

14 March 2018

Laura Kerber
Planning and Development
Department of Planning, Transport and Infrastructure
GPO Box 1815
Adelaide 5000
AUSTRALIA

Dear Ms. Kerber,

Subject: DA 571/V001/18: Tailem Bend Solar Project Stage Two – Updated Landscape Character and Visual Impact Assessment Report

Equis Energy (Australia) Pty Ltd (Equis Energy) submitted a Development Application for the Tailem Bend Solar Project Stage 2 (TB2SP) on the 22nd December 2017, under section 49 of the *Development Act 1993* (SA). Consequently, on the 21st February Equis Energy submitted amended documents relevant to the Development Application (Development Number 571/V001/18) due to additional technology and corresponding sufficient availability within the market.

Since the submission of the amendment to the Development Application for TB2SP, new information has become available regarding the Coorong Council wastewater treatment pond batter heights which are located adjacent the subject site. The wastewater ponds were found to provide screening from the proposed solar panels for some sensitive receivers. The assumption had been made that the pond batter heights were 3.5-4 metres AHD based on previous information from the Council, however a survey has found that the southern wastewater pond height is lower which reduces the capacity of this landscape element to conceal the proposed solar panels. Based on the new information the LCVIA has been updated.

It is our understanding that discussions regarding the changes to the LCVIA have been previously highlighted to DPTI. Equis Energy submits the updated LCVIA which more accurately reflects the potential visual impact. However, the overarching impact to residents is not significantly altered by the updated information.

This amended report should be referred to as a summary of the landscape and visual impact to replace Section 6.1.3 and Section 7.2 of the Development Application and replace Appendix F of the Development Application.

Should you have any queries regarding the altered LCVIA for the Tailem Bend Solar Project Stage 2 Development Application, please do not hesitate to contact me via the detail below or Duncan Mortimer on; duncan.mortimer@equisenergy.com or 0417 997 099.

Yours sincerely,

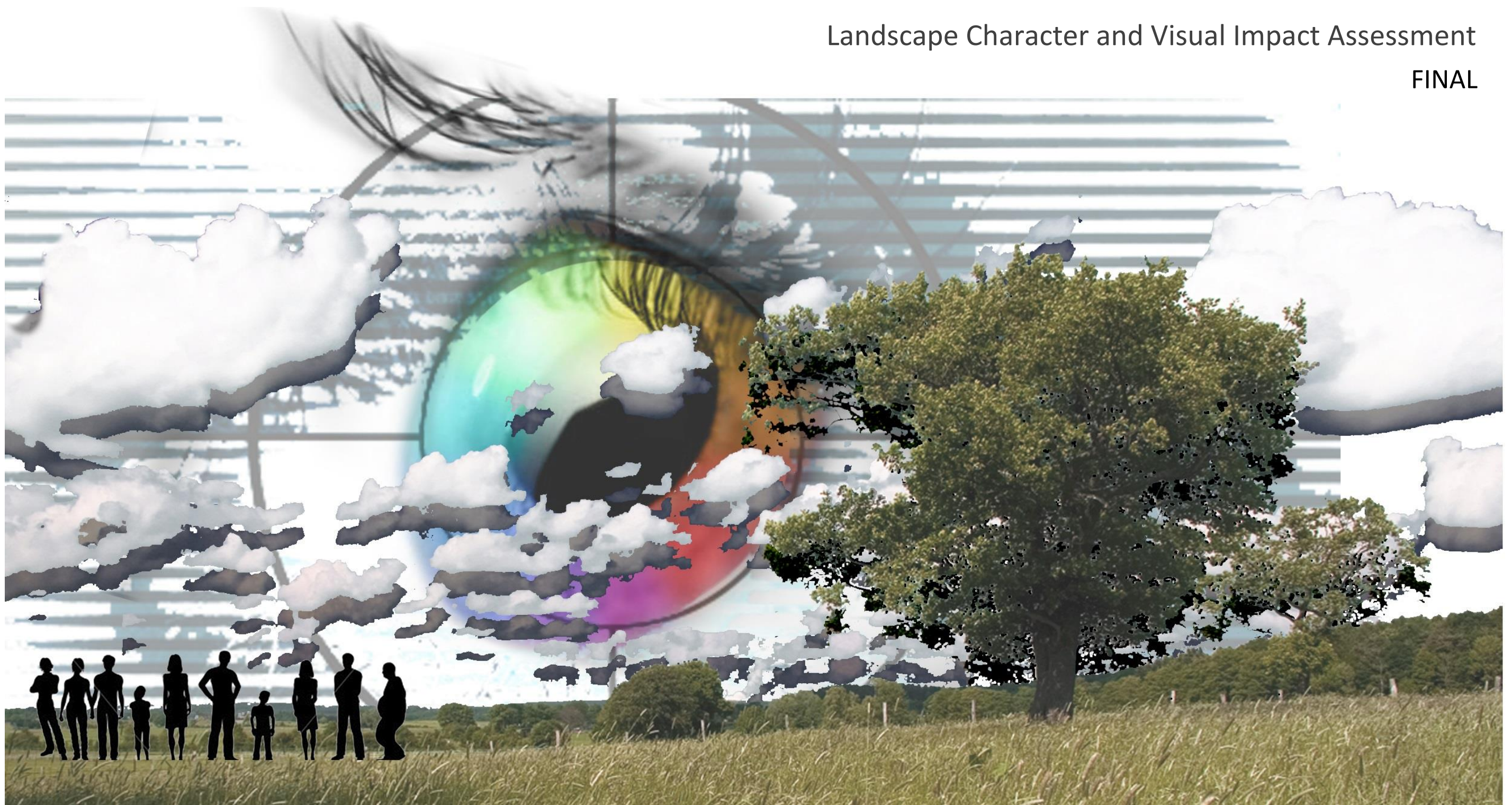


Anil Nangia
Managing Director

TAILEM BEND SOLAR PROJECT STAGE 2

Landscape Character and Visual Impact Assessment

FINAL



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About the author

Stuart Heseltine (SH), Registered Landscape Architect, Principal Hemisphere Design.

Stuart is acknowledged as one of South Australia's leading practitioners in the area of landscape character and visual impact assessment. In considering each visual impact assessment exercise Stuart undertakes a qualitative landscape character assessment consistent with best practice as prescribed by the Guidelines for Landscape and Visual Impact Assessment (third edition), the Landscape Institute (UK) and Institute of Environmental Management and Assessment (NSW) 2013.

Stuart has successfully applied this methodology to major projects across South Australia and Victoria which includes main road, high street and highway projects, the Adelaide Desalination Plant EIA, the Roseworthy Development Feasibility Study, the Palmer, Allendale and Barn Hill Windfarm Developments, numerous infrastructure developments undertaken by ElectraNet SA and visual assessment exercises pertaining to Development Applications lodged in a numerous Adelaide metropolitan and regional council areas.

Stuart's particular expertise in undertaking visual assessments is highly sought after for the provision of expert evidence for the Environment, Resources and Development Court (SA).

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N/A	6/12/17	SH	SH	6/12/17	Draft	Jacobs & Equis Energy
Revision A	19/12/17	SH	SH	19/12/17	Final	Jacobs & Equis Energy
Revision B	01/02/18	SH	SH	01/02/18	Draft Amendment Document	Jacobs & Equis Energy
Revision C	12/02/18	SH	SH	12/02/18	Final	Jacobs & Equis Energy
Revision D	13/03/18	SH	SH	13/03/18	Final	Jacobs & Equis Energy

1. Introduction

1.1 The Tailem Bend Solar Project Stage 2

This assessment has been prepared to support a Development Application for the Tailem Bend Solar Project Stage 2 (TB2SP) and provides an overview of the existing landscape character and visual amenity of the proposed location, the sensitivity of the landscape to change, and the degree of visual impact as a result of the proposed development. Where relevant this report refers to and incorporates the outcomes of the analysis exercise conducted for the adjacent and approved Tailem Bend Solar Project Stage 1 (TBSP).

The delivery of the TB2SP has the potential to result in further change to the existing landscape character and visual amenity of the landscape beyond what is been envisaged in the delivery of the TBSP project. Like TBSP the proposed TB2SP location is highly disturbed by historical agricultural activity and represents further additional visual alteration to the landscape. The degree of likely visual impact of the TB2SP is discussed and, where relevant and appropriate, mitigation measures that would minimise the degree of visual impact are identified.

The degree of likely impact was determined based on an on-site analysis of viewpoints from both publicly accessible areas and locations within residential properties. This impact assessment includes photomontages which, where relevant substantiate the findings of the on- site analysis.

It should be noted that assessment of visual impact is highly subjective and the individual consideration of visual impact from any given location or view point may differ from the findings presented in this assessment.

The TB2SP will have a capacity of up to 100MW. The project will include solar panels, inverter stations, provision for a future battery storage facility, a control room and site office, access tracks for maintenance vehicles, compound areas and connection into the facility substation on the southern side of Substation Road.

The solar panels will be mounted on single-axis tracking structures. The single-axis mounting system allows the panels to track the sun from east to west across the sky over the day. The typical height of the bottom of the solar modules will be 0.5 to 1.0 metres above ground level. The height of modules is expected to be a maximum of 4.5 metres above ground level. The panels will be installed in parallel rows, with potential spacing of up to 9.5 metre between each row.

Inverter stations will have a typical maximum height of 3 metres above ground and habitable buildings including; a single storey dual administration and controls building with a maximum height of six meters. Lightning protection will be established for at least every third or fourth inverter. The lightning protection units are thin tubular structures up to 8 m in height that are not expected to be easily discernible outside the boundary of the project site.

1.2 Project Area

The TB2SP is situated immediately north of the TBSP site, located approximately 1.5 km south-east of Tailem-Bend and 90 km south-east of Adelaide.

The subject site is predominantly cleared due to historical clearing on the land, which has been utilised for cropping and pasture. Scattered patches of remnant native vegetation comprising approximately 22 hectares and approximately 53 scattered remnant individual trees are present on the site. The design of the TB2SP has avoided native vegetation where possible, however clearance of some native vegetation will be required including approximately 46 scattered remnant native trees and 1.3 hectares of small patches. The site is bound by Substation Road (south), the disused Tailem Bend – Loxton Railway (north) and private properties to the east and west with connection to Lime Kiln Road provided via Substation Road to the west.

The subject site landform follows the contextual topography, rising gently from an approximate height of 27 m AHD¹ on the western boundary to an approximate height of 38 m AHD on the eastern boundary. From the western boundary, and at a distance of approximately 0.4 kilometres off the western boundary, the rising land crests at an approximate height of 31 m AHD. This crest (referred to herein as Crest A), creates a subtle, north south undulating ridge line which at a mid-point attains an approximate maximum height of 31 m AHD falling away to an approximate height of 27 m AHD to the northern site boundary and to an approximate height of 26 m AHD to the southern site boundary. Beyond the Crest A ridge line the land dips away to two shallow depressions before rising to a second north - south sloping crest (referred to herein as Crest B), and ridge line which attains an approximate height of 32 m AHD at the northern site boundary, falling away to an approximate height of 26 m AHD on the southern site boundary. Crest B is located approximately 1.5 kilometres off the western boundary. A third shallow depression lies east of the Crest B ridge line, beyond the Crest B ridge line the site continues to rise over land covered with mature native trees to the eastern site boundary.

Two rectangular shaped wastewater treatment ponds are located adjacent to the north-western boundary of the site.

¹ All approximate levels determined from Google Earth

The Northern Wastewater Treatment Pond

Engineering drawings used for the construction of the northern wastewater treatment pond received from Coorong District Council indicate that the graded batters of the pond rise to a height of approximately 4.5 m AHD. The relative height of the western batter largely precludes views into the flatter north western corner of the site from the locations immediately west of the site. (Refer HD_U007_AD01_Sheet3 – page 13).

The Southern Wastewater Treatment Pond

A recently conducted engineering line and level survey has ascertained that the relative heights of the batters enclosing the southern wastewater treatment pond are an average of 0.8 m AHD on the eastern and northern edges and an average of 1.8m AHD and 1.9 m AHD on the western and southern edges. These average heights are below the previously estimated 3.5 m AHD batter heights used in a previous version (Revision C) of this assessment. Where relevant the visual impact on sensitive receptors has been reassessed in consideration of this information and photomontage imagery adjusted accordingly.

In preparing this assessment a 'worst case scenario' has been presented when considering the likely role the wastewater treatment pond batters will play in mitigating the visual impact of PV panels located on land to the east of the of the western boundary and in particular where rows of PV panels are installed along the rising land to the Crest A ridgeline.

The surrounding land use is predominantly agricultural, with scattered rural dwellings. In addition to the two council wastewater treatment ponds there are overhead ElectraNet transmission lines across the eastern end of the subject site and the disused railway to the north. An existing ElectraNet substation is located adjacent to the southern boundary of the subject site, at which the network connection would be made via a new facility substation (forming part of the Stage 1 project). Within proximity to the subject site is a visually prominent telecommunications tower beyond which the upper portion of the Tailem Bend water tower can be identified on the horizon.

1.3 Assumptions

A number of assumptions have been made which are:

- That the development of the solar farm will not require any new transmission power lines, transmission towers or similar infrastructure beyond the existing 132KV transmission line which crosses the site. However during the detail design phase it may be determined that existing single – wire earth return (SWER) power lines carried on 8 m high poles which provide power to local homes may need to be replaced, upgraded or relocated to the site boundary.
- That security fencing will be erected on all perimeters. That the fencing is likely to be of a height of approximately 1.8 m and be of a post and panel construction which allows a high degree of visual permeability; and
- Grades and levels within the development site are likely to be altered (e.g. the filling of gullies and low points) to facilitate the installation of PV panels, construction of internal access paths and construction of associated infrastructure.

2. Assessment Methodology

2.1 Desktop Study

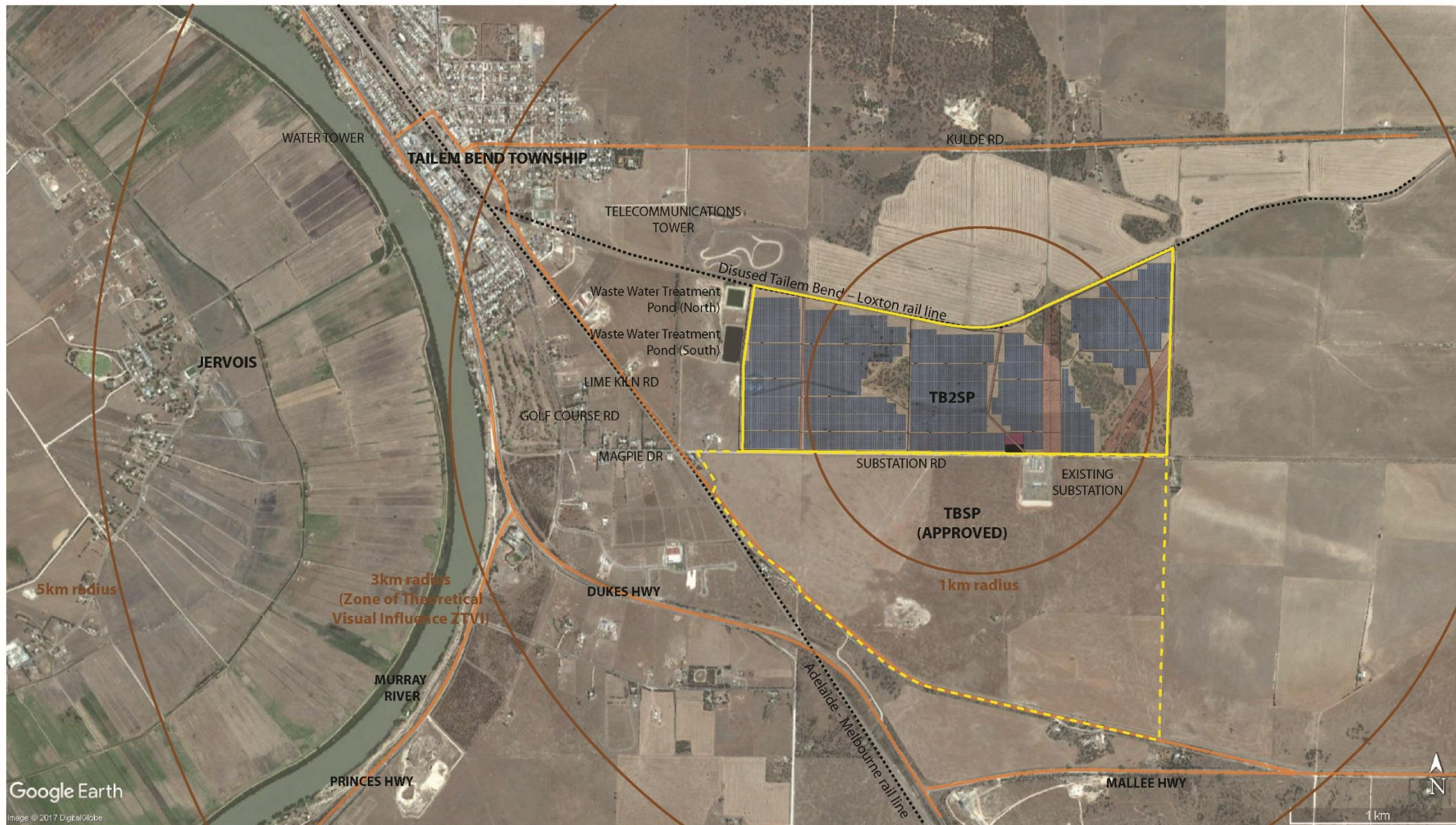
A desktop evaluation was undertaken to identify the nature of the regional topography and consequently likely viewpoints from which the development may be apparent. This evaluation identified a suitable study area for on - site assessment.

This study area, the 'Zone of Theoretical Visual Influence' (ZTVI) was defined based on the assumption that modification to the contextual landscape as a result of the development could be discernible to the naked eye from within this defined area. Given that the maximum height of the PV panels associated with the development is 4.5 meters, a distance of up to a 5 km radius from the development was adopted as the furthest extent of the ZTVI.

The subsequent on - site assessment revealed that within a predominately planar, and subtly undulating landscape the assumed ZTVI distance of 5 km was generous for a solar farm development. Consequently, a distance defined by 3 km radius from the centre of the development was adopted as the furthest extent of the ZTVI. (Refer HD_U007_AD01 _ Sheet 1 – page 6)



Photo: Substation Road view north east – east to TB2SP site



- LEGEND**
-  TB2SP
 -  Rail line

TITLE	LANDSCAPE CONTEXT PLAN			
PROJECT	TAILLEM BEND SOLAR PROJECT STAGE TWO			
DWG NO	HD_U007_AD01	SCALE	SHEET NO	REVISION
DRAWN	SW	CHECKED	DATE	11/17
		SRH		




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2.2 Site Visit and Photography

A series of site visits were undertaken on the 6th, 8th and 23rd of November 2017.

On each visit, photographs were taken at selected viewpoints to underpin the landscape character and visual impact assessment. Photographs have been taken using a Nikon 35mm Single Lens Reflex (SLR) camera with an approximate lens setting of 43mm.

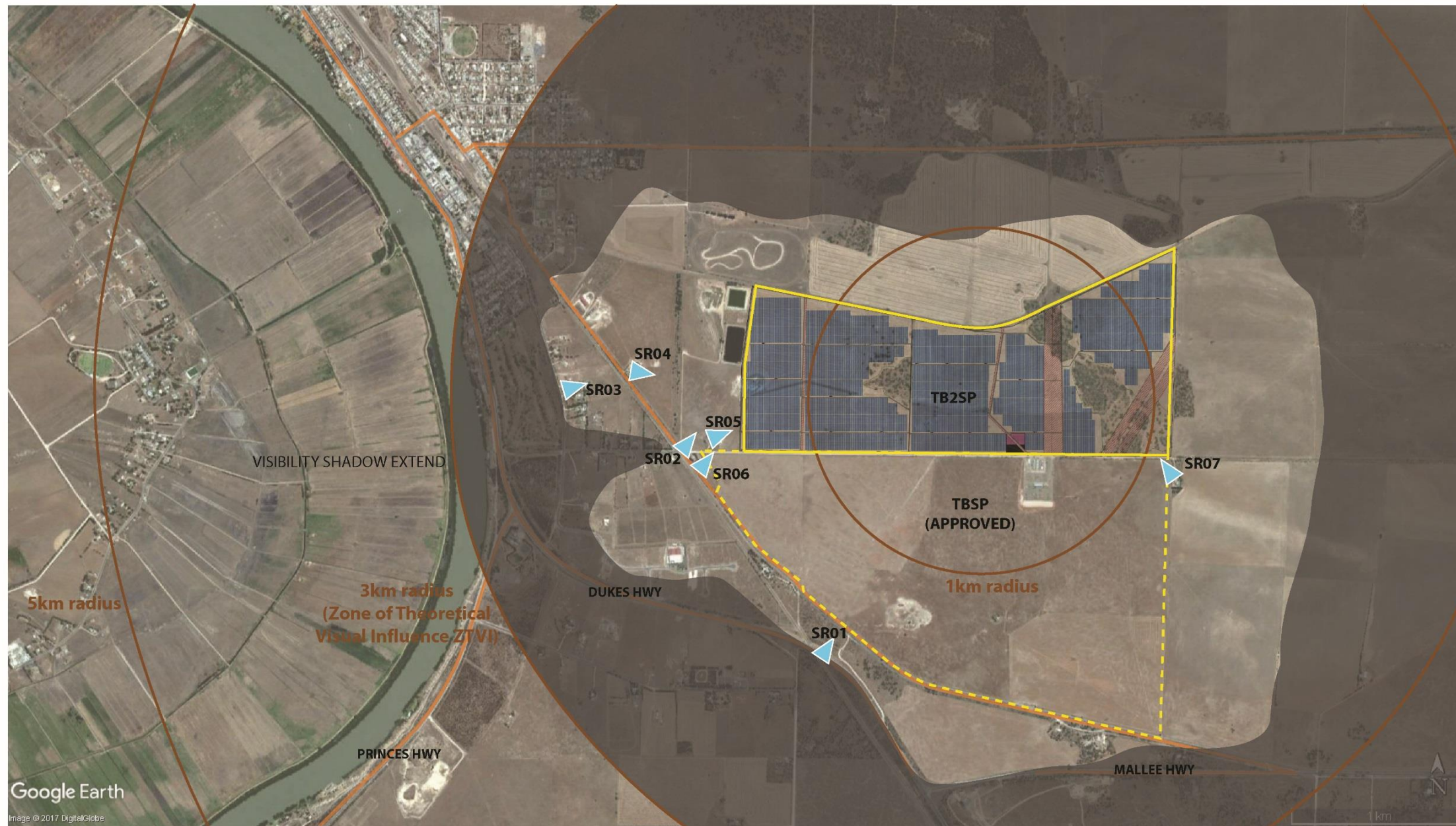
Where appropriate, panoramas have been presented at certain viewpoints to simulate the wider horizontal field of view that a person typically experiences, as opposed to what is represented in a single photograph. The selected panoramas have been used to prepare photomontages which, where relevant substantiate the findings of the on-site analysis. It should be noted that these photomontages have not been survey rectified.

The ZTVI was assessed and 'truthed' on-site, where further consideration was given to the presence of other intervening elements, e.g. vegetation, local topography and built form that may obscure views to the solar farm, providing a conservative indication of the visibility of the solar farm.

In concluding the on-site assessment, the visibility or lack thereof of the solar farm from within the ZTVI has been represented through the identification of a 'visibility shadow' diagram (Refer HD_U007_AD01_Sheet 4 - page 8). This diagram identifies areas within the ZTVI where it is predicted that the proposed development will not be visible because there are a combination of ridgelines and specific blocks of vegetation between the viewer and the proposal that potentially blocks all views. Through the on-site assessment it was determined that generally, areas beyond the ZTVI and 'visibility shadow' are likely to be too far away from the proposed site to offer discernible views of the solar farm.



Photo: View to TB2SP from telecommunications tower



LEGEND

-  Visibility shadow
-  TB2SP site boundary
-  SR01 Sensitive Receptor

TITLE **VISIBILITY SHADOW MAP**
 PROJECT **TAILEM BEND SOLAR PROJECT STAGE TWO**
 DWG NO HD_U007_AD01 SCALE - SHEET NO 4 REVISION -
 DRAWN SW CHECKED SRH DATE 11/17



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2.3 Evaluation of the Existing Landscape Character

A qualitative landscape character assessment has been undertaken in a rigorous manner consistent with best practice, as prescribed by the *Guidelines for Landscape and Visual Impact Assessment* (Third Edition).²

2.3.1 Landscape Assessment

Landscape assessment, in contrast to visual assessment, deals with the fabric, character and quality of the countryside. The landscape fabric consists of the elements that make up the landscape, such as landform, land-use and cultural influences. The way these elements fit together in terms of proportion, pattern, scale, etc., gives rise to a particular landscape character. Changes to the fabric and character of a particular landscape may affect the perceived value of that landscape, giving rise to changes in its quality.

The landscape character assessment has encompassed both the wider contextual landscape and the locality, which is visually more difficult to define and within which the proposed development is located.

This characterisation process establishes a 'baseline' upon which judgments about the potential effects of the proposed development can be made. I apply the following guiding definitions to determine my assessments:

- **High scenic quality:** Areas and localities which exhibit an exceptionally strong positive character with valued features which combine to give an experience of unity, richness and harmony. Within this definition 'exceptional' could apply where an area is also deemed to be worthy of a legislative designation, e.g. a National Park;
- **Moderate scenic quality:** Areas which exhibit a strong positive character with valued features with evidence of a visually acceptable level of alteration/degradation/erosion resulting in a location of more mixed character;

- **Low scenic quality:** Areas with a generally positive character with fewer valued features with evidence of a visually acceptable level of alteration/degradation/erosion resulting in a location of more mixed character; and
- **No scenic quality:** Areas with little or no positive character with few or no valued features with evidence of a visually unacceptable level of alteration/degradation/erosion resulting in a highly modified location of little character.

² Landscape Institute and Institute of Environmental Management and Assessment. *Guidelines for Landscape and Visual Impact Assessment*, Third edition, 2013.

2.3.2 Landscape Sensitivity

Further, the characterisation process includes consideration of the current landscape character and the ability of the landscape to absorb the visual change associated with the proposed infrastructure. This is categorised as either high, medium, low or negligible, where for example, a landscape that displays a high 'sensitivity to change' would not be able to absorb a development of this nature without irreparable consequences and impacts on the inherent character and visual amenity.

The factors used to determine the landscape sensitivity include:

- Pattern and scale of the landscape;
- Existing land use;
- Visual enclosure and openness of views;
- Scope for mitigation which would be in character with the existing landscape; and
- Value of the modified or natural visual landscape and 'sense of place'.

In general landscape sensitivity:

- Decreases when the viewing time is infrequent and becomes shorter; however, repetitive viewing even if of a short duration will increase sensitivity;
- Decreases as distance from the viewer to the development increases;
- Varies depending on the activity of the viewer, for example a resident within the confines of their dwelling at rest as compared to a rural hiker;
- Increases where a view is enjoyed and highly valued by the immediate community;
- Increases where a view is seen by many viewers;
- Increases if the view is seen from residences; and
- Increases if the visual landscape plays a part in tourist or recreational activities.

In total, 18 locations or waypoints have been visited to determine both the landscape character of the contextual landscape and the more immediate study area, the locality. The locality is broadly contained within a three-kilometre (i.e. the extent of the ZTVI and the 'visibility shadow') radius from the TB2SP site.

(Refer HD_U007_AD01 _ Sheet 2 – page 12)



Photo: Existing vegetation at TB2SP site to be retained.

2.3.3 Sense of Place

The term 'sense of place' is used in urban and rural studies in relation to place-making and most importantly the 'place attachment' of communities to their environment or homeland. The term sense of place is used in many ways, however for the purpose of landscape evaluation I use the following definition sourced from the Geography Dictionary; accordingly sense of place is:

*"Either the intrinsic character of a place, or the meaning people give to it, but, more often, a mixture of both."*³

*"A sense of place is a unique collection of qualities and characteristics – visual, cultural, social, and environmental – that provide meaning to a location. Sense of place is what makes one city or town different from another, but sense of place is also what makes our physical surroundings worth caring about."*⁴

Therefore, in my opinion and in keeping with best practice guidelines for visual assessment, a landscape character assessment must go beyond merely describing land form and use but should also attempt to recognise and give consideration to the 'sense of place' and the values inherent in 'place attachment'.

Whilst 'place attachment' is not an amenity and character value that can be easily quantified or measured, I believe it is important to do so given the significance it plays and especially so in this particular situation.

In my experience, 'place attachment' is the complex synergy of any number of relevant sensory and emotive qualities, which shape how individuals and communities perceive and connect to the landscape. Place attachment is generally expressed as a positive association with the locality. Through their frequent interaction (both passive and active) with a place, locals can be profoundly stimulated in a positive way by these cumulative influences. Their attachment to the 'place' is because of the way it makes them feel.

The place attachment value, in conjunction with the appreciation of the contextual landscape assists in defining sense of place and landscape character for a given locality.

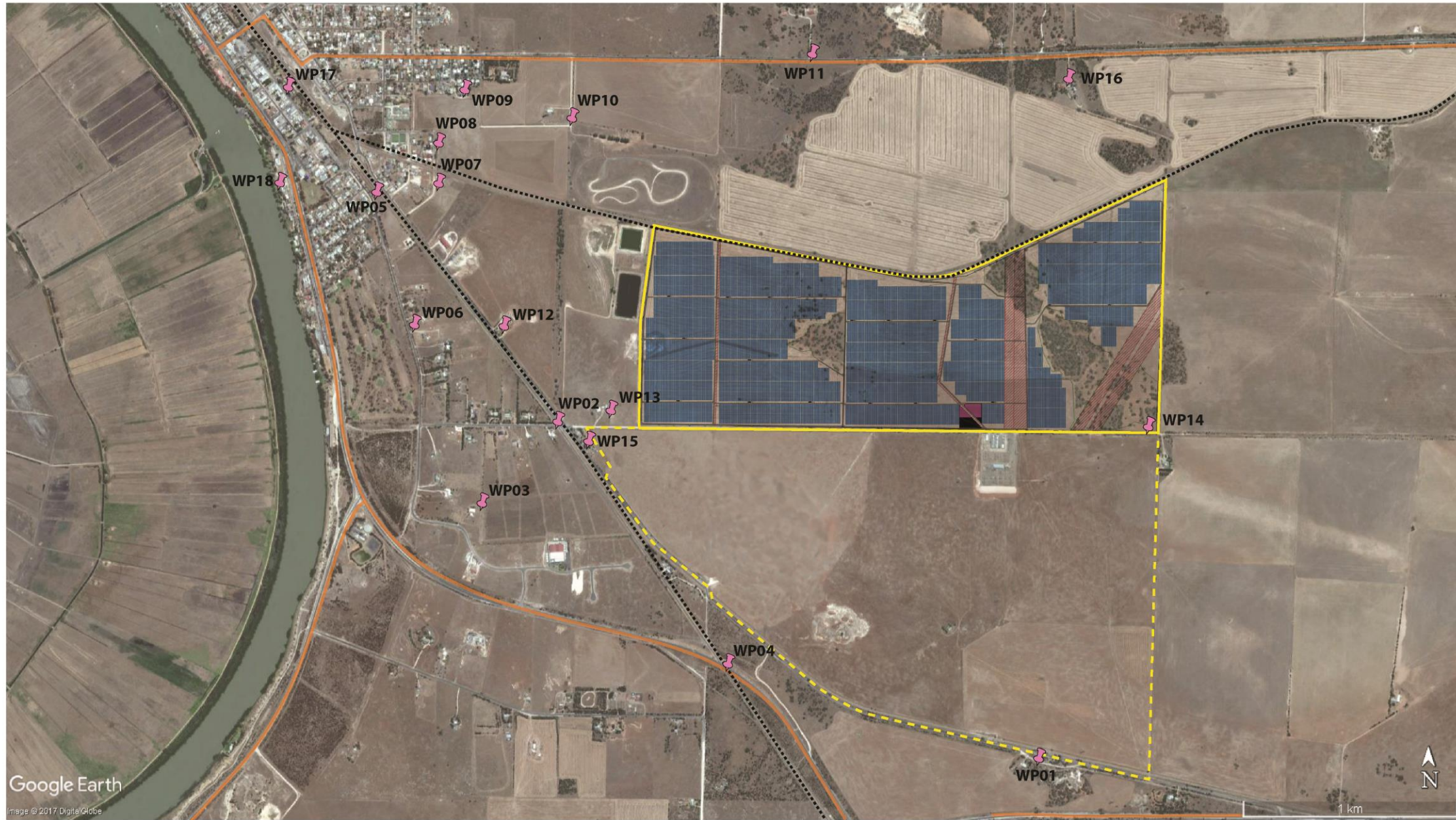
Understanding and applying weighted consideration to a community's intimate relationship with their contextual surroundings is paramount and in my opinion, and the opinion of others, the defining feature of landscape.

*"Landscape is about the relationship between people and place. It provides the setting for our day-to-day lives. The term does not mean just special or designated landscapes and it does not only apply to the countryside. Landscape can mean a small patch of urban wasteland as much as a mountain range and an urban park as much as an expanse of lowland plain. It results from the way that different components of our environment - both natural (the influences of geology, soils, climate, flora and fauna) and cultural (the historical and current impact of land use, settlement, enclosure and other human interventions) - interact together and are perceived by us. People's perceptions turn land into the concept of landscape."*⁵




³ Buntin, S.B., Terrain.org and the Online Nexus of Literature and environment. Virtual Sense of Place. 2009. <http://www.terrain.org/ecomedia/q1/definitions.htm>

⁴ McMahon, E.T., UrbanLand The Magazine of the Urban Land Institute. The Distinctive City. 4 April 2012. <http://www.urbanland.uli.org/development-business/the-distinctive-city>

⁵ Swanwick, C and Land Use Consultants (2002) in Landscape Institute and Institute of Environmental Management and Assessment. Guidelines for Landscape and Visual Impact Assessment, Third edition, 2013, p. 394



LEGEND

-  WP01 Waypoint location
-  TB2SP
-  Rail line

TITLE	WAYPOINT LOCATIONS		
PROJECT	TAILM BEND SOLAR PROJECT STAGE TWO		
DWG NO	SCALE	SHEET NO	REVISION
HD_U007_AD01	-	2	-
DRAWN	CHECKED	DATE	
SW	SRH	11/17	




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3. Landscape Character and Visual Impact Assessment

3.1 Landscape Character of the Locality

The characterisation of the locality and area contained within the ZTVI has identified three distinct landscape character units. (Refer HD_U007_AD01_Sheet 3 – page 14)

3.1.1 The Township of Tailem Bend

This character unit broadly comprises of the built form of the Tailem Bend township which is located to the north of the TB2SP and within the defined ‘visibility shadow’ (Refer HD_U007_AD01_Sheet 4 – page 18), consequently views from the township to the TB2SP site are precluded.

A pioneering settlement typical of several townships in rural South-East Australia, the historic charm of the once vibrant rail industry on which the commercial prosperity of the town was founded is still evident and resonates through the high street and town centre. It is a locality where the communities sense of pride is both obvious and celebrated through both the presence of poignant memorials, historical interpretive signs and whimsical animal statues.

As an experienced Landscape Architect, I can say that whilst the diversity of attractive sensory qualities can be experienced within this landscape character unit, it may be limited. It is my opinion that that the ‘place attachment’ value in this landscape character unit would likely be one of relative significance.

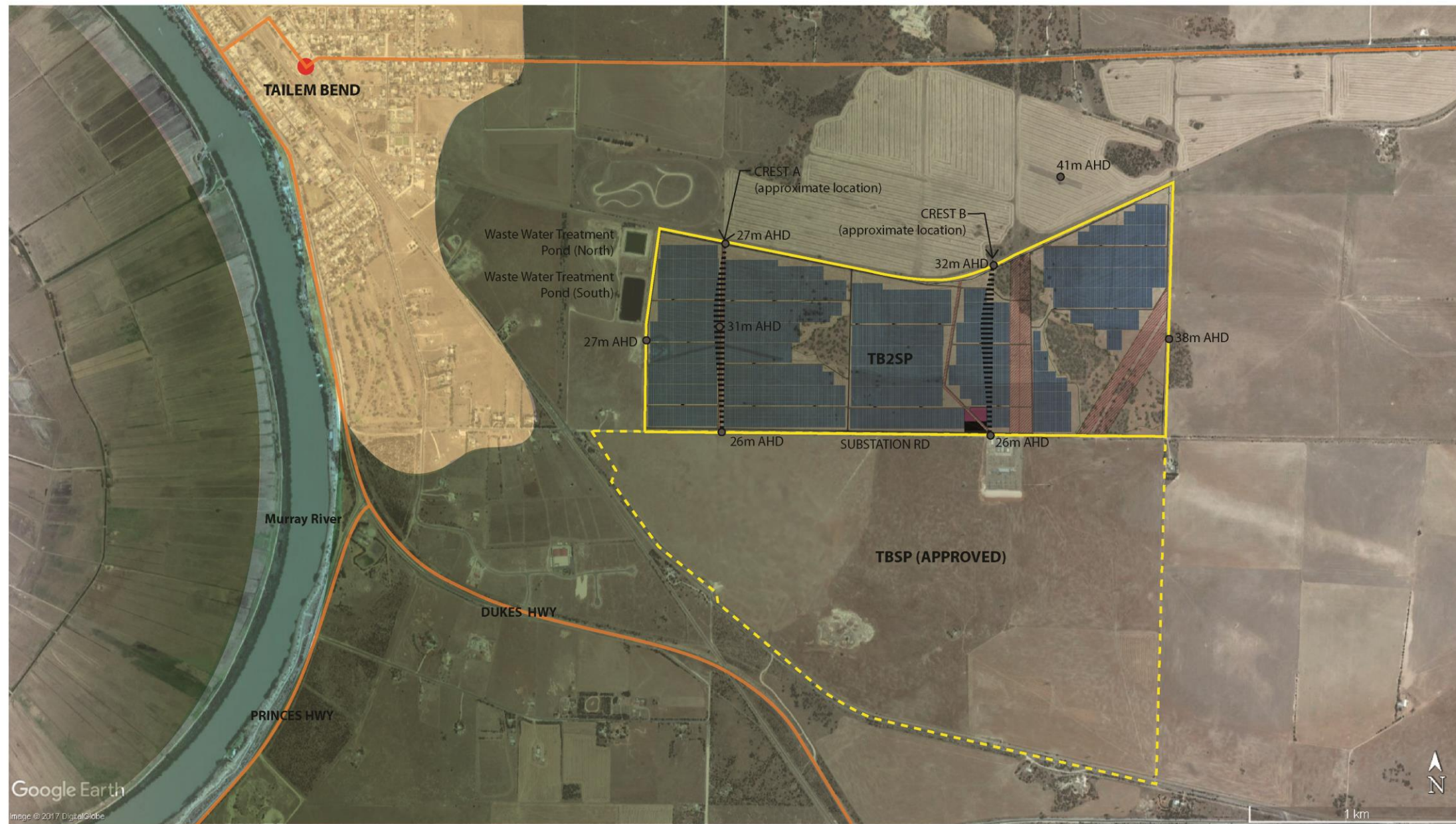
Therefore, it is my opinion that the sense of place and landscape character of the Tailem Bend township is one of a **low to moderate scenic quality** and has a **moderate sensitivity to change**.



Photo: Tailem Bend township- Railway Terrace



Photo: Tailem Bend township- Railway Terrace



LEGEND

- Rural township
- Murray River riparian corridor
- Expansive eastern plains
- TB2SP site boundary
- Crest



TITLE	LANDSCAPE CHARACTER UNITS		
PROJECT	TAILEM BEND SOLAR PROJECT STAGE TWO		
DWG NO	SCALE	SHEET NO	REVISION
HD_U007_AD01	-	3	-
DRAWN	CHECKED	DATE	
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3.1.2 The Meandering Murray River Riparian Corridor

Almost anonymous to the traveller passing through Taillem Bend, the Murray River announces its presence in a somewhat laconic fashion when the traveller pauses at one of a number of elevated vantage points off the Dukes Highway. The Murray River corridor lies beyond the project 'visibility shadow' and as such the TB2SP project will not impact on the character or amenity of this treasured asset.

The river expanse is flanked either side by swathes of water's edge plantings which appear as a lush 'billowing' like blanket of vegetation softening the river's edge against the more visually acute pastoral fields to the west. The meandering, sinuous corridor draws the eye of the observer north to the distant hills which envelope Mount Barker.

A valued, treasured, visual and recreational amenity, the sense of place and landscape character of the Murray River riparian corridor is of a **moderate to high scenic quality** and has a **moderate sensitivity to change**



Photo: Murray River lookout point.

3.1.3 The Expansive Eastern Plains

A visually simple landscape comprising of a mostly flat, planar landform of expansive open pastoral and cropping fields. Elevations range from 10 to 100 m AHD as the landscape slopes towards the coast and Murray River to the west. A landscape of monotonous vistas where the general absence of significant boundary plantings and the occasional only scattered groups of mature native trees clustered around the few scattered rural dwellings in the locality allows the eye to sweep across the landform in a fleeting moment.

The collection of angular and 'mechanical' infrastructure elements of the existing substation, corridors of transmission towers, catenary of overhead wires and a singular telecommunications tower momentarily captures the eye of the observer from numerous locations within the character unit. Notwithstanding, the vastness of the landscape instils a sense of remoteness where occasional sheep appear to be the primary occupants.

It is a landscape of both sealed and unsealed straight roads which appear endless, bounded by post and wire fencing. It is a landscape infrequently visited by the tourist, however the imminent opening of the Tailem Bend Motorsport Park may see an increase in patronage of the township and outskirts of town via the eastern plains landscape.

The elevated Dukes Highway railway overpass, affords unrestricted panoramic views across the eastern plains landscape which contains both the approved TBSP and proposed TB2SP project sites. These views and views to the horizon are dominated by the silhouetted, incongruous mechanical forms of the electricity substation and its associated infrastructure.

The expansive eastern plains are a simple landscape that offers little visual appeal nor visual amenity.

It is my opinion that the landscape of the locality is of a **low scenic quality** and has a **low sensitivity to change**.



Photo: View to TBSP and TB2SP from elevated Dukes Highway.

3.2 Likely Visual Impact of the Proposed Development

Of the 18 locations or waypoints visited the evaluation has identified:

(i) Seven locations comprising of waypoints WP02, 04, 06, 12-15 which are 'Sensitive Receptors' SR01 - 07, which comprise of:

- six residential dwellings within a three-kilometre radius of the solar project (within the ZTVI);
- an elevated vantage point on the Dukes Highway overpass south of Taillem Bend;

These are locations from where it is considered the proposed solar project development is likely to be wholly or partially visible and in some instances prominent.

(ii) Four locations comprising of waypoints WP01, 03, 10, 16 from which partial views of varying magnitude only of TB2SP are likely.

These locations are representative of many similar locations from within the ZTVI from which other similar views could be obtained. However, they are considered of low or no sensitivity due to their remoteness as a location, E.g. an unsealed road used infrequently and by local traffic only, where the number of affected viewers would be negligible.

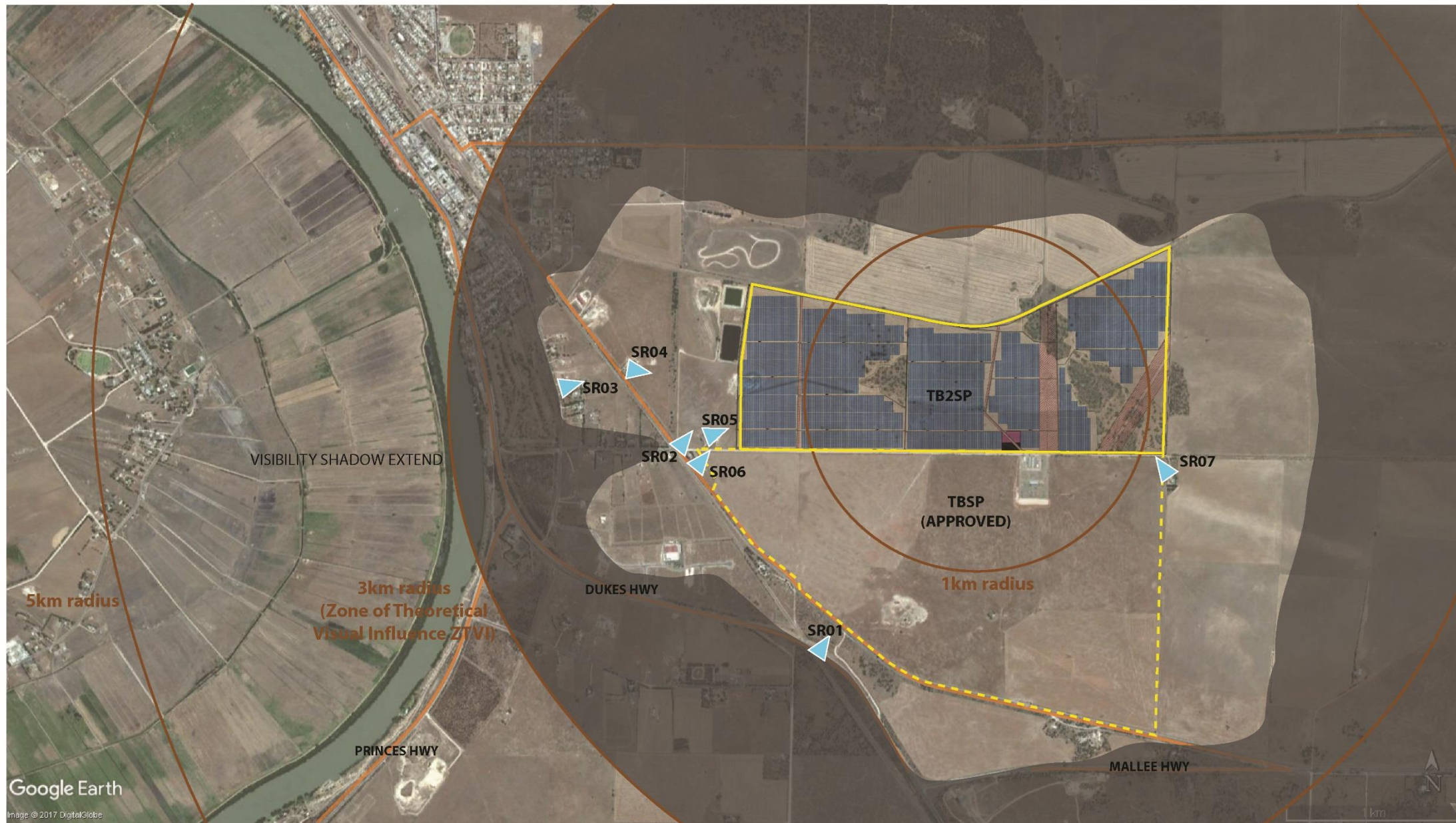
(iii) Seven locations comprising of waypoints WP05, 07 - 09, 11 and 17 - 18 from which views of TB2SP will be concealed through a combination of both landform and vegetation screening.




My assessment of the likely visual impact of the proposed TB2SP has been confined to the seven 'Sensitive Receptors'. (Refer HD_U007_AD01 _ Sheet 4 – page 18).

With each assessment, reference is made to the description of the relevant prevailing landscape character unit.

For each 'Sensitive Receptor' the likely visual impact of the proposed development is described considering factors which may include:

- The visual qualities of the view and the duration and angle of the view in relation to the main activity of the viewer;
- The distance of the viewpoint from the proposed development;
- The extent of the area over which the changes would be visible and the scale of the change in the view (loss or addition of features, changes in composition, proportion of view affected);
- The degree of contrast in form, scale, mass, line, height, colour and texture introduced into the view by the proposed development;
- The duration and nature of the effect (temporary, permanent, intermittent); and
- The numbers and types of viewers affected.



- LEGEND**
-  Visibility shadow
 -  TB2SP site boundary
 -  **SR01** Sensitive Receptor

TITLE	VISIBILITY SHADOW MAP		
PROJECT	TAILEM BEND SOLAR PROJECT STAGE TWO		
DWG NO	SCALE	SHEET NO	REVISION
HD_U007_AD01	-	4	-
DRAWN	CHECKED	DATE	
SW	SRH	11/17	




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3.3 General Solar Farm Development Considerations

Photovoltaic panels are designed to absorb sunlight and convert it to electricity. Minimising the light reflected from the panels is a goal of panel design, manufacture and installation.

The dark, non-reflective nature of a solar array is generally considered to help minimise their visual contrast with the surrounding landscape, where at a distance they will appear similar to the belts of boundary plantings of native evergreen trees. Their horizontal scale is consistent with the large paddocks in the eastern plains character unit.

The solar plant will be low in profile, comprising of panels which when fully tilted at 60° does not exceed 4.5 metres in height. In theory the solar farm should be visible in the fore and mid-ground when viewed from locations to the immediate west and south of the site. However, it is apparent that subtle changes in undulation across the site and wider contextual landscape coupled with the presence of existing vegetation scattered throughout the area is likely to screen part or the entire solar project from many locations within these immediate areas.

For viewers who are more than three kilometres away from the TB2SP the reduction in apparent size of the solar project brought about by distance will mean that it is likely to be insignificant in height and therefore concealed within the view.

The likely potential visual impact of glare due to reflection from the solar farm PV panels and associated infrastructure is not assessed in this study.

3.4 Construction Phase

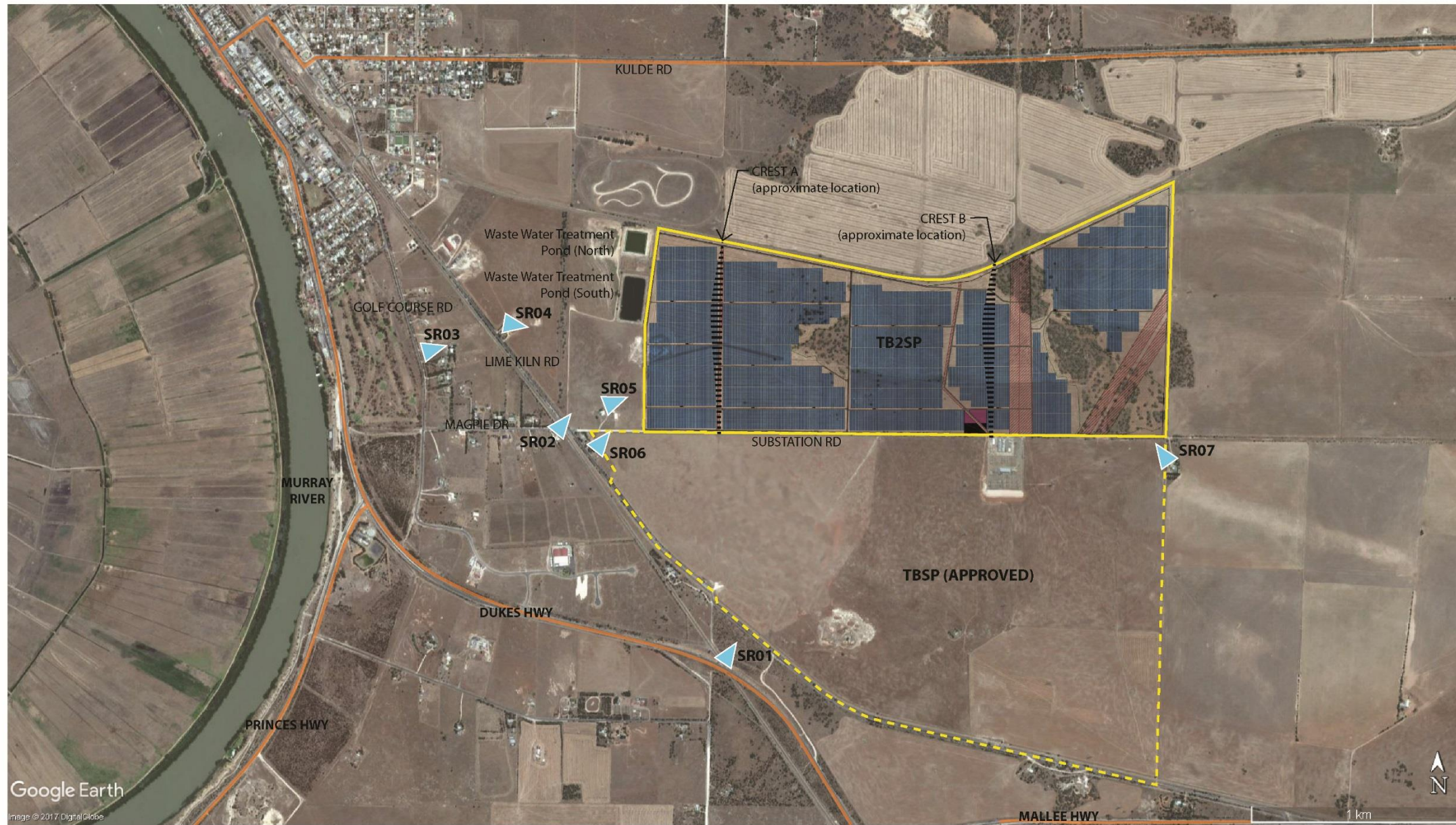
During the construction phase, the change to visual amenity within the locality will occur because of earthworks, construction of additional ancillary infrastructure and an overall increase in the number of people and vehicles. The changing visual environment and activity during construction will be temporary, therefore is not considered in detail within the visual impact assessment.

3.5 Likely Visual Impact at the Identified 'Sensitive Receptors'

The following criteria were applied to describe the likely visual impact of the proposed development at each 'Sensitive Receptor':

- **Substantial adverse impact** – where the scheme would cause a significant deterioration in the existing view;
- **Moderate adverse impact** – where the scheme would cause a noticeable deterioration in the existing view;
- **Slight adverse impact** – where the scheme would cause a barely perceptible deterioration in the existing view;
- **Slight beneficial impact** – where the scheme would cause a barely perceptible improvement in the existing view;
- **Moderate beneficial impact** – where the scheme would cause a noticeable improvement in the existing view;
- **Substantial beneficial impact** – where the scheme would cause a significant improvement in the existing view; and
- **No change** - No discernible deterioration or improvement in the existing view.

(Refer HDU007_AD01_Sheet 5 – page 20)



LEGEND

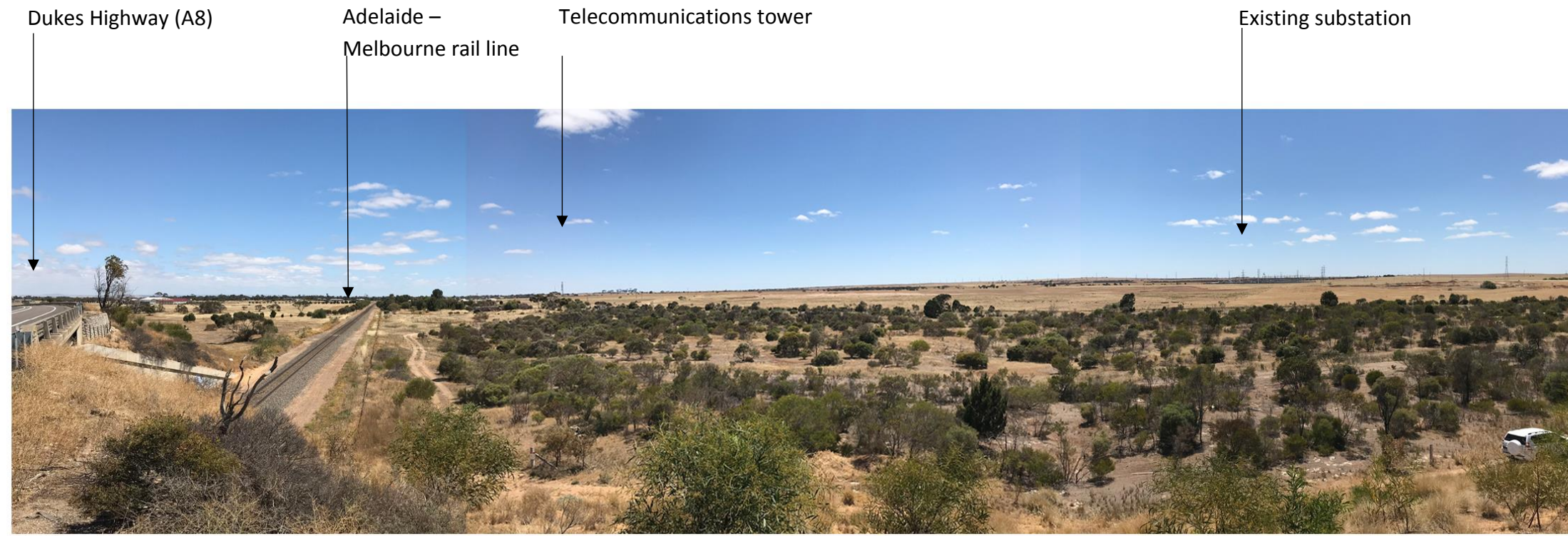
- SR01 Sensitive Receptor
- TB2SP site boundary
- Crest

TITLE	SENSITIVE RECEPTORS		
PROJECT	TAILEM BEND SOLAR PROJECT STAGE 2		
DWG NO	SCALE	SHEET NO	REVISION
HD_U007_AD01	-	5	-
DRAWN	CHECKED	DATE	
SW	SRH	11/17	



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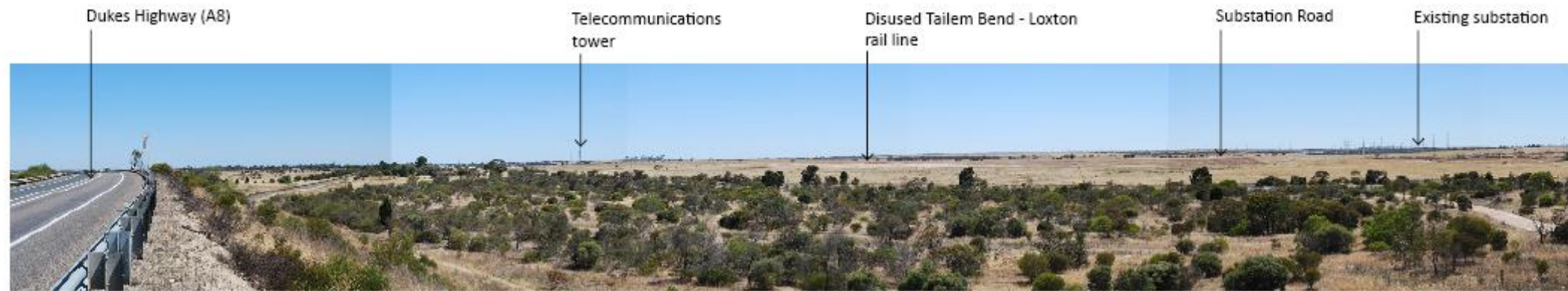
Landscape and Visual Impact Assessment: Sensitive Receptor SR #01



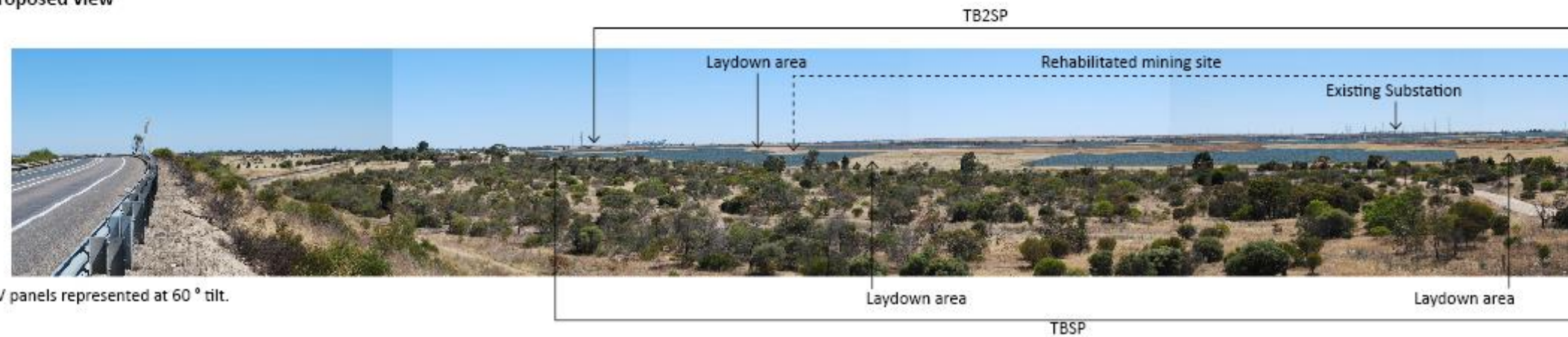
Location	Elevated location on the Dukes Highway (A8); a north - south dual lane carriageway with a 110 kph speed limit. The location where both TB2SP and the approved TBSP will appear as a singular feature within the contextual landscape.
View direction	Panoramic view north east – east – south east.
Landscape and setting	<i>'Expansive eastern plains'</i> - Character Unit 2; a landscape of low scenic quality . When searching for visual stimulation the eye of the travelling observer is drawn over a foreground of sparse and unimaginative native shrub and ground cover plantings to the wider, planar landscape of cropping fields. The visually ad-hoc arrangement of electricity substation infrastructure and the extensive presence of transmission towers with a catenary of overhead cables offers only a fleeting moment of visual interest. The eye of the observer quickly slips away into the distance where the lack of 'tracery' over the expansive horizon delivers a sharp juxtaposition between landform and skyline. A monumentally underwhelming panorama of limited visual merit.
Distance from Project Site(s)	1 km.
Visual exposure at receptor	Low for TB2SP, Moderate to High for both TB2SP and TBSP.

	<p>From this elevated vantage point the homogenous and prostate arrangement of the PV panels of both TB2SP and TBSP will appear as an enveloping and folding 'blue hue', 'cloaking' the planar landform. The vast array of PV panels will sit below the horizon without penetrating the skyline.</p> <p>Together, both solar projects will deliver an infrastructure statement which will be of visual interest to the many thousands of travelling tourists who cross into South Australia each year. Along the fringes of both projects the disposition of PV panels will appear to merge into nearby existing copses of trees and shrubs, visually integrating both developments into the contextual surroundings.</p> <p>The expanse of PV panels will positively transform the panoramic view, redefining the visual 'Gateway' into Taillem Bend and the state of South Australia.</p> <p>In a contextual landscape which is largely repetitive and uniformly uninspiring, TB2SP in conjunction with the approved TBSP will deliver a visual statement that reinforces the States commitment to pioneering renewable energy.</p>
Predicted visual impact	<p>Slightly Beneficial Impact - As a singular development.</p> <p>Moderately Beneficial Impact in conjunction with the approved TBSP.</p> <p>The cumulative visual impact that will be delivered through the introduction of two new, notable and visually significant land use activities adjacent one of South Australia's primary tourism routes connecting South Australia to the eastern Australian states will be positively overwhelming.</p>
Mitigation	None required.

Existing view



Proposed view



Photomontage Representation for Sensitive Receptor SR01

Location: Dukes Highway
View north - east - south east
Date: November 2017
Revision A



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Landscape and Visual Impact Assessment: Sensitive Receptor SR #02



Location	No. 60 Magpie Drive. The property lies due west of the TB2SP site at the intersection with Lime Kiln Road, adjacent to the Adelaide – Melbourne railway line.
View Direction	East – north east.
Landscape and setting	<i>'Expansive eastern plains'</i> - Character Unit 2; a landscape of low scenic quality . The eye of the observer is drawn beyond the immediate foreground of Lime Kiln Road and the signalised intersection comprising of traffic lights, boom gates and a controls hut to the wider, planar landscape of cropping fields. The visually ad-hoc arrangement of rail infrastructure, large stobies and overhead cables and distant transmission towers diminish the quality of the view afforded to the residents of no. 60 Magpie Drive and to other residents and travellers within the immediate vicinity.
Distance from Project Site(s)	0.5 km.
Visual exposure at receptor	Low to Moderate The slightly elevated and eastern orientation of the dwelling will afford an easterly directed north - south panorama across the TB2SP site. However, the depth and the extent of PV panels which can be viewed from this aspect will be largely contained to views of PV panels within less than a quarter only of the TB2SP site from the site western boundary. From the western boundary the TB2SP site gently rises in an easterly direction to the north – south orientated toward the Crest A ridgeline which conceals views of the PV panels lying on flatter land immediately east.

	<p>The PV panels located on the land which rises to the Crest A ridgeline will appear as an intermittent, thin 'slither' only.</p> <p>To the north west, the PV panels located on the land rising to the Crest A ridgeline will be mostly concealed behind the batters of the northern wastewater treatment ponds however the uppermost section of the row(s) of PV panels which run north - south along the Crest A ridgeline will protrude above the batters of both wastewater treatment ponds. The thin grey 'pencil line' appearance of the uppermost section of the PV panels will be barely discernible against the horizon.</p> <p>To the south west the PV panels will be obscured by the foreground dwellings and the mature trees of numbers 6 and 13 Substation Road. Distant views to the horizon remain largely unaltered.</p>
Predicted visual impact	<p>Slightly Adverse Impact only for TB2SP.</p> <p>In conjunction with the limited views of TBSP to the south east, which are largely concealed by the foreground dwellings and mature trees of numbers 6 and 13 Substation Road, the likely cumulative impact will be Slightly to Moderately Adverse.</p>
Mitigation	<p>The visual impact of PV panels and on-site infrastructure can be mitigated through the introduction of screen planting along the western boundary of TB2SP or on the line of sight within the property boundary. Planting smaller native trees and low maintenance shrubs which attain a height of at least 2 - 3 meters would likely ensure that, if desired, a visual buffer could be quickly established. However, discussions with the landowners have confirmed that at this point in time visual mitigation is not required.</p>

Existing view



Proposed view



PV panels represented at 60 ° tilt.

Photomontage Representation for Sensitive Receptor SR02

Location: No. 60 Magpie Drive
View east - north east
Viewpoint at 21m AHD
Date: March 2018 Revision B



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Landscape and Visual Impact Assessment: Sensitive Receptor SR #03



Location	No. 43 Golf Course Road - small to medium sized dwelling on modest sized allotment located on slightly higher ground than land to the immediate east. The dwelling has been elevated and orientated west affording panoramic views to the distant horizon.
View direction	North – north east.
Landscape and setting	<i>'Expansive eastern plains'</i> - Character Unit 2; a landscape of low scenic quality . Fore and mid - ground views reveal a landscape of undulating cropped fields bounded by roadside tree and shrub planting and the occasional collection of trees and shrubs which define field and property boundaries. The panorama is dominated by views of the distant transmission towers juxtaposed against the skyline. In a planar landscape where the eye of the observer traces over the undulating landscape searching for visual stimulation a single stand of mature eucalypts which appear as an 'incidental' copse of canopies 'silhouetting' the skyline offers limited interest.
Distance from Project Site(s)	1.0 km.
Visual exposure at receptor	Low. The slightly elevated distant view north - east to the TB2SP PV panels installed on flatter land immediately within the north western site boundary will be precluded by the batters of the northern wastewater treatment pond. The land within the project site rises from the western boundary in an easterly direction to the north - south Crest A ridgeline. The uppermost portion of the row(s) of PV panels installed on the higher mid-point of the Crest A ridgeline will, at a distance of 1 kilometre from the project site appear above the batters of both wastewater treatment ponds as a faint and barely detectable linear addition to the horizon. Casting the eye to east and south east, the contiguous evergreen canopies of the mid-ground tree planting will afford intermittent, glimpsed views only of the array of PV panels located within the site on the land which rises east to the Crest A ridgeline. The PV panels will appear as a thin

	<p>almost indiscernible dark line running in north - south direction, similar in appearance to the linear bands of mid – ground darker vegetation which also traverses the view.</p> <p>The distant transmission towers and existing substation infrastructure dominate the view across the horizon. The telecommunications tower to the west remains the prominent visual element within the panorama. Distant views of the procession of transmission towers are incongruous and visually dominant.</p>
Predicted visual impact	<p>TB2SP - from a slightly elevated viewpoint - Slightly Adverse Impact. The cumulative impact when considered in conjunction with TBSP - Slightly Adverse Impact.</p> <p>This is also considered to be the predicted visual impact that is likely to be experienced at the adjacent No. 39 Golf Course Road.</p>
Mitigation	<p>None required, recent tree and shrub planting on the property’s eastern boundary will create a satisfactory visual screen once established.</p>

Existing view



Proposed view



PV panels represented at 60° tilt.

Photomontage Representation for Sensitive Receptor SR03

Location: 43 Golf Course Road

View north - north east

Viewpoint at 26m AHD

Date: March 2018 Revision B



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Landscape and Visual Impact Assessment: Sensitive Receptor SR #04



Location	No. 105 Lime Kiln Road. A large property typical of the locality, comprising of a residential dwelling with domestic sheds, carport and external buildings, the western property boundary includes a large atrium for fruit growing. A pleasing domestic setting with an abundance of exotic small trees, shrubs and ground cover with irrigated lawn.
View direction	North east – east – south east.
Landscape and setting	<i>'Expansive eastern plains'</i> – Character Unit 2. A landscape of low scenic quality . A foreground of undulating cropped fields bounded by roadside tree and shrub planting and the occasional collection of trees and smaller shrubs which define field and property boundaries. The panorama is dominated by electricity transmission towers juxtaposed against the skyline. A planar landscape where the eye of the observer traces over the undulating landscape and earth bunds of the nearby wastewater treatment ponds searching for visual interest, concluding the search somewhat unrewarded at the distant horizon.
Distance from Project Site(s)	0.6 km.
Visual exposure at receptor	Low. Views north east – east to TB2SP will be largely precluded by the batters of the northern wastewater treatment pond and the canopies of an intermittent group of trees which currently conceals views of the infrastructure associated with the existing substation which lies beyond. The uppermost section of the row(s) of PV panels which run north - south along the Crest A ridgeline will protrude above the batters of both wastewater treatment ponds. However, the thin grey 'pencil line' appearance of the PV panels, broken by the foreground of intermittent tree planting, will be barely discernible against the horizon.

	<p>To the immediate south of the wastewater treatment ponds the PV panels within the western most portion of the site will appear as a more pronounced, darker and thicker line which sits below the horizon. The southern extent of TB2SP PV panels will meet the northern boundary of TBSP, as such the extent of PV panels stretching south west will appear as a continuous, singular dark line traversing the contextual landscape.</p> <p>The transmission towers will remain the most visually conspicuous features in the contextual landscape.</p>
Predicted visual impact	TB2SP - No Change to Slightly Adverse Impact . The cumulative impact when considered in conjunction with TBSP – Slightly Adverse .
Mitigation	None required.

Existing view



Proposed view



PV panels represented at 60° tilt.

Photomontage Representation for Sensitive Receptor SR04

Location: No. 105 Lime Kiln Road
View looking north - east - south east
Date: March 2018 Revision B



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Landscape and Visual Impact Assessment - Sensitive Receptor SR #05



Location	No. 13 Substation Road. Substation Road is an unsealed road which carries occasional local traffic only.
View Direction	East – north east - north.
Landscape and setting	<i>'Expansive eastern plains'</i> Character unit 2; a landscape of low scenic amenity . The expansive eastern panorama is like other sensitive receptors where the eye of the observer traces over the undulating landscape and batters of the nearby wastewater treatment ponds in search of visual stimulation before settling on the distant horizon. As a singular vertical element in the contextual landscape the telecommunications tower to the north is a notable and obvious focal point.
Distance from project site	0.15 km.
Visual exposure at receptor	<p>Low to Moderate. Views north east from the northern aspect of the dwelling of the PV panels installed on flatter land within the north - western corner of the site will be largely precluded by the batters of the distant northern wastewater treatment pond. However, the uppermost portion of the row(s) of PV panels installed on land rising east along the higher aspects of the Crest A ridgeline will emerge from behind the batters of both wastewater treatment ponds. South of the ponds the PV panels within the western most portion of the site will begin to emerge from behind the pond batters and appear as a thin almost indiscernible grey line only.</p> <p>The eye of the observer is drawn south to the immediate foreground which falls in both a southern and western direction. The rows of PV panels located on the land which rises east to the Crest A ridgeline widen, appearing deeper and 'wedge' like drawing the eye to the horizon. Whilst the visual extent of PV panels within TB2SP to the east is confined to the land that rises to the north - south Crest A ridgeline the relative height of the crest extinguishes views of the PV panels on the flatter land immediately beyond. However, the uppermost portion of the rows of PV panels installed along</p>

	<p>the Crest B ridgeline further east will appear as a faint contiguous extension of the PV panels in the foreground, touching but not punctuating the eastern horizon.</p> <p>The southern extent of PV panels is concealed behind a collection of large steel sheds on the properties eastern boundary.</p>
Predicted visual impact	For TB2SP - Slightly Adverse Impact . The cumulative impact when considered in conjunction with TBSP – Slightly Adverse to Moderately Adverse where the expanse of PV panels over TBSP will be more apparent at the property entrance off Substation Road.
Mitigation	<p>None Required – formally.</p> <p>The landowner of SR#05 has asked Equis to consider the planting of screening vegetation along the eastern boundary of SR#05. Equis is currently preparing a proposed planting plan, identifying native vegetation local to the region with an approximate height of 2-3m, that are low maintenance and would be suitable for the property, for discussion and agreement with the landowner. Ongoing consultation with the landowner of SR#05 will continue throughout the development of the project.</p>

Existing view



Proposed view



PV panels represented at 60° tilt.

Photomontage Representation for Sensitive Receptor SR05

Location: No. 13 Substation Road

View east - north east - north

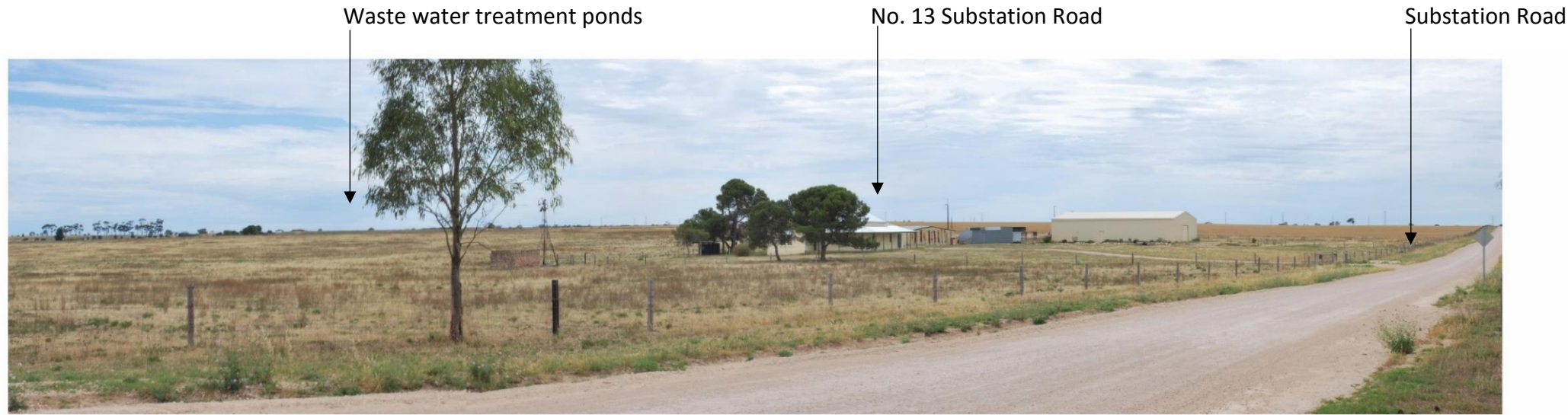
Viewpoint at 20m AHD

Date: March 2018 Revision B



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Landscape and Visual Impact Assessment – Sensitive Receptor SR#06



Location	No. 6 Substation Road. The property lies at the intersection of Lime Kiln Road with Substation Road; positioned to the south of the unsealed Substation Road which carries occasional local traffic only.
View direction	East – north east - north.
Landscape and setting	<i>'Expansive eastern plains'</i> Character unit 2; a landscape of low scenic amenity . The expansive eastern panorama is like Sensitive Receptor SR #06 where the eye of the observer traces over the undulating landscape in search of visual interest, concluding the search somewhat unrewarded at the distant horizon. It is a view where collectively, the foreground of stobie poles, mid – ground of prominent towers and the catenary of wires of the existing substation and a distant horizon of transmission towers are notable and incongruous features within the contextual landscape.
Distance from project site	0.3 km
Visual exposure at receptor	<p>Moderate. PV panels installed within the flatter north western corner of the TB2SP site will be concealed behind the distant batters of the northern wastewater treatment pond and the built form of No. 13 Substation Road. However, the uppermost section of PV panels installed on rising land along the Crest A ridgeline will emerge from above the batters of both wastewater treatment ponds appearing as an almost imperceptible thin linear form. The more 'ribbon like' appearance of PV panels in the south-western corner of the site will be visually prominent.</p> <p>The extent and depth of view of PV panels to the east is largely confined to land within the site that rises from the western boundary of the site to the Crest A ridgeline located 0.4 km beyond the western site boundary. However, the uppermost portion of the rows of PV panels installed along the Crest B ridgeline further east will appear as a faint contiguous extension of the PV panels in the foreground, touching but not punctuating the eastern horizon. At this sensitive receptor boundary fencing is likely to appear more obvious and obtrusive than at other sensitive receptors.</p>

Predicted visual impact	<p>Moderately Adverse Impact – TB2SP.</p> <p>The cumulative impact when considered in conjunction with TBSP – Moderately to Substantially Adverse. Particularly where the visually expansive array of PV panels and boundary security fencing over both the TB2SP and TBSP sites will be broken only by the east - west alignment of Substation Road.</p>
Mitigation	<p>Boundary screening along the western boundary of TB2SP or on the line of sight within the SR#06 property boundary will assist in mitigating the visual impact of the PV panels and security fencing. The use of native trees and shrub species with low maintenance requirements is recommended to establish a quick growing impenetrable visual buffer. Planting evergreen native shrubs which attain a height of at least 2 - 3 meters along the first 40 meters of the western boundary of TB2SP from Substation Road or approximately 12 - 15 meters of screening on the line of sight within the SR#06 property boundary will achieve the recommended mitigation outcomes for TB2SP (and deliver visual mitigation benefits for the approved TBSP).</p> <p>Preliminary discussions with the property owner have revealed that the owner does not consider visual mitigation necessary.</p>

Existing view



Proposed view



PV panels represented at 60 ° tilt.

Photomontage Representation for Sensitive Receptor SR06

Location: No. 6 Substation Road

View north - north east

Viewpoint at 21m AHD

Date: March 2018

Revision C



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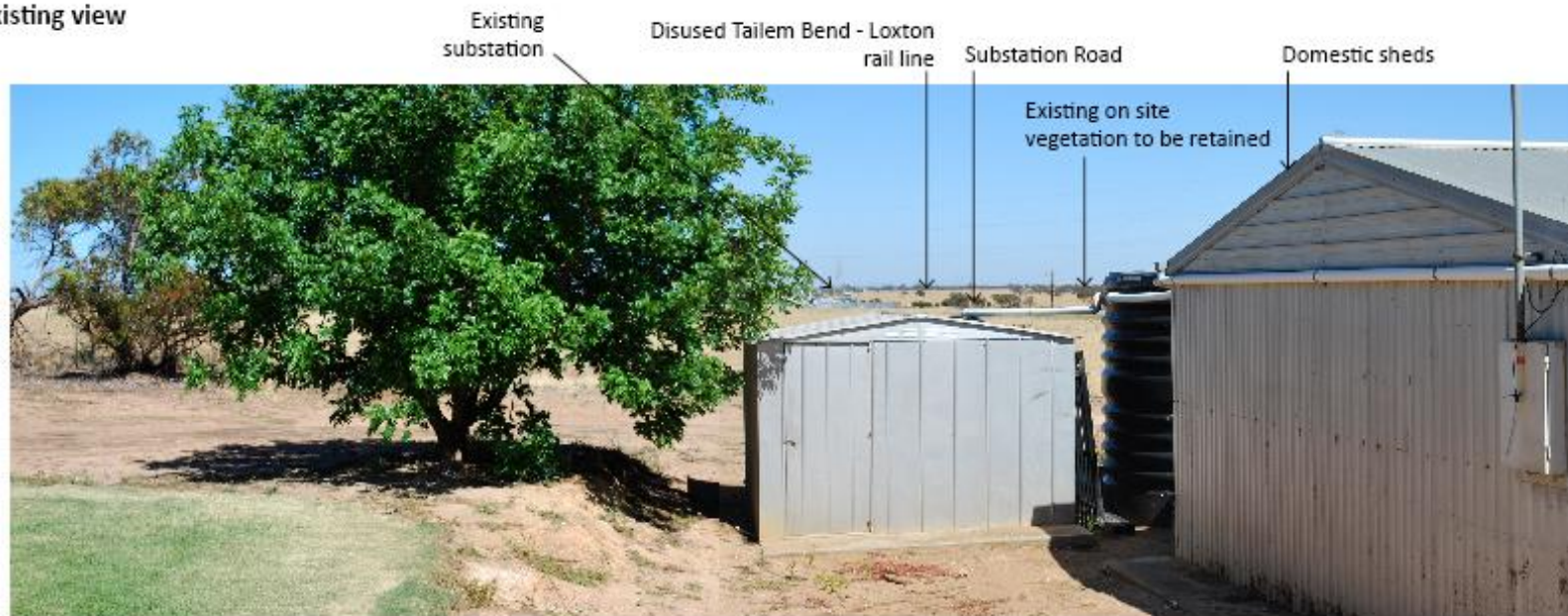
Landscape and Visual Impact Assessment - Sensitive Receptor SR #07



Location	<p>No. 278 Substation Road. Substation Road is an unsealed road carrying occasional local traffic only.</p> <p>A large allotment comprising of a residential dwelling, domestic scale sheds and external buildings and attractively landscaped amenity and outdoor recreational areas. The dwelling is centred within the property with vehicular access along Substation Road. The northern aspect of the dwelling is landscaped with small trees and mature large shrubs.</p>
View Direction	North west to north.
Landscape and setting	<p>'Expansive eastern plains'- Character Unit 2. Views to the west are restricted to the immediate foreground of undulating cropped fields as a nearby north-south crest precludes views further west over the wider expanse of the approved TBSP site. Views to the north beyond Substation Road are largely restricted by roadside tree and shrub plantings along Substation Road and the expansive copse of vegetation within the TB2SP site. To the north-west skyline is dominated by transmission towers and overhead wires which are juxtaposed against the distant hills behind the Tailem Bend township. On clear days the upper section of the Tailem Bend water tower is visible from the dwellings outdoor amenity and dining area which are located on the western aspect of the dwelling.</p>
Distance from project site	0.14 km.
Visual exposure at receptor	Low. To the north intermittent glimpsed views only of less than 10% of the proposed design layout for TB2SP site will be obtained through the roadside tree canopies located along Substation Road.

	<p>From the outdoor amenity and dining area views to the west - north west will include the distant PV panels, which will be largely concealed by the two domestic sheds erected on the western property boundary. A glimpsed view only will be obtained of a small area of PV panels located from a mid-point within the site to the northern boundary, west of the retained copse of mature trees and shrubs. The linear appearance of these PV panels over undulating land will create a differential colour contrast to the surrounding cropped fields. However, the linear form of the collection of PV panels will be similar in colour and appearance to the darker foreground and mid-ground of the roadside tree and shrub canopies.</p> <p>The transmission towers will remain the most visually conspicuous features in the contextual landscape.</p>
Predicted visual impact	Views north to north west from within the property – No Change to Slightly Adverse Impact . The cumulative impact when considered in conjunction with TBSP - No Change to Slightly Adverse Impact .
Mitigation	None required.

Existing view



Proposed view



PV panels represented at 60° tilt.

Photomontage Representation for Sensitive Receptor SR07

Location: No. 278 Substation Road

View north west - north

Date: November 2017

Revision A



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4. Post construction management and mitigation measures

Consideration should be given to the visual mitigation measures recommended at each 'Sensitive Receptor' on completion of construction works.

It is considered unnecessary to screen views from adjacent roads within the locality, these roads are for local traffic only and the volume and frequency of traffic movement is low.

It is recommended that where desirable, visual mitigation is undertaken on an individual site basis and should comprise of screen planting using indigenous and native vegetation.



Photo: Substation Road view east – TB2SP on left, TBSP on right

5. Development Plan Considerations

The Coorong District Council Development Plan⁶ establishes that the land within which TB2SP is located is zoned as Urban Employment.

Given this, the following Development Plan Urban Employment Zone Objective is relevant to this study:

Objective 9: Development that contributes to the desired character of the zone.

It is considered that the expansion of the approved solar project and associated battery storage through the proposed TB2SP is envisaged as part of the desired character of the zone.

The following Development Plan Urban Employment Zone Principles of Development Control are relevant to this study;

Form and Character 9: Development should not be undertaken unless it is consistent with the desired character for the zone.

Expansion of the approved solar project and associated battery storage through the proposed TB2SP is envisaged as part of the desired character of the zone.

Form and Character 10: Buildings should be set back in accordance with the following parameters:

- *Building heights of 6 metres – 8 metres from primary road frontage and 3 metres from secondary road frontage.*
- *Building heights greater than 6 metres - 10 metres from primary road frontage and 3 metres from secondary road frontage.*

Form and Character 11: Structures should have a maximum height of 10 metres, exclusive of any external plant and equipment such as flues, chimney stacks or aerials.

The solar modules and buildings of TB2SP (including battery modules) will not exceed 10 metres.

⁶ Development Plan, Coorong District Council Consolidated – 21 November 2017

Other relevant provisions of the Coorong Council Development Plan include a broad range of policy items of relevance to the design and appearance of the TB2SP. In particular, the Development Plan provides that infrastructure development should:

- Be sited and designed to blend with the natural features of the landscape;
- Be of a high architectural standard;
- Protect areas of scenic or conservation significance from undue damage;
- Cause minimal damage to the natural landform; and
- Screen and orientate infrastructure away from public view, tourist and scenic routes.

The TB2SP development satisfies these relevant provisions.

Whilst the cumulative visual impact of both TBSP and TB2SP from the elevated section of Dukes Highway south of Taillem Bend places new infrastructure in a location which can be viewed by tourists and the general public alike, it is my opinion that as two new notable and visually significant land use activities both TB2SP and TBSP will deliver a **moderately beneficial impact** within the contextual landscape.

6. Summary and recommendations

The introduction of the TB2SP will alter the character and visual qualities of the locality and wider contextual landscape. In particular, the cumulative visual impact of both TB2SP and TBSP will be notable when observed from the elevated section of Dukes Highway south of Taillem Bend.

It has been demonstrated that, where necessary and desired, all likely visual impacts on the identified residential Sensitive Receptors can be managed through visual mitigation introduced through vegetative screening.

The sense of place and place attachment values of neither Taillem Bend nor the Murray River will not be detrimentally affected by the TB2SP development.

It is my opinion that the solar project will introduce a new infrastructure element of an acceptable design standard that, from the identified elevated vantage point on Dukes Highway will evoke curiosity, becoming a prominent 'incidental' infrastructure feature of merit and a best practice example of progressive renewable energy delivery.

It is my opinion that within a locality and character unit of **low scenic quality** the visual impact that is likely to be experienced by the introduction of TB2SP will range between;

- **negligible to slightly adverse only** on five residential Sensitive Receptors
- **moderately adverse on** one residential Sensitive Receptor.

The TB2SP will have a **moderately beneficial visual impact** from the elevated sensitive receptor at Dukes Highway.

The likely cumulative visual impact of TB2SP and TBSP will vary from **Negligible to Moderately – Substantially Adverse** (at one only sensitive receptor - SR #06).

With the application of the recommended mitigation measures both the singular and cumulative visual impacts can, where desirable, be largely ameliorated.