

# **DUBBO SOLAR FARM**

**Visual Analysis and Landscape Concept** 







#### PROJECT NAME

Location	Lot 2101 DP 1227782, 19L Sheraton Road, Dubbo NSW 2830	
Project Number	631.20573.00000	
Client	Providence Asset Group	

### PREPARED BY

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#### BASIS OF REPORT

This report has been prepared by SLR Consulting Australia Pty Ltd with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Providence Asset Group (the Client).

Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

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### DOCUMENT CONTROL

Reference	Date	Prepared	Checked	Authorised
631.20573.00000-v0.1	February 2021	Dallas Ellis	Dean Butcher	Dean Butcher
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# 1. INTRODUCTION

# 1.1 Background

This Visual Analysis and Landscape Concept has been prepared for the proposed Solar Farm near Dubbo, NSW.

This Visual Analysis and Landscape Concept assessment has been prepared to provide an effective and objective assessment of the anticipated high level impacts of the project on the surrounding visual environment.

SLR has worked closely with other members of the project team in determining and rating visual impacts of the proposed solar farm project works on its immediate surrounds as well as suggesting mitigation measures to further reduce any impacts that may occur.

There are 2 parts to this report.

- Visual Analysis, and
- Landscape Concept.

### 1.2 Site Location

The land on which the Solar Farm is located (the subject site) for the proposed Solar Farm (the project) is situated approximately 2 km south east of Dubbo Township.

The site is located along an unnamed, private access track which connects to Sheraton Road.

The proposed development will consist of solar panels mounted on single-axis trackers connected to a power conversion station with an access and hardstand area from the existing unnamed access road.

The development will be confined to Lot 2101, DP 1227782 (Figure 1).

#### **LEGEND**



Proposed Lease Area (Subject Site)

Railway



Figure 1. Locality Plan



Scale (m)

100 250 50

1000

2000



### 2. BASELINE VISUAL ENVIRONMENT

### 2.1 Subject Site and Surrounding Context

The subject site is located on the southern side of the Mitchell Highway, Dubbo and is a typically open cropped and grassed rural site, similar to other rural properties surrounding it. The site is approximately 2 km south east of Dubbo. The site, like its surrounding context is typically flat with no major land form features visible from the site.

### 2.1.2 Roads and Access

The Mitchell Highway is a state road that is adjacent the site to the east and connects Dubbo from the south east.

Lidscomb Road is a local unsealed road that links a number of local residential properties to the Mitchell Highway. Views of the site can be obtained from Lidscomb Road from the east.

### 2.1.3 Vegetation

The subject site has been cleared of vegetation except for a few scattered specimens remaining which are located on the southern edge of the proposed Solar Farm.

The local area in general is very sparsely vegetated, with some established vegetation along the Mitchell Highway, other local roads and property boundaries. Vegetation to the south of the site does not hinder any public views from local and state roads.

#### 2.1.4 Structures

There are no structures on the subject site. There are a number of rural residential dwellings in the surrounding area to the north and east of the site.

To the north east of the site, the urban areas of Dubbo are present but not clearly visible from viewpoints around the site

### 2.1.5 Infrastructure

The subject site has power poles and lines running past it on the northern side within the existing solar farm.

The existing solar farm is the most prominent infrastructure element in the near vicinity of the subject site. The quarries to the south east are large exposed areas within the rural landscapes.

# 3. LANDSCAPE CHARACTER ANALYSIS

### 3.1 Regional Context

The landscape character of the region surrounding the site is flat, open rural lands used with a mix of pastoral and agricultural uses. Whilst the vegetation is sparse on the agricultural lands, it is typically concentrated around the local waterways. This however is generally not within the local visual context of the site.

# 3.2 Baseline Visual Character of Subject Site and Surrounds

The subject site is typical of the rural landscape character of the region in that it is open and typically devoid of tree and vegetation cover except for along boundaries and roads.

As the size of the site is small in the context of its surrounds, it utilises the 'borrowed landscape' of the adjoining rolling hills to define its visual context and define local views.



# 4. PROPOSAL

# 4.1 Project Description

A full description of the proposal is provided within the main Statement of Environmental Effects and site plans, but a brief description is as follows. Section 4.1.1 identifies key elements of the proposal that are of particular relevance to an assessment of impacts on the Visual Analysis and Landscape Concept.

### 4.1.1 Indicative project Layout

The solar electricity generating facility will consist of the following elements:

- Solar array area of approximately 10 hectares within a total fenced area of approximately 13.5 Ha
- Solar array mounted on trackers (159 sets)
- Rectangular photovoltaic module
- Trackers area horizontal single-axis type
- Solar array up to 2.6m high with +/-60° rotation angle
- Trackers orientated north south
- Associated infrastructure
- Power Conversion Station (PCS)
- Entry to the site via improved access from the unnamed, private access track which connects to Yarrie Lake Road
- Security fencing
- Car park area
- Offload and hardstand area

During construction, temporary facilities located within the site may include:

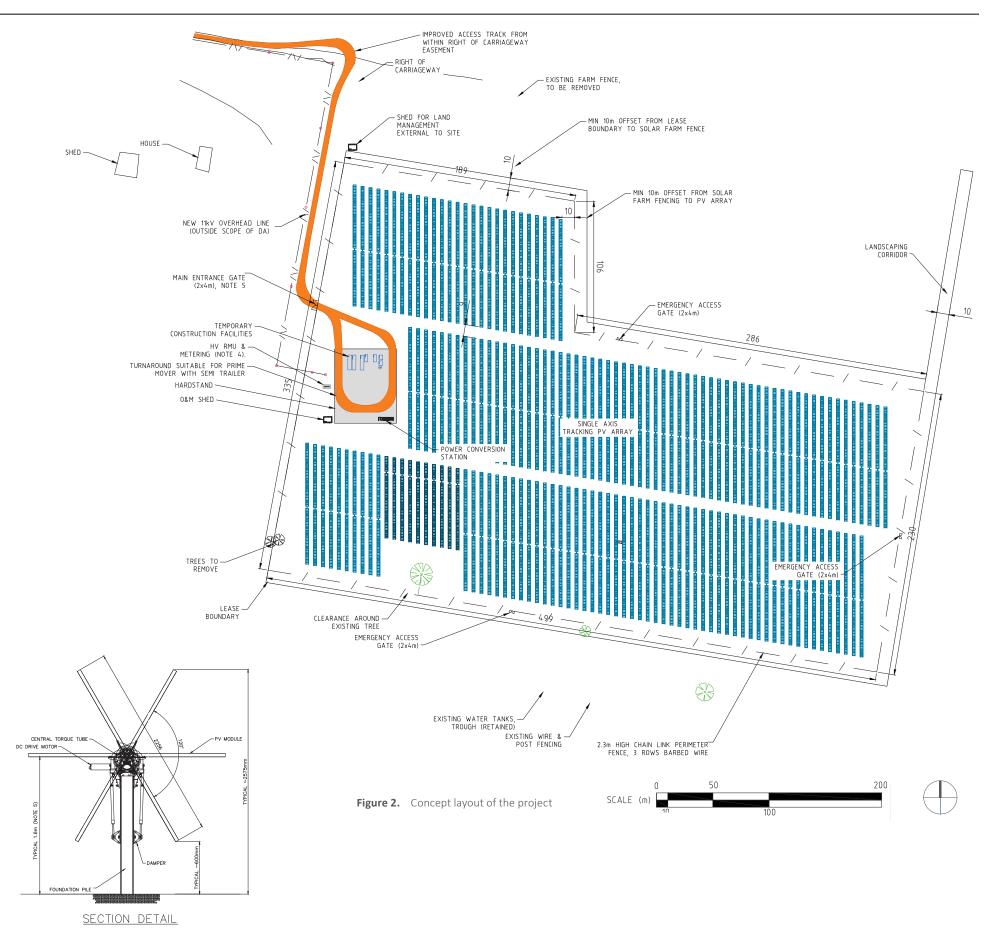
Construction office

### 4.1.2 Solar panel dimensions and arrangement

The proposed solar array module dimensions are approximately 1.1 m wide x 2.6m high. They are mounted on a tracking system that will maximise the electricity production. The tracking system rotates about a north-south axis to follow the sun with the aim of orienting each panel to be as close to perpendicular as possible to the incoming sun.

The tracking systems will be arranged in rows running in a north-south direction as indicated in **Figure 2.** The enclosure for the solar panel arrays and associated equipment will cover approximately 13.5Ha.

The diagram in **Figure 2.1** illustrates the dimensions and rotation of the panels. The panels only rotate from east to west and are not tilted toward the north.







### 5. VISUAL IMPACT ASSESSMENT

### **5.1** Process

The Visual Impact Analysis generally applies the assessment techniques set out in the 'Guidelines for Landscape and Visual Impact Assessment, Third Edition' (2013) prepared by The Landscape Institute and the Institute for Environmental Management and Assessment (UK).

The analysis includes the following:

- Review of the proposal (scale, bulk, height, technical specifications and landscape);
- Analysis of the subject site (visual exposure, visual qualities and landscape values);
- Identification of potential impacts on key receptors including the rating of magnitude for each receptor group;
- Rating of impact significance for each receptor group;
- The significance is evaluated as a product of the sensitivity or value of the receptor, and the magnitude of impacts on the receptor;
- Potential mitigation measures to meet the necessary planning requirements and any community expectations; and
- The report included a desktop analysis and a visual site investigation in November 2020. The desktop review included the review of aerial photography, site topography and vegetation cover.

Photomontages were also prepared to inform the analysis.

# 5.2 Assessment of Visual Impacts for Key Receptors

Photographic imagery was taken of the site to assist in the assessment of visual impacts. Photos were taken with a Canon EOS 6D Mark II digital single-lens reflex (DLSR) camera with a 50 mm lens.

Three photomontage images were prepared to assist in the Visual Analysis and Landscape Concept process; all from public receptor points.

The five receptors used in the photomontage were selected to investigate a range of visual solutions and illustrating views from areas of perceived sensitivity. During the site investigation, local areas around the site were observed to determine the potential visibility of the proposed Solar Farm.

For the purposes of this Visual Analysis and Landscape Concept a Photomontage image was produced from each of the three viewpoints chosen. The approximate extent of the proposed Solar Farm has been identified to give a general impression of the location on site and the approximate height.

The Photo montage Images are represented in Section 5.6 and show the following overlays of information.

- Existing visual baseline (existing landform); and
- Overlay of the final solar farm proposed development.



# 5.3 Receptor Sensitivity

The receptor sensitivity is derived from a combination of factors including:

- Receptors interest in the visual environment (high, medium or low interest in their everyday visual environment and the duration of the effect);
- Receptors viewing opportunity (prolonged, regular viewing opportunities);
   and
- Number of viewers and their distance/ angle of view from the source of the effect, extent of screening/ filtering of view.

Whilst the assessment of visual values and effects is largely measured on a qualitative basis, assessment against scale enables a more objective evaluation and comparison of sensitivity of receptors and magnitude of effects. The Receptor Sensitivity Rating is described as being High, Medium, Low or Negligible as described in **Table 1.** 

## 5.4 Magnitude of Landscape Change

The Magnitude of Change to the landscape character depends on the nature, scale, intensity, extent and duration of the impacts/ change due to proposal. The magnitude of change also depends on the loss, change or addition of any feature to the existing landscape and is based on the character type that is most likely to be impacted by the project prior to the addition of any mitigation measures.

The Magnitude of Change is described as being High, Medium, Low or Negligible as described in **Table 2**.

Descriptions of Magnitude and Sensitivity are illustrative only and there is no defined boundary between levels of impacts.

Table 1. Receptor Sensitivity Rating

Receptor Sensitivity	Description
High	<ul> <li>Visitors to heritage sites, regionally important locations, scenic routes, lookouts within 2.5km with quality views, important views of the site and surrounding areas where landscape is the specific focus.</li> <li>High numbers of visitors</li> <li>Views to landscape that are rare and or unique and are possibly vulnerable to change</li> <li>Views from residences within 1km of the site or are representative of high quality views</li> </ul>
Medium	<ul> <li>Travellers/visitors along roads or rail routes that are not scenic routes but offer quality views within 2.5km of the site</li> <li>Medium numbers of visitors/ residents (rural communities or townships)</li> <li>Views that are representative of local character or sense of place but are not rare or unique</li> <li>Views from residences beyond immediate vicinity (1km-5km) of the site or are representative of moderate quality views</li> <li>Recreational users/ viewers beyond 2.5km from the site with moderate interest in their surrounds</li> </ul>
Low	<ul> <li>Travellers/visitors along roads or rail routes that are not scenic routes but offer reasonable views within 4km of the site</li> <li>People at place of work where setting or views not important to quality of working environment</li> <li>Recreational users not dependent on views or scenic quality of landscape</li> <li>View experience takes in broad context with which site is visible but not an important element.</li> <li>Small numbers of visitors with passing interest in their surroundings (those travelling along mid-level roads)</li> <li>Viewers whose interest is not specifically focused on landscape or scenic qualities (commuters, workers)</li> </ul>
Negligible	<ul> <li>Very occasional or low level of users with passing interest in their surrounds (those travelling along minor roads or views from the air)</li> <li>Travellers/visitors along unsealed roads offering views greater than 4km of the site</li> </ul>

# **5.5** Impact of Significance on Landscape Character

The Impact Significance is evaluated according to 2 key criteria as noted above and is reflected in **Table 3.** 

The rating is a means of comparing impacts on different receptors. Professional judgement and experience have been applied in order to identify the level of significance for each character type which has been assessed on its own merits.

- The sensitivity of the receptor or existing landscape; and
- The magnitude of the change or impact that is likely to occur.

The process of assessment and the use of the ratings tables reflect typical outcomes for visual impacts.

- Impacts on receptors that are particularly sensitive to change in views and visual amenity are more likely to be significant.
- Impacts that constitute a substantial change to the visual environment are likely to be more significant than the impacts that do not cause substantial change.

# **5.6 Summary of Potential Landscape Character Impacts**

The following sheets summarise the assessment of impacts on each of the identified visual receptor groups.

Three representative viewpoints were identified where the site could be seen preferably from public locations. Due to the distances from the site, presence of topographic and vegetated features, surrounding structures and the limited views from publicly accessible areas, the choice of viable views was limited. The following sheets describe and rate the sensitivity of each viewpoint, the nature and magnitude of impacts likely to occur and the resultant significance of impacts for each receptor.

Typically views to the site from local roads and other public locations in the area were very limited. Photos from each receptor are provided and photomontages prepared to show how the proposed Solar Farm will be perceived from that particular viewpoint. Mitigation measures have been included where appropriate.



Table 2. Magnitude of Change

Magnitude of Change	Description
	Dominant Change     Major change in view at close distances, affecting
	substantial part of the view continuously visible for a long duration or obstructing a substantial part or important elements of the view
High	Overwhelming loss or additional features in the view such as the nature of view or character of landscape fundamentally changed
	Views to key landscape features affected
	<ul> <li>Visual amenity of local residents or road users substantially diminished</li> </ul>
	Substantial change to the landscape due to loss of and or change to elements, features or characteristics of the landscape creating an overall worsening of landscape quality
	Considerable Change
	<ul> <li>Clearly perceptible changes in views at intermediate distances resulting in either distinct new element in a significant part of the view or a more widely ranging, less concentrated change across a wider area</li> </ul>
Medium	Significant loss or addition of features in the view, such that nature of view or character of landscape is altered
ivieululli	<ul> <li>Noticeable contrast of any new features in the view such that the nature of the view or landscape character is changed</li> </ul>
	Noticeable contrast of any new features or changes compared to existing landscape
	Views to key landscapes partially obstructed but views remain intact
	Noticeable Change
	Minor memorable change to the landscape or views
Low	Temporary or reversible impact
	<ul> <li>Landscape dominant element and built form/ development well integrated within it</li> </ul>
	Little permanent change or no fundamental change to local landscape character
	Barely Perceptible Change
Negligible	No memorable or rarely perceptible change to landscape character or key views

Table 3. Effect Significance Rating

	Magnitude of Change in Landscape				
Sensitivity		High (Dominant Change)	Medium (Considerable Change)	Low (Noticeable Change)	Negligible (Barely Perceptible Change)
	High	High	Moderate-High	Moderate	Minor-Moderate
Receptor	Medium	Moderate-High	High	Minor-Moderate	Minor
Re	Low	Moderate	Minor-Moderate	Minor	Minor-Negligible
	Negligible	Minor-Moderate	Minor	Minor-Negligible	Negligible



# **5.6.1 Selected Viewports**



**Figure 3.** Selected Visual Receptors and Direction of View



# 5.6.2 Viewpoint 1 - Existing



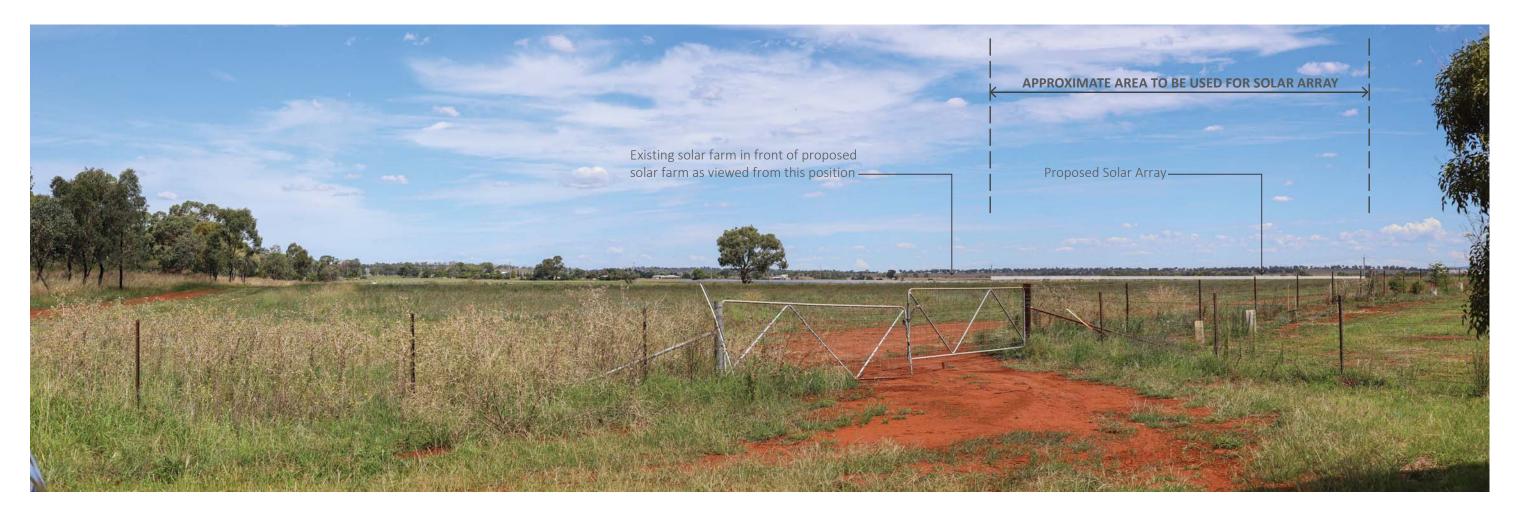
Receptor - VP1 Private unsealed access road which connects to Wellington Road, Dubbo	
Coordinate Location	32°15′51.642″ S 148°39′44.13″ E
View Description	
Distance from Site Approximate 1.3 km	

### Comments

- Open rural landscape, with minimal canopy vegetation except along the boundary lines and road verges to the south and east of the site. Established vegetation visible in the foreground of the view within the verge areas of the Mitchell Highway.
- Generally flat landscape with no prominent topographical landform visible from this viewpoint



# 5.6.3 Viewpoint 1 - Proposed



Receptor - VP1 Summary of Impact Assessment		
Receptor Sensitivity	Low	
View Magnitude of Landscape Change	Negligible	
Impact Significance	Minor - Negligible	
Mitigation Measures	No mitigation necessary	



# 5.6.4 Viewpoint 2 - Existing



Receptor - VP2	Mitchell Highway, Dubbo	
Coordinate Location	32°15′56.586″ S 148°39′53.664″ E	
View Description	Public view from the Mitchell Highway looking south	
Distance from Site	om Site Approximate 1 km	

### Comments

- Open rural landscape, with minimal canopy vegetation except along the boundary lines and road verges to the south and east of the site. Established vegetation visible in the foreground of the view within the verge areas of the Mitchell Highway.
- Generally flat landscape with no prominent topographical landform visible from this viewpoint



# 5.6.5 Viewpoint 2 - Proposed



Receptor - VP2 Summary of Impact Assessment		
Receptor Sensitivity	Medium	
View Magnitude of Landscape Change	Negligible	
Impact Significance	Minor	
Mitigation Measures	From this viewpoint the existing solar farm will be visible in front of the subject site and therefore no mitigation measures are recommended for the proposed solar farm	



# 5.6.4 Viewpoint 3 - Existing



Receptor - VP3	Lidscomb Road, Dubbo	
Coordinate Location	32°16′32.802″ S 148°40′13.404″ E	
View Description	View from Lidscomb Road, looking south west	
Distance from Site	Approximate 250m	

### Comments

- Open rural (agricultural) landscape, with minimal canopy vegetation in the background except along the boundary lines to the south west and south east. Established vegetation and Dwelling visible in the foreground of the view.
- Generally flat landscape with no prominent topographical landform visible from this viewpoint. The hills in background are a minor topographical feature.



# 5.6.5 Viewpoint 3 - Proposed



Receptor - VP3 Summary of Impact Assessment		
Receptor Sensitivity	Low	
View Magnitude of Landscape Change	Low	
Impact Significance	Minor	
Mitigation Measures	Informal shrub planting (to a maximum height of 3m) on the eastern side of the adjoining lease boundary and within the landscaping corridor to provide screening from residential properties	

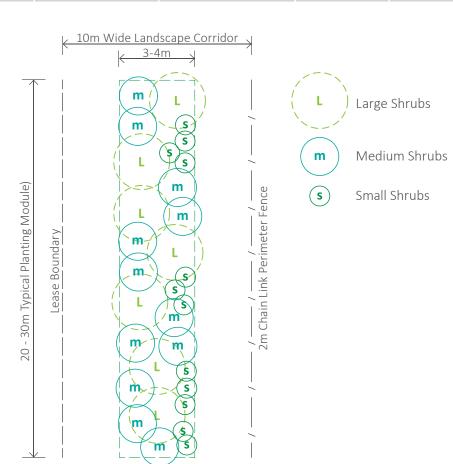


# 6. LANDSCAPE CONCEPT

# 6.1 Landscape Plan

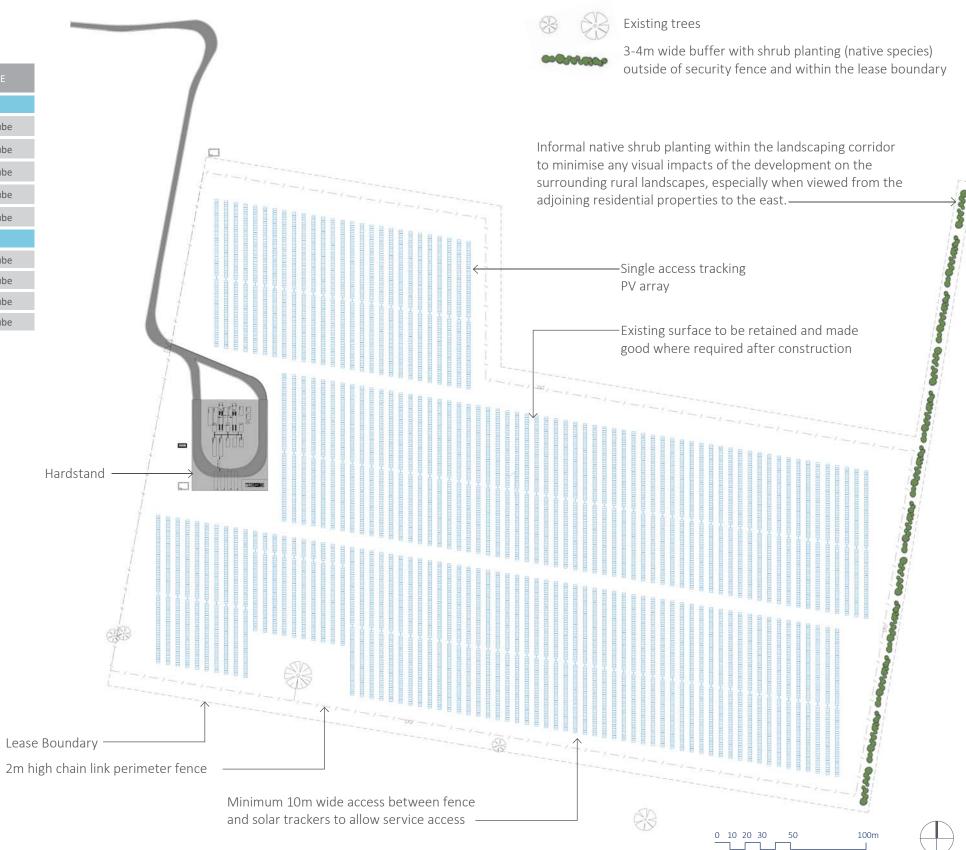
#### PLANTING SCHEDULE

SPECIES		COMMON NAME	APPROX. MATURE HEIGHT	POT SIZE		
MEDIUM TO LARGE SHRUBS (Native Species)						
L	Acacia decora	Western Silver Wattle	3-4m	50mm Tube		
L	Dodeonaea viscosa	Sticky Hop Bush	3-4m	50mm Tube		
L	Acacia vestita	Hairy Wattle	3-4m	50mm Tube		
m	Notelaea microcarpa	Velvet Mock Olive	2m	50mm Tube		
m	Acacia paradoxa	Hedge Wattle	2m	50mm Tube		
SMALL SHRUBS (Native Species)						
S	Lomandra longifolia	Mat Rush	1m	50mm Tube		
s	Melaleuca thymifolia	Thyme-Leaf Honey-Myrtle	1m	50mm Tube		
S	Callistemon linearis	Narrow-leaved Bottlebrush	1.5m	50mm Tube		
s	Acacia acinacea	Gold Dust Wattle	1m	50mm Tube		



TYPICAL 3-4M WIDE BUFFER WITH SHRUB PLANTING

SCALE 1:200 @ A3



LEGEND



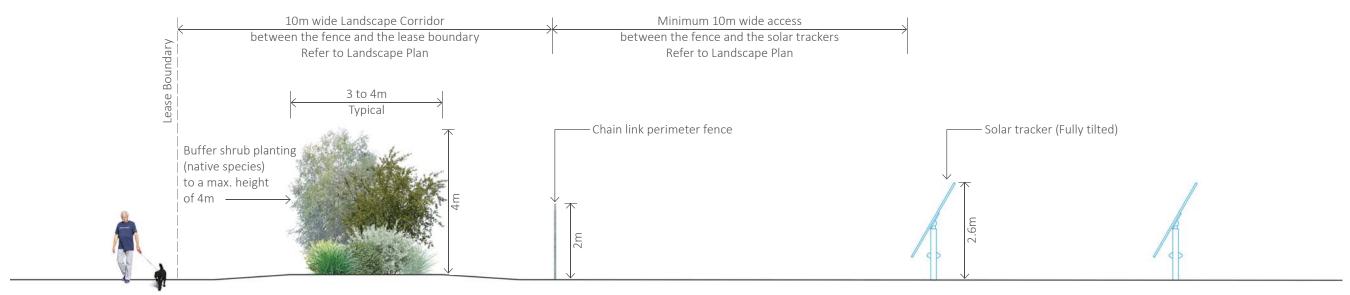
SCALE 1:2500 @ A3

# **6.2** Landscape Screening

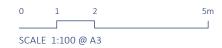


### TYPICAL VEGETATION BUFFER (FRONT ELEVATION)





TYPICAL VEGETATION BUFFER SECTION





### **6.3 Landscape Works Construction Notes**

The following outline of Landscape Works to be undertaken by the Landscape Contractor (unless otherwise stated). This will not override future detail documentation that will be undertaken as part of the project works, prior to construction.

#### 6.3.1 Civil Works

The EPC Contractor will ensure the following minimum depths of site topsoil are provided.

- Planting areas to be a minimum 200 mm depth site topsoil.
- Grass/ turf areas to be a minimum of 100mm site topsoil
- Finished level of topsoil to be generally 100-150 mm above surrounding existing ground surface levels to ensure topsoil/planting areas are free from water-logging.

### **6.3.2 Locate Existing Services**

The Landscape Contractor shall locate all existing services prior to commencing works, contacting Dial Before You Dig, the project EPC Contractor and/or the relevant authorities as required. Identify all overhead services prior to commencing works.

#### 6.3.3 Set Out the Works

The Landscape Contractor shall accurately set the works out in accordance with the future detailed documentation set.

### **6.3.4 Soil Testing**

The Landscape Contractor shall undertake soil sampling & testing of the existing topsoil as stripped and stockpiled by the EPC Contractor.

An approved agricultural soil testing laboratory shall be used to test and provide amelioration recommendations for the soil shall be in accordance with AS 4419:2018 Soils for landscaping and garden use. Any recommended adjustments must be made for native tree & shrub planting.

### **6.3.5** Planting Areas Preparation

The Landscape Contractor shall undertake the planting preparation works in line with best practice, consideration of local conditions and timing of the works.

Eradicate broad-leaf, woody and noxious weeds from all planting areas using selective, non-residual herbicides. Manual removal of larger woody weeds may be required. Inspect the site prior to commencement to confirm extent of weed treatment and follow up with secondary treatment if required.

- If the existing soil is heavily compacted, deep rip along planting line to minimum 300 mm depth with tines at a maximum of 750 mm centres to break up/aerate natural subgrade and to relieve compaction, grade & level.
- Apply fertilisers and additives at rates recommended by soil test results.
- Cultivate planting lines to a minimum of 150mm depth to break up soil clods and provide an appropriate planting medium. Re-cultivate planting lines to break up soil clods and provide an appropriate planting medium if required.
- Remove any deleterious material brought to the surface, consolidate soil and grade surface to even grades, free of any depressions or undulations.
- DO NOT WORK WET SOIL.

### 6.3.6 Plant Supply

All plants shall be healthy, free from any pests or diseases, be attractive, well grown and well-formed plant specimens (typical of the individual species) and shall have a healthy, well-formed root system commensurate in size with the foliage mass (root systems must not be pot bound). Plant container sizes shall be as listed in the detail planting schedule, but shall be min. hiko, ViroTube or 50 mm round/square pot size.

### 6.3.7 Planting

The Landscape Contractor shall set out plants in accordance with future detailed documentation. Individual holes are to be dug (tree planter, mini-auger, etc.) in the prepared planting areas of sufficient size to easily accommodate the plant's root system and relieve any polishing.

Create broad, shallow watering bowl to ALL plants to facilitate effective watering (min. 15 litre capacity). All plants shall be watered-in immediately after planting and at such times during the Contract period as is required to maintain growth free of water stress. Planting medium must be moist - do not plant into dry soil. Handle and plant all plants at all times in accordance with best horticultural practice.

#### 6.3.8 Mulch

The Landscape Contractor shall supply and place 100mm organic mulch to all new planted areas. Preference is for Forest Mulch or local tub-ground mulch where possible. Mulch shall be free of deleterious material such as rubbish, soil, stones and large sticks.

### 6.3.9 Weed Mats

Where weed matting is to be used, the Landscape Contractor is to supply & install proprietary (TreeMax or similar approved) jute weed mat to each plant. Installation shall be strictly in accordance with manufacturer's recommendations.

#### 6.3.10 Tree / Plant Guides

Where tree/ plant guards are to be used, the Landscape Contractor is to supply & install proprietary tree guards (TreeMax or similar approved) to all nominated plants. Installation shall be strictly in accordance with manufacturer's recommendations.



### 6.3.11 Grassing (Where Required)

Where grass works are required (grass seeding or turfing), the Landscape Contractor is to supply and install the specific grass treatment.

Do not sow seed in periods of extreme heat, cold or wet, or where wind velocities are excessive unless otherwise approved.

Seeding shall be programmed when there is a period of anticipated weather conditions (i.e. rain) that will provide the best chance for germination of grass seed. Any areas affected by heavy rain, wind removing seed or other cause shall be re-seeded as specified to achieve an even cover of grass.

Slash grass when growth height has reached 100 mm or otherwise as directed by Council. Should all the areas not require cutting at one time, complete all further cuts as necessary until 100% of the area has achieved successful coverage and all areas have received at least first cut.

### 6.3.12 Landscape Establishment / Maintenance Period

Landscaping Contractor shall be responsible for maintenance of the landscaping from planting until final project completion and handover to the asset owner (approximately 2 years). Following handover, the site O&M contractor shall be responsible for maintenance and replacement for the lifetime of the asset.

Maintenance shall include care of the contract area by accepted horticultural practices, and rectification of any issues which arise during this period. Maintenance tasks to be carried out as required during the maintenance period shall include (but shall not be limited to) slashing/ mowing, watering, weed control, pest & disease control/ management, tree guard adjustment/ replacement and rubbish removal. Plant establishment at the end of the Maintenance Period is to achieve a minimum 90% success rate.

- WEED CONTROL Planted areas are to be maintained in a weed-free condition.
- GRASS MANAGEMENT Slash all grass areas on a regular basis to maintain grass height to max. 100 mm. Slashing shall comply with all local Council and RFS guidelines with regard to grass heights.
- JUTE MAT & PLANT GUARDS Maintain jute mat and tree guards for first two summers minimum, repair and replace as required during this period.
- PLANT REPLACEMENT Replace any failing, failed, or dead plants during
  the maintenance period. The Council and the Contractor will inspect the
  full planting areas at the end of each summer and will identify the number
  and species of plants that are failing, have failed/died for replacement

- WATERING Ensure all plants planted/maintained under this contract receive adequate (but not excessive) watering to maintain optimum growth and health. Watering shall be localised to each plant, not broad spraying across the entire planting area, to limit weed/grass growth between planting rows.
- FERTILISING All plants shall be fertilised with an approved proprietary fertiliser suitable for native gardens (in particular members of the Proteacea family and plant species and to be applied in strict accordance with the manufacturer's recommended rates. Fertiliser shall be locally spread on soil surface around plants during planting operations. Allow for one fertiliser application in Year 1 and second application in Year 2.
- PESTS & DISEASES Regularly monitor all planted and grassed areas
  maintained under the contract for evidence of pest and/or disease attack.
  Identify and treat any/all problems arising. Identify any predation by
  rabbits, hares and other pests with potential to damage or destroy the
  landscape works under this contract and maintain all tree guards in good
  condition to limit such damage.



## 7. SUMMARY OF ASSESSMENT

### **7.1** Summary of Assessment

The visual environment for the subject site and surrounding area is characterised by open, flat rural land.

Whilst the subject has been cleared of vegetation, the local rural character of the area is evident and reinforced by the surrounding land uses and vegetation.

Although the site location is relatively close to the Mitchell Highway and views of the site are available, due to the presence of vegetation and distances from the viewpoint, views of the solar array are anticipated to be limited.

Views from Lidscomb Road into the site are open due to lack of visual obstructions however as the land falls slightly to the west, the proposed solar farm would be less visible within the surrounding landscape.

Most of these views however will be limited due to the distances from the site and existing elements that will obscure views. Although the landscape is typically open and flat to gently undulating, the low height of the solar array combined with the relative distances from the nominated viewpoints results in a low degree of visibility and impact on the surrounding rural landscapes.

The presence of existing vegetation and urban structures within the view shed of public viewpoints also assists in decreasing the prominence and visibility of the array. Given the precedence of the existing solar farm adjoining the site to the north, the introduction of the proposal solar farm would have less of a visual impact on the surrounding visual environment that if the surrounding land were primarily rural landscapes.

The Solar Farm is considered to have an overall Effect Significance of **Minor.** 

### **7.2** Mitigation Measures

As described in the summary for each of the 3 viewpoints, the height and nature of the solar farm along with the distances from the site will mean that it will have limited visibility within the landscape and from public vantage points. However, minor visual impacts could be anticipated from adjoining private viewpoints to the east. These would be considered minor as the existing larger solar farm to the north will already be visible and will have set a visual precedent for elements of this nature in the rural landscape.

Although there is no screening vegetation within the site, existing vegetation along the Mitchell Highway on the verges helps to reduce visual impacts from the road for users. Given the minor visual change to the rural landscape from public and private viewpoints, screening along the eastern side of the solar array only is proposed.

Table 4. Summary of Visual Impact Ratings for each Receptor

Receptor	Receptor Sensitivity	Magnitude of Change	Effect Significance
VP1	Low	Negligible	Minor - Negligible
VP2	Medium	Negligible	Minor
VP3	Low	Low	Minor



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