to the landscape character and visual environment, The Project was reviewed against the following planning permit triggers and a summary response was provided in section 10:

- Clause 53.13 of the Mitchell Shire Council for the approval of the planning permit for the use and development of the land for the purposes of a Solar Energy Facility (Renewable Energy Facility).
- Solar Energy Facilities Design and Development Guideline, (Victoria State Government, Department of Environment, Land, Water and Planning, October 2022).

The Project site is located in the northeast fringe of the township of Seymour, Victoria, approximately 100 km northwest of Melbourne. Seymour is located on the banks of the Goulburn River, at the junction of the Hume Freeway and Goulburn Valley Highway. The study area is within the Mitchell Shire LGA. The predominant land use zoning surrounding the Project site is Farming Zone (FZ), with the Project site marked as Public Use Service and Utility (PUZ1).

The Project site is situated within the boundaries of Back Mountain Road in the north, Dead Horse Lane on the west, Tarcombe Road on the south and a boundary fence on the east. Topography of the area is generally flat with gradual falls towards the natural valley of the Goulburn River and gradual rises towards the Tallarook Ranges to the south and Mount Stewart to the east. Mount Tallarook is located approximately ten kilometres south of the study area.

The intent of the solar PV system is to provide GVW with maximum energy yield so that GVW can offset their carbon footprint and generate revenue by selling electricity to the market.

A total of three landscape character areas were identified within the study area: Seymour Township (LCA1), Farmland (LCA2) and Goulburn River (LCA3). Impacts of LCA2 were assessed as **Low**, as it is unlikely that this development would have an adverse effect on the landscape character and introduction of components may be new but would not be uncharacteristic within the existing land. All other LCA impacts were assessed as **Negligible**. Overall, this assessment found there to be no significant landscape character impacts from the Project.

LCA	Description	Sensitivity to change	Magnitude of change	Overall Rating
LCA1	Seymour Township	Low	Negligible	Negligible
LCA2	Farmland	Low	Low	Low
LCA3	Goulburn River	Moderate	Negligible	Negligible

Table 11.1 Summary of impacts to landscape character impacts

Sensitive visual receptors in the study area include road users, residents and outdoor workers. Seven viewpoints were chosen to assess the visual impact of the Project.

The assessment found that the visual impacts ranged from Moderate-Low to Negligible, as outlined in Table 11.2.

The most significant impacts where **Moderate-Low** within the vicinity of VP02 (Back Mountain Road) and VP04 (Dead Horse Lane) due to residents that place value upon the open rural landscape and enjoyment of views of their setting.



Table 11.2Summary of Visual impacts

Viewpoint	Location	Sensitivity to change	Magnitude of change	Overall Rating
VP01	Back Mountain Road	Moderate	Negligible	Negligible
VP02	Back Mountain Road	Moderate	Low	Moderate-Low
VP03	Tarcombe Road	Low	Negligible	Negligible
VP04	Dead Horse Lane	Low	Moderate	Moderate -Low
VP05	Dead Horse Lane	Low	Low	Low
VP06	Delatite Road	Low	Negligible	Negligible
VP07	Avenel Road	Low	Negligible	Negligible

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12. References

Australian Institute of Landscape Architect (2018), Guidance Note for Landscape and Visual Impact Assessment.

Centre for Urban Design, Transport for New South Wales, Australia (2020), *Environmental impact assessment practice note EIA-N04 - Guideline for landscape character and visual impact assessment, Version 2.2*

Consultation Draft for Natural England, Scottish Natural Heritage and Countryside Council for Wales, 2011.

CSIRO (2009), Australian Soil and Land Survey Field Handbook Third Edition.

Mitchell Shire Council. (2016). *Seymour Structure Plan.* Seymour: Seymour Structure Plan. Pana, M. (2023). *Tatura Site Layout Plan.* GHD.

Landscape Institute and Institute of Environmental Management & Assessment, UK (2013), *Guidelines for Landscape and Visual Impact Assessment, Third Edition.*

Landscape Institute (2019), Visual Representation of Development Proposals, Technical Guidance Note 06/19.

Land Use Consultants and C Swanwick, Landscape Character Assessment Guidance, 2011 Revision.

Pana, M. (2023). Seymour Site Layout Plan. GHD.

Scottish Natural Heritage (2012), Assessing the Cumulative Impact of Onshore Wind Energy Developments.

Scottish Natural Heritage (2006), Topic Paper 6: Techniques and Criteria for Judging Capacity and Sensitivity.

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Appendices

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Appendix A

Photomontages for the sole purpose of enabling its consideration and review as part of planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright



PROPOSED DESIGN



View Direction: Horizontal Field Of View: Camera Height: Camera Type: Lens Type: Photograph Time & Date:

115° - 195° 80° 1.7 m Canon EOS 6D 50 mm 10:43, 21st November 2023

Location:

Coordinates: Viewpoint Elevation:

Date of Photomontage: Issue:

Back Mountain Road, Seymour, Victoria 337234, 5903581 (GDA 2020 MGA Zone 55) 182 m 15th December 2023 v 01

Goulburn Valley Water Goulburn Valley Water Solar Farm - Seymour

Viewpoint 01: Back Mountain Road



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Viewpoint 01: Back Mountain Road



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EXISTING VIEW



PROPOSED DESIGN



View Direction: Horizontal Field Of View: Camera Height: Camera Type: Lens Type: Photograph Time & Date: 33° - 113° 80° 1.7 m Canon EOS 6D 50 mm 11:28, 21st November 2023

Location:

Coordinates: Viewpoint Elevation: Date of Photomontage: Issue:

Dead Horse Lane, Seymour, Victoria 336900, 5902640 (GDA 2020 MGA Zone 55) 173 m 15th December 2023 v 01

Goulburn Valley Water Goulburn Valley Water Solar Farm - Seymour

Viewpoint 04: Dead Horse Lane



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Coordinates: Viewpoint Elevation:

Location:

Issue:

Date of Photomontage:

Dead Horse Lane, Seymour, Victoria 336900, 5902640 (GDA 2020 MGA Zone 55) 173 m 15th December 2023 v 01

Goulburn Valley Water Goulburn Valley Water Solar Farm - Seymour

Viewpoint 04: Dead Horse Lane



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View Direction: Horizontal Field Of View: Camera Height: Camera Type: Lens Type: Photograph Time & Date:

65° - 145° 80° 1.7 m Canon EOS 6D 50 mm 10:57, 21st November 2023

Location:

Coordinates: Viewpoint Elevation: Date of Photomontage: Issue:

Dead Horse Lane, Seymour, Victoria 336695, 5903277 (GDA 2020 MGA Zone 55) 180 m 15th December 2023 v 01

Goulburn Valley Water Goulburn Valley Water Solar Farm - Seymour

Viewpoint 05: Dead Horse Lane



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Dead Horse Lane, Seymour, Victoria 336695, 5903277 (GDA 2020 MGA Zone 55) 15th December 2023

Goulburn Valley Water Goulburn Valley Water Solar Farm - Seymour

Viewpoint 05: Dead Horse Lane



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