

## APPLICATION ON NOTIFICATION – CROWN DEVELOPMENT

<b>Type of development:</b>	Section 131 Crown Development
<b>Development Number:</b>	752/V008/20
<b>Applicant:</b>	1265 Warnecke Road Pty Ltd (sponsored by the Department for Energy and Mining)
<b>Nature of Development:</b>	Construction of a solar farm (up to 100MW) and associated switchyard, substation, synchronous condenser plant, access points, security fencing and civil works
<b>Subject Land:</b>	Project area is split into two sections approximately 3 – 3.5km north-east of Monash township, being sections 994 to 998, 1265 and 1266 in Hundred 740200 (CT 5974/334); and allotment 100 in File Plan 44626 (CT 5896/224)
<b>Planning and Design Code:</b>	Phase 1 – Remote Areas Zone
<b>Development Plan:</b>	Berri Barmera: Primary Production Zone, Horticulture Policy Area 1 Rural Landscapes Zone
<b>Contact Officer:</b>	Sharon Wyatt
<b>Phone Number:</b>	7109 7132
<b>Consultation Start Date:</b>	Wed 22 July 2020
<b>Consultation Close Date:</b>	Thurs 20 August 2020
<p>During the notification period, the application documentation can be viewed on the SA Planning Portal: <a href="https://www.saplanningportal.sa.gov.au/public_notices">https://www.saplanningportal.sa.gov.au/public_notices</a>.</p>	

Written representations must be received by the close date (indicated above) and can either be posted, hand-delivered, or emailed to the State Commission Assessment Panel (SCAP). A representation form is provided as part of this document.

**Any representations received after the close date will not be considered.**

Postal Address:

The Secretary  
State Commission Assessment Panel  
GPO Box 1815  
ADELAIDE SA 5001

Street Address:

Planning and Land Use Services  
Department of Planning, Transport and Infrastructure  
Level 5, 50 Flinders Street  
ADELAIDE

Email Address: [scapreps@sa.gov.au](mailto:scapreps@sa.gov.au)



# DEVELOPMENT APPLICATION FORM

17-061.02 DAF

**COUNCIL: BERRI BARMERA COUNCIL**  
**APPLICANT: 1265 Warnecke Road Pty Ltd**

Postal Address: c/- Planning Chambers  
 PO Box 6196  
 Halifax Street  
 Adelaide SA 5000

**Owner:**  
**SEC 994, 995, 996, 997, 998 and 1265**  
**Ryan Peter Hamood**  
 Address: PO Box 283 Berri SA 5343

**Owner:**  
**SEC 1266**  
**Jack Ronald Walter**  
 Address: PO Box 1032 Renmark SA 5341

**Owner:**  
**Allotment 100 in FP 44626**  
**Monash Station Pty. Ltd. (ACN: 608 635 641)**  
 Address: PO Box 2004 Berri Sa 5343

**Builder: TBC**  
 Name:  
 Builders Licence Number:

**CONTACT PERSON FOR FURTHER INFORMATION**

Name: Damian Dawson, Planning Chambers  
 Telephone: 8211 9776  
 Mobile: 0408 227 493  
 Fax: 8212 5979  
 Email: damian@planningchambers.com.au

**EXISTING USE:** Vacant land/grazing

**DESCRIPTION OF PROPOSED DEVELOPMENT:** Construction of a renewable energy facility comprising of a solar farm and associated switchyard, substation and synchronous condenser plant (generating capacity of 100MW).

**LOCATION OF PROPOSED DEVELOPMENT:**

Section No: 994-998, 1265 and 1266 Plan: H740200 Allotment: 100 in File Plan 44626 Street: Warnecke Road, Sturt Hwy  
 Town/Suburb: Monash Volume: 5974 Folio: 344, Volume: 6175 Folio: 635, Volume: 5896 Folio: 224

**BUILDING RULES CLASSIFICATION SOUGHT:** \_\_\_\_\_ Present classification: \_\_\_\_\_

If Class 5,6,7,8 or 9 classification is sought, state the proposed number of employees: Male: \_\_\_\_\_ Female: \_\_\_\_\_

If Class 9a classification is sought, state the number of persons for whom accommodation is provided: \_\_\_\_\_

If Class 9b classification is sought, state the proposed number of occupants of the various spaces at the premises: \_\_\_\_\_

**DOES EITHER SCHEDULE 21 OR 22 OF THE DEVELOPMENT REGULATIONS 1993 APPLY?** YES  NO

**HAS THE CONSTRUCTION INDUSTRY TRAINING FUND ACT 1993 LEVY BEEN PAID?** YES  NO

**DEVELOPMENT COST** [do not include any fit-out costs]: \$ 120 million

I acknowledge that copies of this application and supporting documentation may be provided to interested persons in accordance with the Development Regulations 1993.

**SIGNATURE:**



\_\_\_\_\_  
 Damian Dawson  
 On behalf of 1265 Warnecke Road Pty Ltd

Dated: 22/05/2020

<b>FOR OFFICE USE</b>	
Development No: _____	
Previous Development No: _____	
Assessment No: _____	

<input type="checkbox"/> Complying <input type="checkbox"/> Non Complying <input type="checkbox"/> Notification Cat 2 <input type="checkbox"/> Notification Cat 3 <input type="checkbox"/> Referrals/Concurrences <input type="checkbox"/> DA Commission	Application forwarded to DA  Commission/Council on / /  Decision: _____  Type: _____  Date: / /
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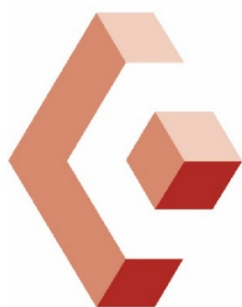
	Decision required	Fees	Receipt No	Date
Planning:	_____	_____	_____	_____
Building:	_____	_____	_____	_____
Land Division:	_____	_____	_____	_____
Certificate:	_____	_____	_____	_____
<b>Development Approval</b>				

17-061

**Development Assessment Report**

22 May 2020

**Mango Power  
Monash Solar Farm**



PLANNING  
CHAMBERS  
TOWN PLANNING



## CONTACT LIST

### PROJECT TEAM:

**Client: Mango Power**  
C/- Planning Chambers Pty Ltd



**Project Planner: Damian Dawson**

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<b>Appendix 7:</b>	Register of Aboriginal Sites and Objects search results

# 1

## DETAILS OF THE APPLICATION

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### 1.1 APPLICATION DETAILS

<b>Applicant</b>	1265 Warnecke Rd, Pty Ltd T/A Monash Solar Farm
<b>Address</b>	Suite 153, 461 St Kilda Rd Melbourne, VIC 3004
<b>ACN</b>	632 594 248
<b>Year Founded</b>	2019
<b>Applicant's Representative</b>	Planning Chambers Pty Ltd Po Box 6196 Halifax Street, SA 5000 P: (08) 8212 9776 E: damian@planningchambers.com.au
<b>Relevant Plan(s)</b>	N/A

# 2 BACKGROUND

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Planning Chambers has been engaged by Mango Power to prepare a development application for the construction of a solar farm and associated switchyard, substation and synchronous condenser plant upon the subject land (Sections 994 to 998, 1265 and 1266 in Hundred 740200 and Allotment 100 in File Plan 44626).

## **Crown Sponsorship**

The proposal has been supported and endorsed for Crown Sponsorship by the Chief Executive of the South Australian Department for Energy and Mining (DEM), Paul Heithersay in correspondence dated 8 May 2020, a copy of which is attached in **Appendix 1**.

As stated within the correspondence, the proposal was granted Crown Sponsorship as it is for the development of:

- *'public infrastructure' pursuant to section 49(2)(c) of the Development Act 1993; or*
- *'essential infrastructure' under section 131(2)(c) of the Planning, Development and Infrastructure Act 2016.*

It is understood that the proposal will be lodged under the Planning, Development and Infrastructure Act 2016 (PDI Act) given that the majority of the proposal is upon land which is located within an area currently under the PDI Act.



# 3

## SUBJECT LAND & LOCALITY

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### 3.1 SUBJECT LAND

The subject land consists of Sections 994 to 998, 1265 and 1266 in Hundred 740200 and portion of Allotment 100 in File Plan 44626. Copies of the Certificates of Title are attached within **Appendix 2**.

The subject land, and the proposed solar farm, is divided into two separate components referred to within this report as the northern and southern sections. The two parts of the subject land are shown within the Locality Plan within **Appendix 3**.

The applicant has successfully negotiated options to purchase the freehold allotments which make up the subject land.

There are a number of unmade road reserves existing within the southern section of the subject land. These road reserves are owned by the Berri Barmera Council. Preliminary discussions have been held with Council staff in relation to the closing of these unmade roads so as to allow the land to be sold to the proponent. Council staff have indicated support subject to the undertaking of the formal roads open/closing procedure which will be undertaken once planning consent has been granted.

The subject land is currently developed with a mixture of low-intensity grazing and patches of native vegetation (regrowth and remnant). The land is undulating with larger flatter portions divided by and interspersed with predominately east/west running remnant sand dune ridges. Several ridgelines remain uncleared with the flatter portions generally cleared for primary production use. The northern end of the southern portion of the subject land is dense remnant native vegetation.

### 3.2 LOCALITY

The subject land and locality are shown within the attached Locality Plan within **Appendix 3**.

The locality of the southern section is characterised by a mixture of viticulture, industry, rural living, rural and conservation land located on medium to large rural allotments. The immediate locality includes the Murraylink Connector, the Monash Substation and Ral Ral Winery approximately 300 to 1,000 metres to the south-west, as shown in **Figures 1 to 3** below.

The locality of the northern section is a mixture of rural living allotments, open grazing/rural land and native vegetation. This portion of the subject land is located upon Monash Station, a large grazing and cropping property to the west and north. The land upon which the northern section is to be located is currently being divided from the remainder of the Monash Station land. A large-scale horticultural project has been approved for Monash Station with water to be drawn from the river to supply large scale nut and citrus orchards. The approval for the project included a 6MW solar farm to supply the power for the pumping of water and irrigation of the orchards. An agreement has been reached between Monash Station and the proponent for electricity from the proposal to be utilised within the orchard operations rather than Monash Station developing their own separate solar facility.

The Cooltong Conservation Park is located to the east of the upper portion of the southern compound, stretching to the north along the boundary of the Monash Station property.



**Figure 1:** Murraylink Connector as viewed facing east from the Monash Substation



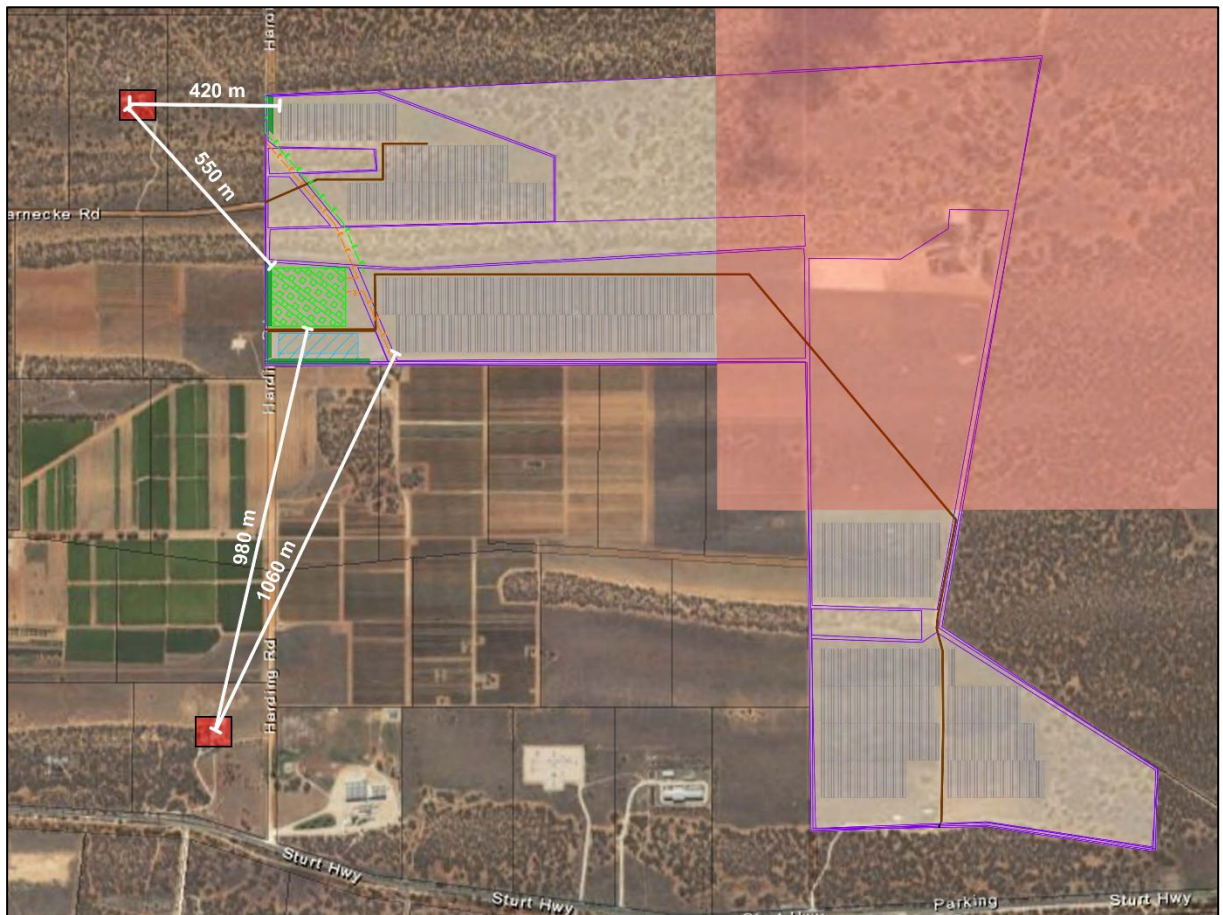
**Figure 2:** Monash Substation as viewed facing north-west





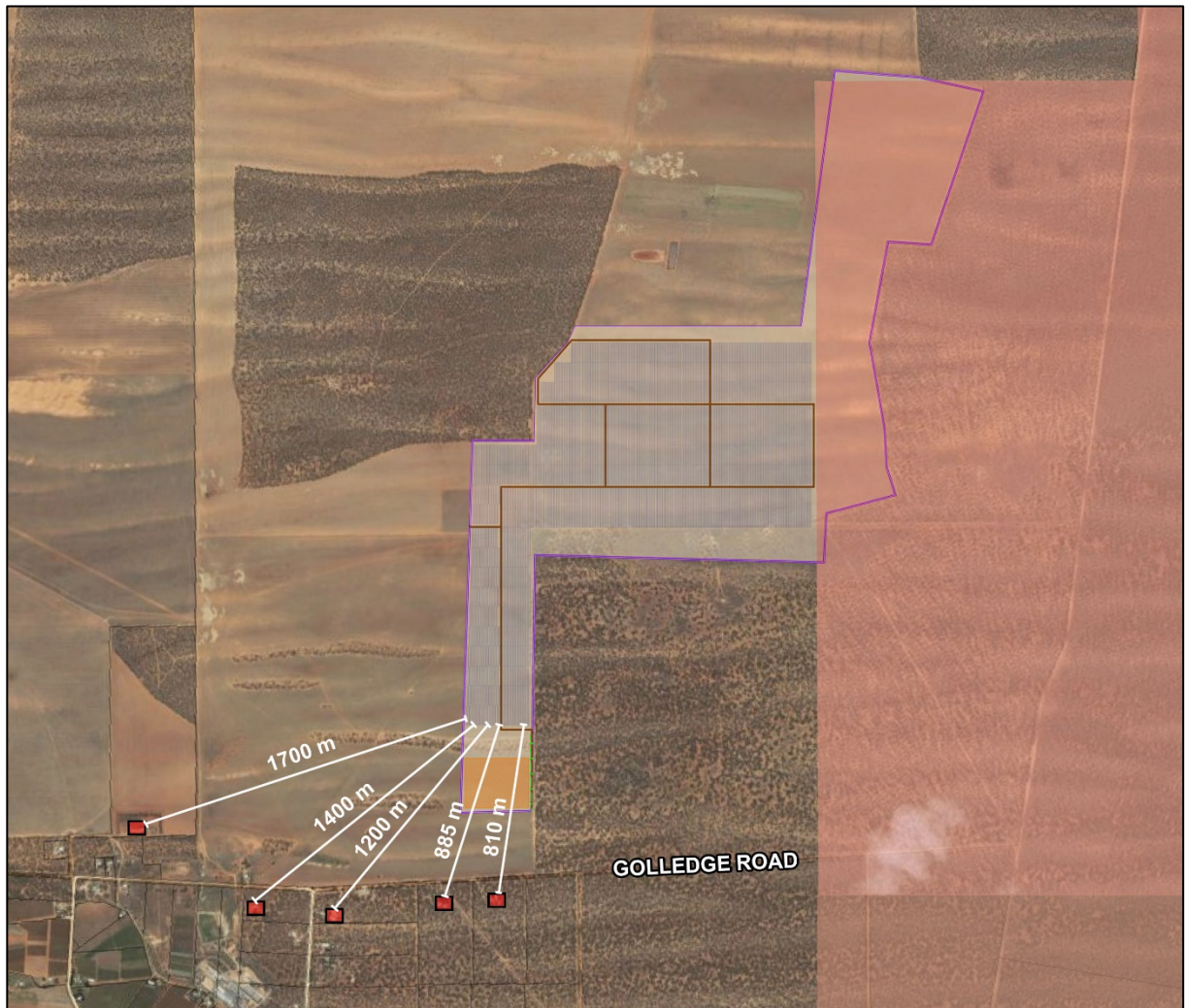
**Figure 3:** Ral Ral Wines as viewed facing east from Harding Road.

There are only a limited number of dwellings within the locality. The dwelling at 34 Warnecke Road is located approximately 420 metres to the west of the southern section with the dwelling at 29 Harding Road located approximately 1 kilometre to the south-west as shown within **Figure 4** below.



**Figure 4:** Location of closest dwellings to the southern solar farm

The dwellings at 176 and 194 Golledge Road are located approximately 800 metres from the southern end of the solar panels within the northern section of the subject land. The dwelling at 94 Ellis Road is located over 1 kilometre from the solar panels as shown in **Figure 5** below.



**Figure 5:** Location of closest dwellings to the northern solar farm



# 4 PROPOSAL

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The proposal seeks the construction of a solar farm and associated switchyard, substation and synchronous condenser plant. The proposed plans prepared by Brighty Energy are attached in **Appendix 4**. The proposed facility will be separated into two (2) compounds; north and south. The two compounds will be connected via a new overhead 33kV line. The final alignment of the overhead line is yet to be determined. Whilst the alignment will be finalised in the detailed design stage of the project there is an option to locate it either within the subject land alongside Harding Road or within the road reserve subject to the consent of Council.

The facility will have a generating capacity of approximately 100MW which will be connected to the local electricity network via a new substation and connection point adjacent Harding Road. The proposed substation will facilitate a direct connection into the existing 132kV overhead line which runs to the north-west from the Monash substation across the subject land.

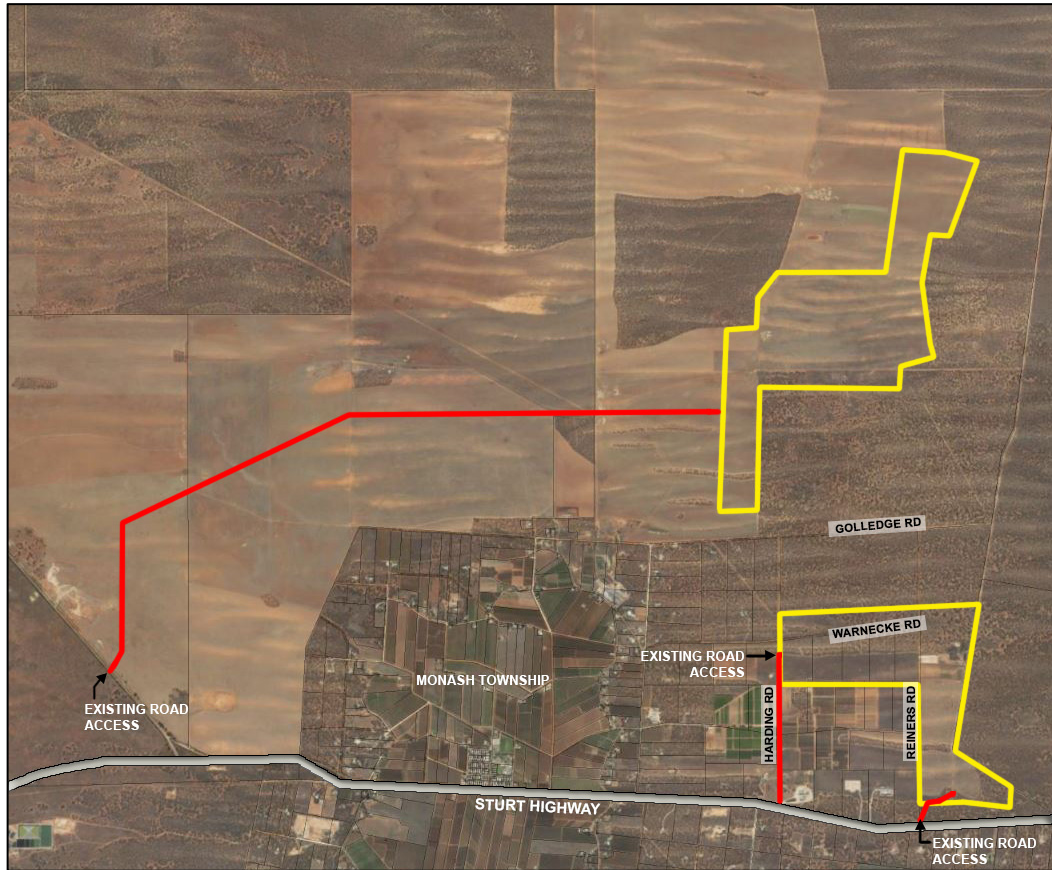
The southern compound will be located approximately 260 metres from the Sturt Highway, with a portion located along the boundary of Harding Road. The northern compound will be more than 3.2 kilometres from the Sturt Highway to the north of Gollidge Road. A 1.8 metre-high perimeter cyclone mesh fence will be placed around each compound.

The panels will be mounted on a single axis tracking frame which rotates during the day to follow the path of the sun from east to west. The panels and frame will have a total height of between 1.5 and 2.3 metres depending on the angle of the panels. The panels will utilise anti-reflective highly transparent, low iron tempered glass.

## **Access**

The northern compound will be accessed from the Goyder Highway via a private access road through Monash Station as seen in **Figure 6** below. The southern compound will be accessed from the Sturt Highway via Harding Road and via an existing access to Section 1266 (H740200). The access points have been designed and located to allow vehicles to enter and exit in a forward direction and provide adequate laydown areas within the boundaries of each compound.

It is anticipated that a number of movements to the site will occur during the construction period, with semi-trailers utilised to deliver the required infrastructure to the site. It is envisaged that once the facility has been commissioned limited access to the site will be required. Maintenance of the site will be limited and undertaken by contractors in a standard vehicle or van with no heavy vehicle access required.



**Figure 6:** Location of proposed vehicle access points

### Substation/Switchyard

As noted above the two portions of the solar farm will be connected via a 33kV transmission line which will feed into the combined switchyard/substation adjacent to Harding Road.

The Monash Solar Farm switchyard will perform four main functions:

- Collection point for the medium voltage 33kV cables from the solar farm inverter/transformers;
- The main power transformer converts 33kV up to 132kV to match the grid voltage;
- A synchronous condenser will provide system strength and fault current to the grid; and
- A 3 breaker mesh provides connection to ElectraNet's 132kV network. This component will be owned and maintained by ElectraNet as it will form part of the shared high voltage grid system.

The synchronous condenser can generate or absorb reactive power as required. The primary function of the generator is to stabilise the power produced, provide fault current, adjust the grid's voltage and improve the power factor of the facility instantaneously. If a fault were to occur on an existing solar farm with a direct connection to the grid the power would cut immediately as there would be no capacity to ride through the network outage. In contrast, the synchronous condenser would allow the facility to ride through any network faults without causing damage to the site's infrastructure or to the grid.

The proposed substation is to be screened by native vegetation planted along the Harding Road frontage and along a portion of the adjoining southern boundary.

A Certificate of Compliance from the Technical Regulator has been issued for this project and is attached within **Appendix 5**.

# 5

## DEVELOPMENT ASSESSMENT

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### 5.1 PROCEDURAL CONSIDERATIONS

The proposal is considered to meet the criteria of *public infrastructure* under section 49 of the Development Act 1993 and the criteria for *essential infrastructure* under section 131 of the Planning, Development and Infrastructure Act 2016 as it is infrastructure for the supply of electricity. The project has been sponsored by the Department for Energy and Mining on this basis and as such has been lodged as a Crown Development for assessment by the State Commission.

### 5.2 ASSESSMENT

Due to the configuration of the facility, the northern section is located within the Pastoral Unincorporated Area of the State with the southern section located within the Berri Barmera Council area. The northern section is located within the Remote Areas Zone of the Planning and Design Code. The southern section is within an area that is not currently controlled by the Planning and Design Code. This portion of the land is currently in the Rural Landscape Protection Zone of the Berri Barmera Development Plan.

An assessment has been undertaken against the relevant planning controls applicable to each portion of the subject land.

#### Southern Section

##### **Rural Landscape Protection Zone** (*Berri Barmera Development Plan*)

Zone map BeBa/26 of the Berri Barmera Development Plan, consolidated 8 December 2016, shows the southern portion of the subject land is located within the Rural Landscape Protection Zone.

It is noted that there are no specific provisions within the zone that provide guidance as to the development of solar farms. As such the proposed siting, appearance and potential impacts have been considered against the provisions of the zone which relate more broadly to buildings and structures envisaged within the zone.

The zone envisages the preservation of the natural and rural character and the conservation of existing native vegetation. Land uses should be low-intensity rural activities on large landholdings where no vegetation clearance is required. Detached dwellings, recreation and tourist infrastructure and tourist accommodation are envisaged forms of development

The solar panels and associated infrastructure proposed for this portion of the subject land are to be located within areas that are currently cleared. A small portion of regrowth vegetation located within Section 1265 of Hundred 740200 will be cleared. Approval from the Native Vegetation Council for this clearance has already been granted. A copy of the approval is included in **Appendix 6**. The large area of remnant native vegetation within the northern portion of this part of the subject land is to be retained and fenced to minimise any further degradation. The vegetation along the frontage to the Sturt Highway



is to be retained as is the vegetation atop two ridgelines that transect this portion to the subject land. The retention of these portions of vegetation will result in the proposed solar farm being located between the established swathes of vegetation which will assist in limiting the overall visual impact of the proposal. The full extent of the solar farm will not be visible from any single location, instead, the impact will be limited to smaller groupings of solar panels fringed with the existing native vegetation. **Figure 7** below shows the existing vegetation along a sand dune ridge to be retained within the southern portion of the subject land. The vegetation is to be located to the north of the proposed substation and will separate the banks of panels at the northern end of the southern section.



**Figure 7:** Existing native vegetation to be retained within the southern section of the subject land as viewed from Harding Road looking east.

Although the Zone has a focus on low-intensity land uses such as farming and grazing, the locality is characterised by a range of land uses such as the Murraylink interconnector, Monash Substation, Ral Ral Wines winery and storage facility, vineyards and overhead powerlines. Set against a backdrop of rural and industrial uses and electricity infrastructure the proposal is not considered to be out of place or likely to detract from the amenity of the locality.

## **Council Wide**

### *Design and Appearance*

The objectives of the Council Wide Design and Appearance section state that development should be of a high architectural quality and reinforce positive aspects of the local environment and built form. Roads, open spaces, buildings and land uses should be laid out and linked so they are easy to understand and navigate. The section notes that development should not incorporate highly reflective materials that result in glare.



The solar panels, and the solar farm more broadly, are considered to have an inoffensive, utilitarian appearance having been designed and constructed for the sole purpose of capturing light and creating energy. The solar panels are low-scale and arranged in a formal grid across the site. As such they will have a uniform appearance across the site when viewed from outside of the subject land. The views of the solar farm, however, will be limited given the setbacks from public roads, the separation of the facility into smaller groupings of panels, retention of native vegetation, screening provided by the sand dune ridges and a limited number of sensitive uses and vantage points within the locality. The solar panels will not be visible from either the Goyder or Sturt Highways with no direct views from any nearby dwellings.

The proposed substation and solar panels within the western portion of the southern section are in close proximity to Harding Road. The substation and closest array of solar panels within the northern-west corner of the southern section will be screened with native landscaping. The retention of existing stands of native vegetation, the undulating topography of the land and the low height of panels will mitigate the visual impact of the facility on nearby dwellings and land uses.

Regarding the broad requirement for buildings and structures to be finished in low reflective materials, the solar panels are designed to absorb light rather than reflect it with an anti-glare coating to be used. The properties of the panels and their location upon the land is not expected to have any noticeable impact on surrounding land uses or passing vehicles by way of glint or glare.

#### *Hazards*

The provisions of the Council Wide Hazards section seek to maintain the natural environment by limiting development in areas susceptible to natural hazards. The bushfire provisions within the section state that development should be sited away from slopes and hazardous vegetation.

The land is predominantly located within a Medium Bushfire Risk area as per the Bushfire Protection Area BPA Map BeBa/7. The proposed facility will be made accessible to emergency services with sufficient turn around areas provided within and adjacent to the fenced compounds. Any vegetation or cover within the fenced area will be maintained to not pose an unacceptable fire risk with a circulation path around the perimeter of each group of solar panels.

The facility will not unreasonably inhibit firefighting capability within the locality nor increase the risk of bushfires in the area.

The facility and subject land are not considered to be susceptible to any level of natural hazard risk which would require any significant level of mitigation.

#### *Renewable Energy Facilities*

The provisions of this section state that renewable energy facilities such as that proposed should be designed to benefit the environment and the community and be located, sited and operated to avoid any adverse impacts on the natural environment and other land uses. The provisions note that facilities should not impact on the safety of air transport and should be located in areas that maximise efficient generation and supply of electricity.

The location and design of this facility is considered to achieve the intent of these provisions by harvesting a natural resource with minimal impact on the natural environment and surrounding land uses. The location and topography of the land are ideal for the commissioning of a solar facility due to the high levels of solar access. The site was chosen due to the proximity of the Monash Substation and the location of the existing 132kV transmission line which runs across the site providing convenient access to the grid.

It is noted that the Renmark Airport is located 5 kilometres east of the facility however it is considered that the airport is sufficiently removed from the panels to not impact upon the operations of the airfield as discussed further below.

## **Northern Section**

### **Remote Areas Zone** (*Planning and Design Code – Phase 1*)

A solar farm is not listed within the zone as being Accepted, Deemed to Satisfy or Restricted Development. The proposal is therefore a Performance Assessed Development within the zone.

Desired Outcome (DO) 1 of the zone seeks a diverse range of activities including the generation and storage of energy. The proposal achieves this Desired Outcome through the generation of renewable energy. Whilst a battery facility is not proposed at this stage, contingencies have been made to make it possible to retrofit in the future should there be sufficient demand.

Performance Outcome (PO) 1 seeks that development within the zone is sited and designed to protect the natural features and conservation value of the area. The proposal requires only minimal clearance of native vegetation, approval for which has already been granted by the Native Vegetation Council with the associated offset payment made by the applicant. The higher quality areas of vegetation are to remain with the solar panels and infrastructure generally located within cleared portions of the site.

## **General Development Policies**

### *Design and Siting*

The Performance Outcomes of the Design and Siting section state that development should be sited and designed to protect the natural features and conservation value of the area. Development should incorporate landscaping that enhances the appearance of land and streetscapes.

The proposal is generally located on land that is currently grazed and largely devoid of native vegetation. Where located close to public roads, the proposal is obscured by native vegetation with additional landscaping planted along Harding Road so as to mitigate potential visual impacts of the substation and the closest array of solar panels within the north-west corner of the southern section.

The facility will be located approximately 2.8 kilometres from the Sturt Highway and as such is well removed from any views from the highway. Overall, the low height of the panels, the undulating remnant sand dune ridges and surrounding native vegetation will restrict views from nearby sensitive land uses.

### *Infrastructure and Renewable Energy Facilities*

The Desired Outcomes seek the efficient provision of renewable energy facilities and ancillary development in a manner that minimises hazards, is environmentally and culturally sensitive and sustainably manages adverse visual impacts on the natural and rural character and residential amenity.

The relevant PO's note that development is to be located and designed to minimise hazard and nuisance to adjacent land uses. The visual impact of above-ground renewable energy facilities should be minimised and managed by utilising the natural landscape and existing vegetation to screen the facility, siting development below ridgelines where practicable, avoiding sensitive and significant landscapes, using materials and finishes with low reflectivity and using existing vegetation to screen buildings.

The proposal is considered to satisfy the above provisions through the delivery of a modern renewable energy facility that will provide efficient renewable energy into the national grid. As noted above, the

proposal is to be sited upon a generally cleared site which benefits from existing screening vegetation and a series of sand dune ridges that visually partition and compartmentalise the proposal.

The proposed substation will incorporate vegetated buffers along the western frontage to Harding Road and along the adjoining southern boundary line. The existing vegetation adjoining the northern side of the substation will be retained. The screening will satisfy PO 2.2 in adequately reducing the potential adverse visual impacts when viewed from adjacent land and Harding Road.

Regarding hazard minimisation, the proposal is sited well away from dwellings, tourist accommodation or frequently visited public places. Appropriate clearances of hazardous vegetation, upkeep of access tracks and management of the site will occur to minimise any future bushfire risk.

PO 7.1 seeks that renewable energy facilities be located as close as practicable to existing transmission lines. The site was chosen due to its location alongside the existing 132kV line connected to the Monash Substation. The location adjacent to the Murraylink Connector also allows for the export of power directly into the national grid.

PO 9.1 notes that solar facilities generating 5MW or more are not to be located on land of high environmental, scenic or conservational value. The subject land, whilst it displays a reasonable level of amenity and natural and rural character it is not considered to be of high environmental, scenic or conservational value given the level of clearance and current low-intensity rural land use.

PO 9.2 seeks that solar facilities assist the movement of wildlife by incorporating wildlife corridors and habitat refuges and avoiding the use of extensive security or perimeter fencing. Whilst the two sections of solar panels will be fenced, they are located such that there is a significant gap of over 1 kilometre in width between the two. The setback between the two compounds, which is mostly vegetated, will allow for wildlife movement in an east/west direction.

It is envisaged that temporary facilities and amenities will be required for construction staff during the construction period. These facilities will be located within already cleared areas and managed to not result in a nuisance to nearby land users. Temporary on-site waste storage enclosures will also be utilised to minimise the potential of wind-blown litter.

#### *Interface between Land Uses*

PO 7.1 of the Interface between Land Uses section identifies that development should be designed and compromised of materials and finishes so as to not unreasonably cause a distraction to adjacent roads or unreasonably cause heat loading and micro-climatic impacts on adjacent buildings and land uses as a result of reflective solar glare.

The operation of the proposed facility will not result in the creation of any appreciable noise, vibration, electrical interference, light spill, glare or traffic impacts. Given the significant setback distance to nearby dwellings and other land uses as well as the lightweight nature of the panels (resulting in little to no retention of heat overnight), the facility is unlikely to have any noticeable effect on air temperature experienced at adjoining or nearby properties.

#### *Transport, Access and Parking*

The relevant Performance Outcomes state that development should be integrated with the existing transport system. Development should be sited and designed so that loading, unloading and turning of all traffic likely to be generated avoids interrupting the operation of and queuing on public roads. Access points should be appropriately separated from level crossings and be sited and designed to accommodate the type and volume of traffic likely to be generated by the development.

The access points into each compound have been appropriately located to be accessible from existing transport routes, creating safe points of entry into each compound. It is not expected that the amount of traffic generated and the impact of the traffic along the access routes will create an increased risk to the safety of the road network. The applicant is open to future discussions with DPTI as to the management of the existing access onto both the Goyder and Sturt Highways post-approval to ensure all road safety and traffic issues are addressed.

## **Overlays**

### *Water Resources Overlay*

The Desired Outcome of the overlay is to protect the quality of South Australia's surface waters. The PO's of the overlay seek that development will not damage existing watercourses nor occur in proximity to swamp or wetlands.

The proposal will not be located near any watercourses, swamps or wetlands and will therefore meet the desired and performance outcomes of the Water Resources Overlay.

### *Building Near Airfields*

The Desired Outcome of the overlay is to ensure the long-term operation and safety requirements of commercial and military airfields. Development within the overlay should not pose a hazard to aircrafts, increase the attraction of birds or be sensitive to aircraft noise.

The nearest airfield, Renmark Airport, is used for private flights and the Royal Flying Doctors Service only. The proposal is located approximately 5 kilometres to the west of the western end of the runway. In relation to potential impacts from glare, it is noted that the US Federal Aviation Administration (FFA) guidelines only consider the potential glare from solar farms upon aircraft within 2 miles of an airstrip (3.2 kilometres). Any aircraft approaching from the west would have already flown past the solar panels at this point of the flight path. Any aircraft approaching from the east would be well removed from the panels and unlikely to be subject to any negative impacts from glare from the panels.

# 6

## ENVIRONMENTAL, ECONOMIC & SOCIAL EFFECTS

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### 6.1 POTENTIAL EFFECTS OF PROPOSAL

From our initial desktop scoping study and subsequent site visits, there have been no potential effects from the proposal identified.

One species listed as a potential trigger for an assessment under the Environment Protection and Biodiversity Conservation (EPBC) Act 1999 has been identified within the area, being the Mallee Fowl. Given that the proposal seeks only to clear a small portion of regrowth vegetation and will preserve the intact native vegetation upon the site it is not considered to result in the need for a referral or assessment under the EPBC Act.

An initial search of the central archive, which includes the Register of Aboriginal Sites and Objects under Section 9 of the *Aboriginal Heritage Act* 1988 has been submitted with the Aboriginal Affairs and Reconciliation section of the Department of the Premier and Cabinet. The search confirmed that there are no entries on the register located upon the subject land. A copy of the search results is included within **Appendix 7**.

### 6.2 DIRECT AND INDIRECT ECONOMIC IMPACTS OF THE PROJECT

The project is strategically located in the Riverland adjacent to the Murraylink interconnector with Victoria. A key economic effect of the facility will be the improvement to the stability of the local power network. The facility will provide renewable energy into the electricity grid, particularly during local peak loads over summer, potentially avoiding blackouts caused by high demands. This will allow the region to continue to operate during the hotter months without the loss of power which could disrupt the operation of businesses within the region.

The regional community will benefit through the broadening of its economic base which will be aided by employment and population growth. It is estimated that a portion of the work will be undertaken by local contractors, particularly the initial site preparation works. The contractors and staff who do not reside within the area will need to be accommodated during the construction period resulting in a significant influx of spending and demand for accommodation within the Berri Barmera Council area.

The facility will offer a new business opportunity within the Riverland region with the potential to promote, support, attract and encourage further renewable energy opportunities. The project encourages sustainable development through the lifespan of the facility. The facility will produce electricity needs for the present generation without compromising the ability of future generations to meet their economic, social and environmental needs.

The proposal can have a potential effect on lowering electricity prices within South Australia due to the expansion of the renewable energy industry. The diversity of alternate energy sources can place downward pressure on market prices within the State.

### **6.3 EMPLOYMENT OPPORTUNITIES**

The project will result in significant employment during the construction stage where 150 plus positions will be required, most of which will be locally based contractors and suppliers. The operation of the facility will require five full-time workers to be employed on and off-site.

# 7

## CONCLUSION

---

### 7.1 SUMMARY

The proposal seeks the construction of a solar farm and associated switchyard, substation and synchronous condenser plant upon the subject land to the north and west of the township of Monash. The proposed facility will be separated into 2 sections (north and south) and will be connected to the grid via a proposed 33kV powerline. The facility will have a generating capacity of approximately 100MW which will be fed into the local electricity network via the proposed substation and connection point adjacent Harding Road.

The facility has been designed and located to limit any potential adverse impacts on the subject land and surrounding locality. The clean power generated from the facility will provide a local supply of energy for consumers and assist in improving network stability during peak power usage periods.

### 7.2 RECOMMENDATION

In summary, I am satisfied the proposed variation is not seriously at variance with the requirements of the Berri Barmera Development Plan, consolidated 8 December 2016 and the Planning and Design Code – Phase 1.

The proposal shows a high degree of consistency with the relevant provision of the Development Plan and the Planning and Design Code to the extent that the proposal warrants the grant of consent from the State Assessment Commission Panel.

Yours sincerely



**Damian Dawson**

**Associate**



## **Appendix 1**

### **Crown Sponsorship Approval and Application Form**



**Government  
of South Australia**

Department for  
Energy and Mining

Our Ref: D20018023

Mr Damian Dawson  
Planning Chambers Pty Ltd  
PO Box 6196  
Halifax Street SA 5000

Via: damian@planningchambers.com.au

Dear Mr Dawson

### **CROWN SPONSORSHIP MONASH SOLAR FARM**

Thank you for your recent letter requesting Crown Sponsorship under section 49 of the Development Act 1993 and section 131 of the Planning, Development and Infrastructure Act 2016 to assist with Mango Power's (MP) proposed Monash Solar Farm.

This Project has been considered within the South Australian Department for Energy and Mining (DEM) with input from the Department of Planning, Transport and Infrastructure, the Department for Environment and Water, the Environment Protection Authority and the Technical Regulator. In principle, the Project is supported, recognising the possible environmental and community issues that will need to be addressed through the development assessment process.

On balance, the development of Mango Power's proposed Project has the potential to benefit South Australia and can be considered public infrastructure. Accordingly I, as Chief Executive of DEM, will support the development and specifically endorse the Development Application to construct the Project comprising up to 100MW of solar generation and associated switchyard, substation and synchronous condenser plant, as a development of:

- 'public infrastructure' pursuant to section 49(2)(c) of the *Development Act 1993*; or
- 'essential infrastructure' under section 131(2)(c) of the *Planning, Development and Infrastructure Act 2016*.

Dependent on the date of application lodgment and the phased introduction of the *Planning, Development and Infrastructure Act 2016* across South Australia, this sponsorship remains valid in respect to both Acts (but only one will apply from the date of lodgment).

Chief Executive

Address Level 12, 11 Waymouth Street, Adelaide 5000 | GPO Box 320 Adelaide SA 5001 | DX452

Tel (+61) 08 8429 3216 | Email DEM.OCE@sa.gov.au | www.energymining.sa.gov.au | ABN 83 768 683 934





**Government  
of South Australia**

Department for  
Energy and Mining

It is the responsibility of Mango Power to prepare all documentation as required by the relevant Act. This includes all costs in the preparation, lodgement and assessment of the Development Application and any other subsequent action in relation to this Application.

A certificate from the Office of the Technical Regulator must also accompany your Development Application to ensure that your Project meets either Real Inertia or Fast Frequency Response criteria to safeguard the stability and reliability of the state's electricity network.

A development application must then be submitted to the DEM Clean Energy Transition Division ([CET@sa.gov.au](mailto:CET@sa.gov.au)) who will lodge it with the State Commission Assessment Panel (SCAP). These lodgement documents can be provided in electronic form or made available via download link. Any development fee levied by SCAP is the responsibility of Mango Power.

It is also a requirement that you contact Mr Richard Webster, Principal Industry Development Officer, on (08) 8429 5285 or via email: [richard.webster@sa.gov.au](mailto:richard.webster@sa.gov.au) prior to the lodgement of your Development application to ensure all relevant statutory requirements are met.

DEM makes no representations and gives no warranties in relation to the outcome of the Development Application or time that it takes to secure a planning outcome. It is the responsibility of Mango Power to obtain all other statutory approvals, licences, connection agreements and permits from relevant authorities, manage community expectations and to fund the Project. The South Australian Government makes no commitment to purchase any product or service related to the Project.

If the Development application has not been received electronically, by mail or in person by the SCAP within 12 months from the date of this letter, my support for this Crown Sponsorship under section 49 (2)(c) of the *Development Act 1993* and section 131(2)(c) of the *Planning, Development and Infrastructure Act 2016*, for the Project will lapse.

Yours sincerely

A handwritten signature in black ink, appearing to read 'P. Heithersay'.

Paul Heithersay  
**CHIEF EXECUTIVE**

08/05/2020



## **Appendix 2**

### Certificates of Title

REAL PROPERTY ACT, 1886



The Registrar-General certifies that this Title Register Search displays the records maintained in the Register Book and other notations at the time of searching.



## Certificate of Title - Volume 5896 Folio 224

Parent Title(s) CL 1422/37  
Creating Dealing(s) RLG 9567124  
Title Issued 06/06/2003 Edition 4 Edition Issued 18/02/2016

### Estate Type

FEE SIMPLE

### Registered Proprietor

MONASH STATION PTY. LTD. (ACN: 608 635 641)  
OF PO BOX 2004 BERRI SA 5343

### Description of Land

ALLOTMENT 100 FILED PLAN 44626  
IN THE AREA NAMED MONASH  
COBDOGLA IRRIGATION AREA (MCINTOSH DIVISION)

### Easements

NIL

### Schedule of Dealings

Dealing Number	Description
5113003	LEASE COMMENCING ON 26/5/1983 AND EXPIRING ON 25/5/2082 OF AN EASEMENT OVER PORTION AS TO THE SHARES SPECIFIED THEREIN (SUBJECT TO LEASE 9061500 OF THE INTERESTS OF TRANSMISSION LESSOR CORPORATION) PURSUANT TO THE ELECTRICITY CORPORATIONS (RESTRUCTURING AND DISPOSAL) ACT 1999
11532312	HERITAGE AGREEMENT PURSUANT TO SECTION 23 OF NATIVE VEGETATION ACT 1991 OVER PORTION (A IN GP 48/2010)
12465346	MORTGAGE TO NATIONAL AUSTRALIA BANK LTD. (ACN: 004 044 937)
13142606	HERITAGE AGREEMENT PURSUANT TO SECTION 23 OF NATIVE VEGETATION ACT 1991 OVER PORTION (A IN G24/2018)

### Notations

Dealings Affecting Title NIL  
Priority Notices NIL  
Notations on Plan NIL

### Registrar-General's Notes

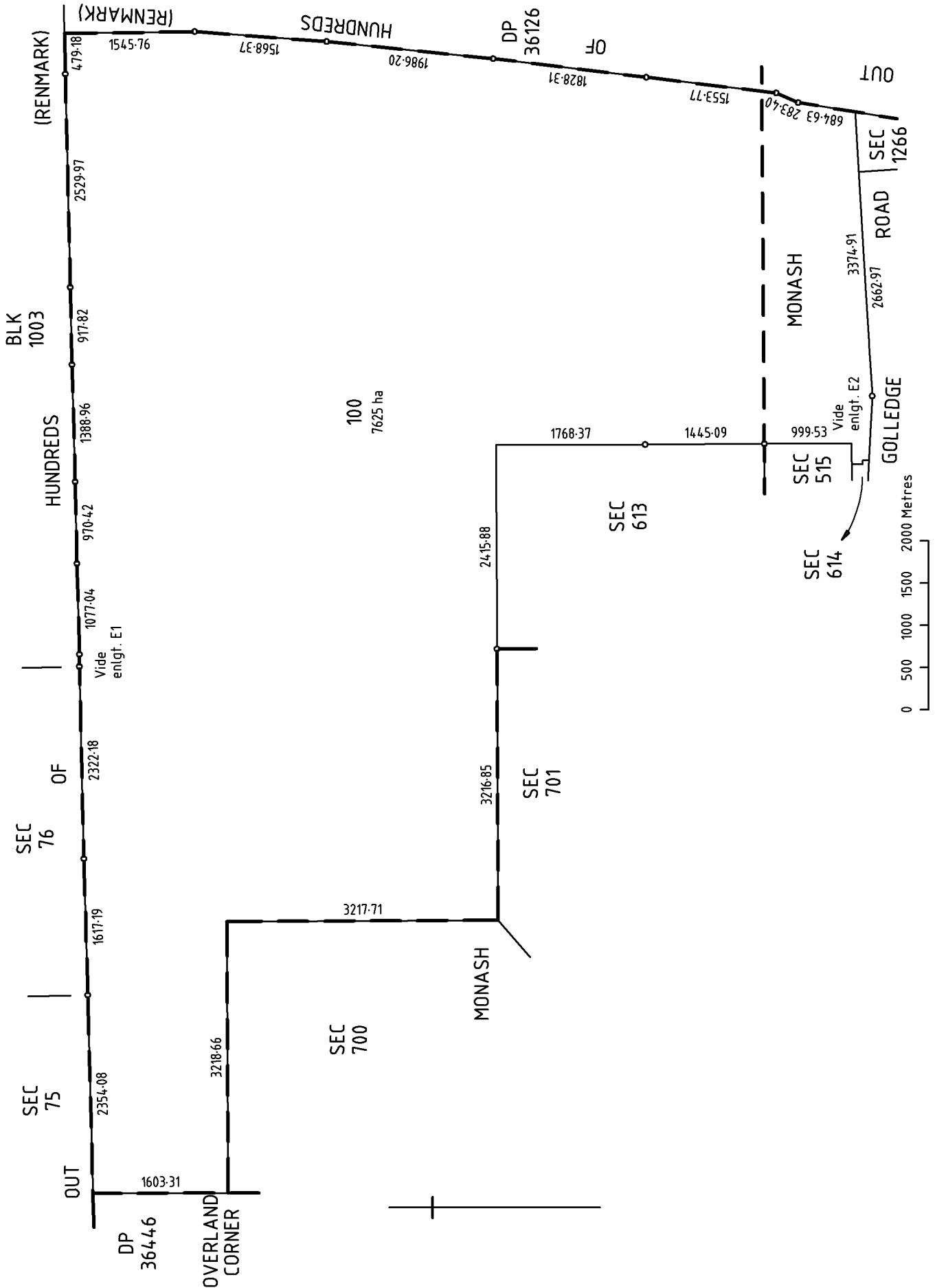
PLAN FOR HERITAGE AGREEMENT PURPOSES VIDE G24/2018  
PLAN FOR HERITAGE AGREEMENT PURPOSES VIDE G48/2010  
APPROVED FILED PLAN FOR LEASE PURPOSES FX58132  
APPROVED F44626  
APPROVED FX253897



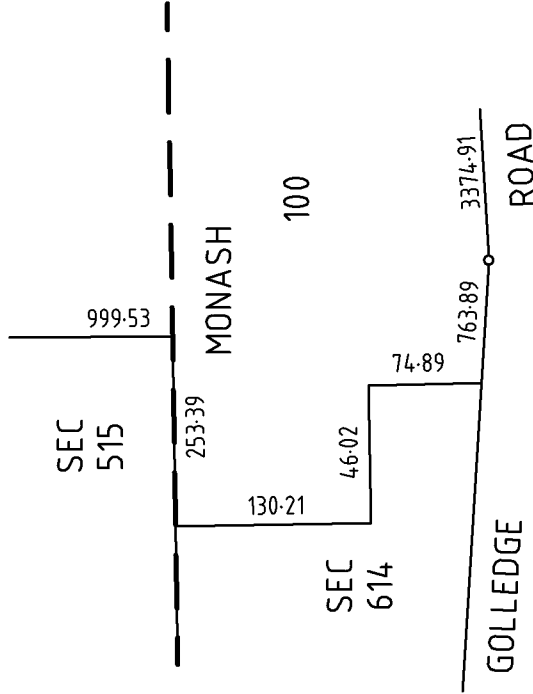
### **Administrative Interests**

NATIVE VEGETATION HERITAGE AGREEMENT HA 1495

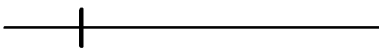
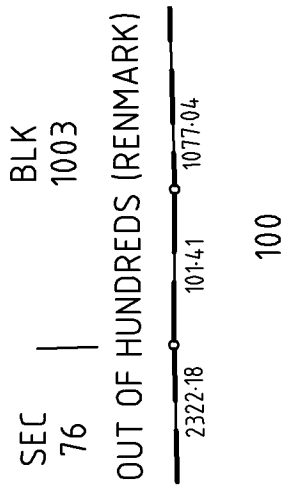
NATIVE VEGETATION HERITAGE AGREEMENT HA 1601



ENLARGEMENT E2  
(NOT TO SCALE)



ENLARGEMENT E1  
(NOT TO SCALE)



REAL PROPERTY ACT, 1886



The Registrar-General certifies that this Title Register Search displays the records maintained in the Register Book and other notations at the time of searching.



## Certificate of Title - Volume 6175 Folio 635

**Parent Title(s)** CT 6120/363  
**Creating Dealing(s)** SC 12525816  
**Title Issued** 10/06/2016      **Edition** 2      **Edition Issued** 16/06/2016

### Estate Type

FEE SIMPLE

### Registered Proprietor

JACK RONALD WALTER  
OF PO BOX 1032 RENMARK SA 5341

### Description of Land

SECTION 1266  
BERRI IRRIGATION AREA  
IN THE AREA NAMED MONASH

### Easements

NIL

### Schedule of Dealings

NIL

### Notations

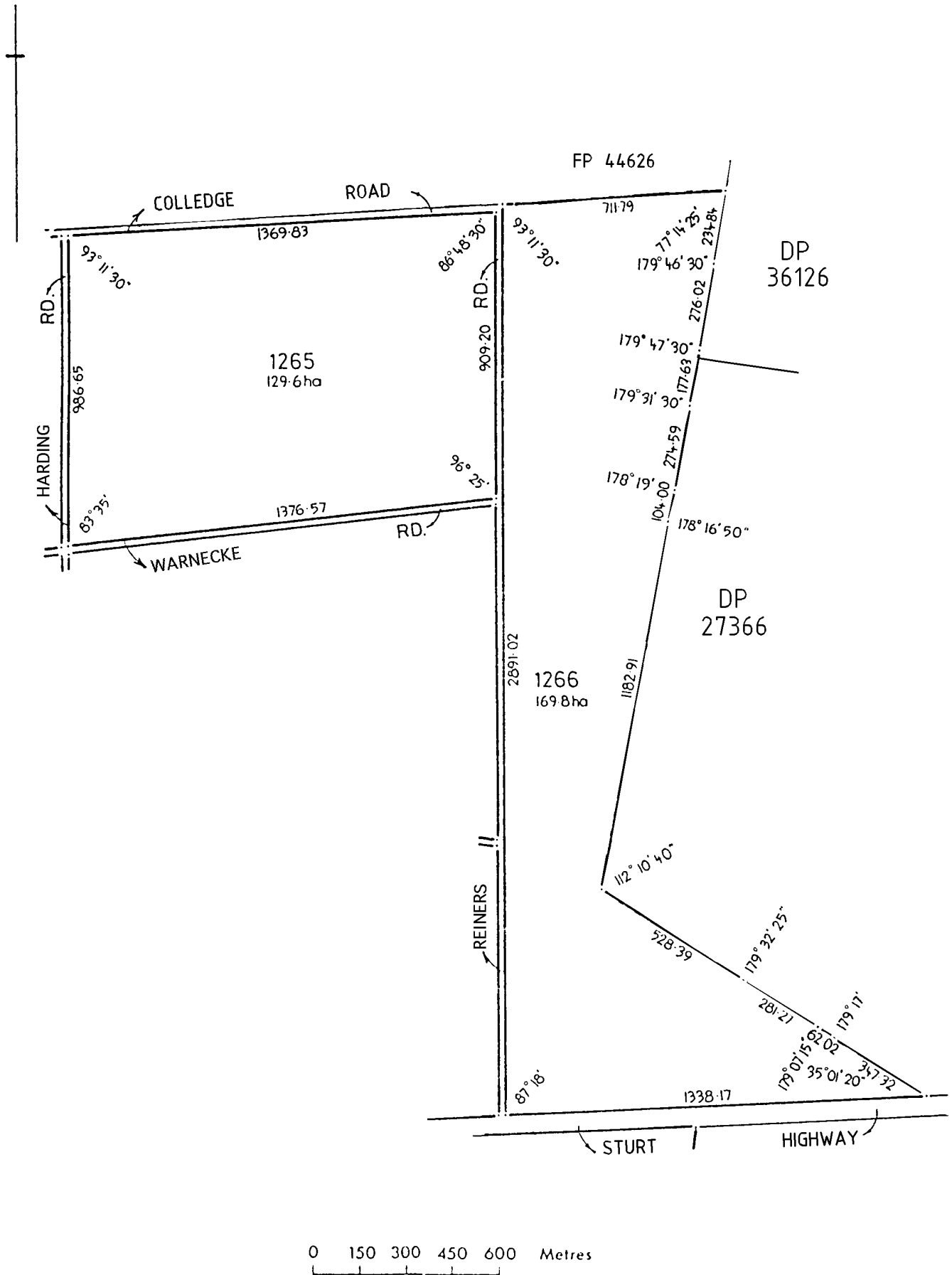
**Dealings Affecting Title** NIL  
**Priority Notices** NIL  
**Notations on Plan** NIL

### Registrar-General's Notes

CONTROLLED ACCESS ROAD VIDE PLAN 121

**Administrative Interests** NIL







REAL PROPERTY ACT, 1986



South Australia

The Registrar-General certifies that this Title Register Search displays the records maintained in the Register Book and other notations at the time of searching.



## Certificate of Title - Volume 5974 Folio 344

Parent Title(s) CT 5907726  
 Creating Dealing(s) T 10496886  
 Title Issued 02/11/2006 Edition 3 Edition Issued 26/11/2012

### Estate Type

FEE SIMPLE

### Registered Proprietor

RYAN PETER HAMOOD  
 OF PO BOX 283 BERRI SA 5343

### Description of Land

SECTIONS 994, 995, 996, 997, 998 AND 1265  
 BERRI IRRIGATION AREA  
 IN THE AREA NAMED MONASH

### Easements

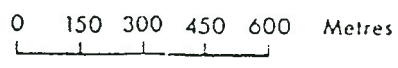
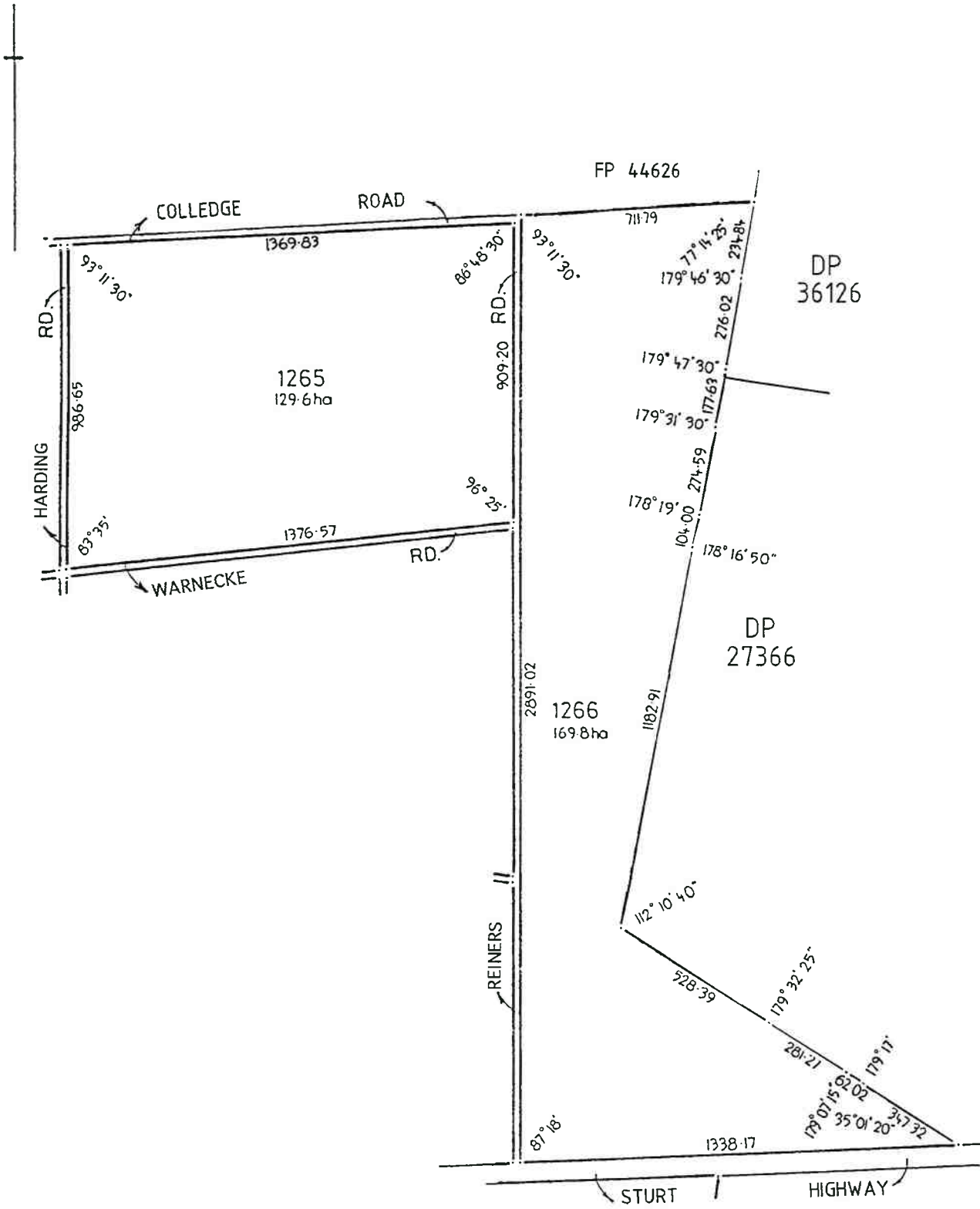
NIL

### Schedule of Dealings

Dealing Number	Description
11846466	MORTGAGE TO COMMONWEALTH BANK OF AUSTRALIA

### Notations

Dealings Affecting Title	NIL
Priority Notices	NIL
Notations on Plan	NIL
Registrar-General's Notes	NIL
Administrative Interests	NIL







## Certificate of Title

Title Reference CT 5974/344  
Status CURRENT  
Easement NO  
Owner Number 15987901  
Address for Notices PO BOX 283 BERRI 5343  
Area NOT AVAILABLE

## Estate Type

Fee Simple

## Registered Proprietor

RYAN PETER HAMOOD  
OF PO BOX 283 BERRI SA 5343

## Description of Land

SECTIONS 994, 995, 996, 997, 998 AND 1265  
BERRI IRRIGATION AREA  
IN THE AREA NAMED MONASH

## Last Sale Details

Dealing Reference Transfer (T) 11846465  
Dealing Date 07/11/2012  
Sale Price \$90,000  
Sale Type Transfer for full monetary consideration

## Constraints

### Encumbrances

Dealing Type	Dealing Number	Beneficiary
MORTGAGE	11846466	COMMONWEALTH BANK OF AUSTRALIA

### Stoppers

NIL

## Valuation Numbers

Valuation Number	Status	Property Location Address
7565192451	CURRENT	Lot 1265 WARNECKE ROAD, MONASH, SA 5342

## Notations





### Dealings Affecting Title

NIL

### Notations on Plan

NIL

### Registrar-General's Notes

NIL

### Administrative Interests

NIL

## Valuation Record

**Valuation Number** 7565192451  
**Type** Site & Capital Value  
**Date of Valuation** 01/01/2017  
**Status** CURRENT  
**Operative From** 01/07/2006  
**Property Location** Lot 1265 WARNECKE ROAD, MONASH, SA 5342  
**Local Government** BERRI BARMERA  
**Owner Names** RYAN PETER HAMOOD  
**Owner Number** 15987901  
**Address for Notices** PO BOX 283 BERRI 5343  
**Zone / Policy / Precinct** RULP - Rural Landscape Protection\\  
**Water Available** No  
**Sewer Available** No  
**Land Use** 9920 - Breeding Animals And Birds  
**Description** L  
**Local Government Description** Primary Production

## Parcels

Plan/Parcel	Title Reference(s)
H740200 Section 996	CT 5974/344
H740200 Section 994	CT 5974/344
H740200 Section 997	CT 5974/344
H740200 Section 1265	CT 5974/344
H740200 Section 995	CT 5974/344



Plan/Parcel	Title Reference(s)
H740200 Section 998	CT 5974/344

## Values

Financial Year	Site Value	Capital Value	Notional Site Value	Notional Capital Value	Notional Type
Current	\$97,000	\$97,000			
Previous	\$97,000	\$97,000			

## Building Details

Valuation Number	7565192451
Building Style	Not available
Year Built	Not available
Building Condition	Not available
Wall Construction	Not available
Roof Construction	Not available
Equivalent Main Area	Not available
Number of Main Rooms	Not available



The Registrar-General certifies that this Title Register Search displays the records maintained in the Register Book and other notations at the time of searching.



## Certificate of Title - Volume 5896 Folio 224

Parent Title(s) CL 1422/37  
Creating Dealing(s) RLG 9567124  
Title Issued 06/06/2003 Edition 4 Edition Issued 18/02/2016

### Estate Type

FEE SIMPLE

### Registered Proprietor

MONASH STATION PTY. LTD. (ACN: 608 635 641)  
OF PO BOX 2004 BERRI SA 5343

### Description of Land

ALLOTMENT 100 FILED PLAN 44626  
IN THE AREA NAMED MONASH  
COBDOGLA IRRIGATION AREA (MCINTOSH DIVISION)

### Easements

NIL

### Schedule of Dealings

Dealing Number	Description
5113003	LEASE COMMENCING ON 26/5/1983 AND EXPIRING ON 25/5/2082 OF AN EASEMENT OVER PORTION AS TO THE SHARES SPECIFIED THEREIN (SUBJECT TO LEASE 9061500 OF THE INTERESTS OF TRANSMISSION LESSOR CORPORATION) PURSUANT TO THE ELECTRICITY CORPORATIONS (RESTRUCTURING AND DISPOSAL) ACT 1999
11532312	HERITAGE AGREEMENT PURSUANT TO SECTION 23 OF NATIVE VEGETATION ACT 1991 OVER PORTION (A IN GP 48/2010)
12465346	MORTGAGE TO NATIONAL AUSTRALIA BANK LTD. (ACN: 004 044 937)
13142606	HERITAGE AGREEMENT PURSUANT TO SECTION 23 OF NATIVE VEGETATION ACT 1991 OVER PORTION (A IN G24/2018)

### Notations

Dealings Affecting Title NIL  
Priority Notices NIL  
Notations on Plan NIL

### Registrar-General's Notes

PLAN FOR HERITAGE AGREEMENT PURPOSES VIDE G24/2018  
PLAN FOR HERITAGE AGREEMENT PURPOSES VIDE G48/2010  
APPROVED FILED PLAN FOR LEASE PURPOSES FX58132  
APPROVED F44626  
APPROVED FX253897

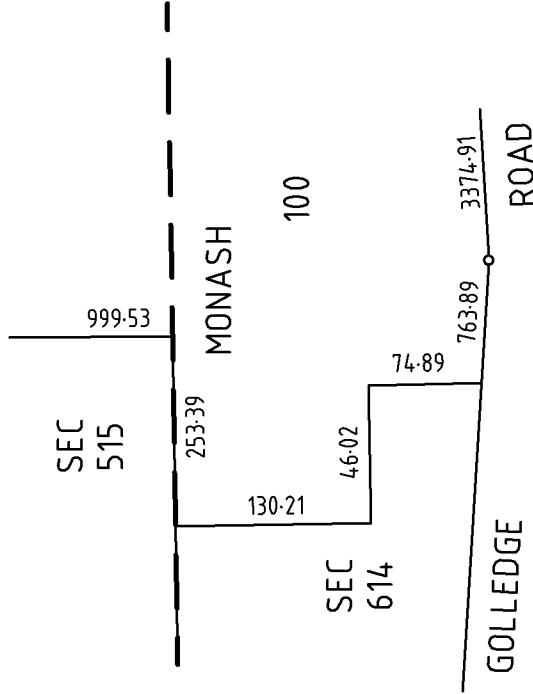
### **Administrative Interests**

NATIVE VEGETATION HERITAGE AGREEMENT HA 1495

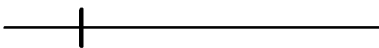
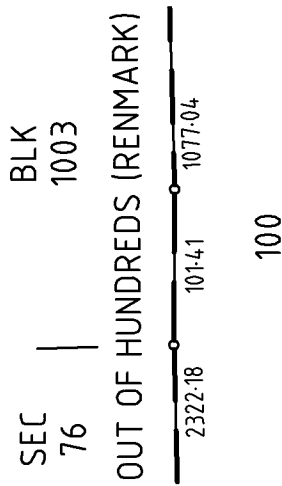
NATIVE VEGETATION HERITAGE AGREEMENT HA 1601



ENLARGEMENT E2  
 (NOT TO SCALE)



ENLARGEMENT E1  
 (NOT TO SCALE)

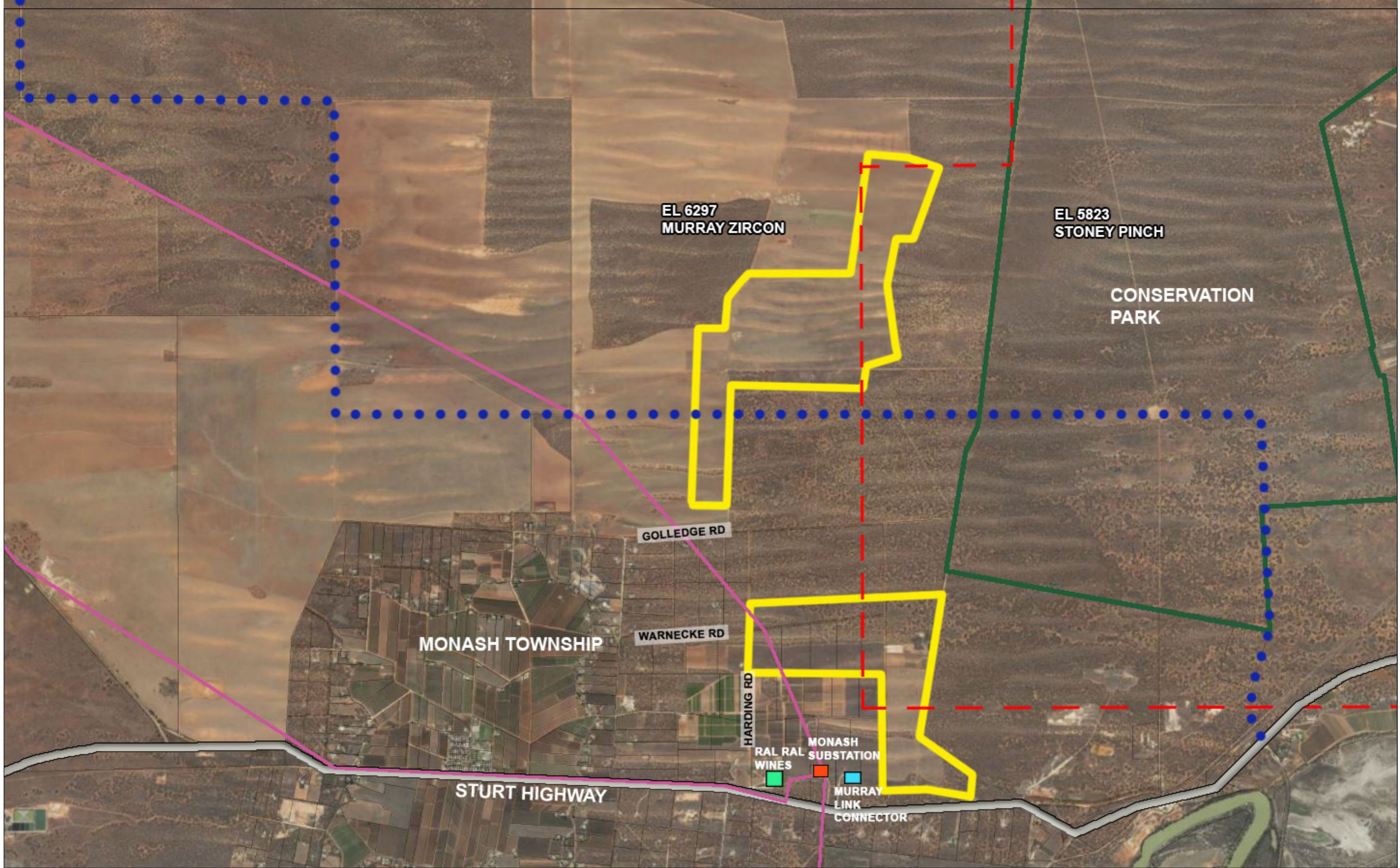




## **Appendix 3**

### Locality Plan



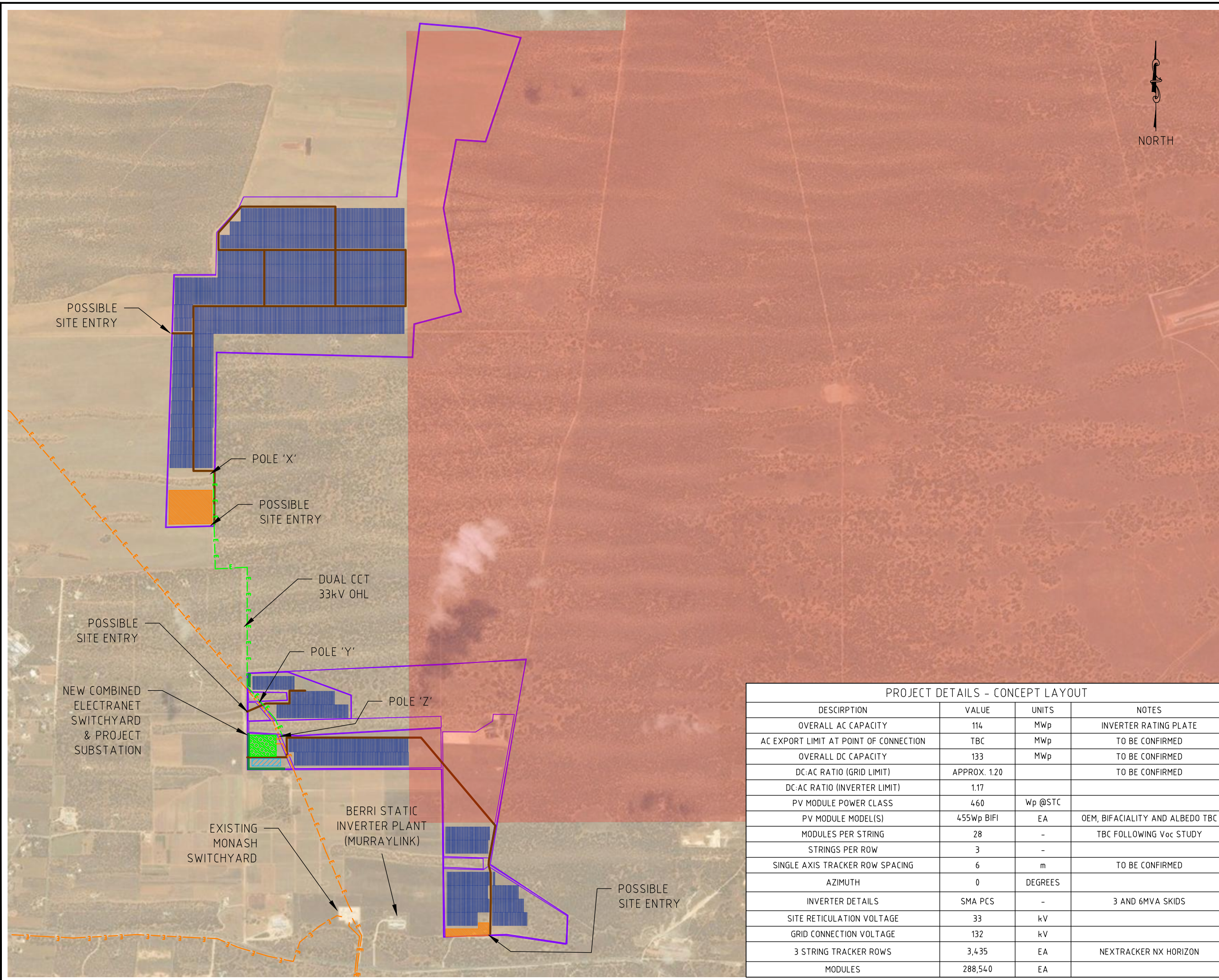




## **Appendix 4**

Proposed plans prepared by Brighty Energy





**NOTES:**

1. CONCEPT DRAWING ONLY, SUBJECT TO CHANGE DURING DETAILED DESIGN.
2. NO CONTOUR DATA AVAILABLE TO INTERPRET SLOPES - MORE ACCURATE SITE SURVEY REQUIRED TO FURTHER REFINE DESIGN AND CONFIRM EARTHWORKS QUANTITIES.
3. FLOODING ASSESSMENT NOT COMPLETED. LAYOUT AND SUBSTATION LOCATION SUBJECT TO CHANGE.
4. DC:AC RATIO TO BE REFINED FOLLOWING RECEIPT OF SITE ALBEDO DATA AND SELECTION OF FINAL MODULE.
5. REACTIVE POWER AND FAULT RIDE THROUGH ASSESSMENT TO BE COMPLETED PRIOR TO CONFIRMATION OF AC EXPORT LIMIT.

**LEGEND:**

- INDICATIVE BOUNDARY
- ACCESS TRACKS
- STREAMS (TBC)
- EXISTING 132kV OHL
- PROPOSED 33kV OHL
- SOLAR TRACKER
- TEMP LAYDOWN AND FUTURE BATTERY
- TEMPORARY FACILITIES
- PROJECT SUBSTATION, ELECTRANET SW/YARD AND SYNCON YARD.
- MINING EXPLORATION LEASE AREA
- VEGETATION SCREEN

PROJECT DETAILS - CONCEPT LAYOUT			
DESCRIPTION	VALUE	UNITS	NOTES
OVERALL AC CAPACITY	114	MWp	INVERTER RATING PLATE
AC EXPORT LIMIT AT POINT OF CONNECTION	TBC	MWp	TO BE CONFIRMED
OVERALL DC CAPACITY	133	MWp	TO BE CONFIRMED
DC:AC RATIO (GRID LIMIT)	APPROX. 1.20		TO BE CONFIRMED
DC:AC RATIO (INVERTER LIMIT)	1.17		
PV MODULE POWER CLASS	460	Wp @STC	
PV MODULE MODEL(S)	455Wp BIFI	EA	OEM, BIFACIALITY AND ALBEDO TBC
MODULES PER STRING	28	-	TBC FOLLOWING Voc STUDY
STRINGS PER ROW	3	-	
SINGLE AXIS TRACKER ROW SPACING	6	m	TO BE CONFIRMED
AZIMUTH	0	DEGREES	
INVERTER DETAILS	SMA PCS	-	3 AND 6MVA SKIDS
SITE RETICULATION VOLTAGE	33	kV	
GRID CONNECTION VOLTAGE	132	kV	
3 STRING TRACKER ROWS	3,435	EA	NEXTRACKER NX HORIZON
MODULES	288,540	EA	

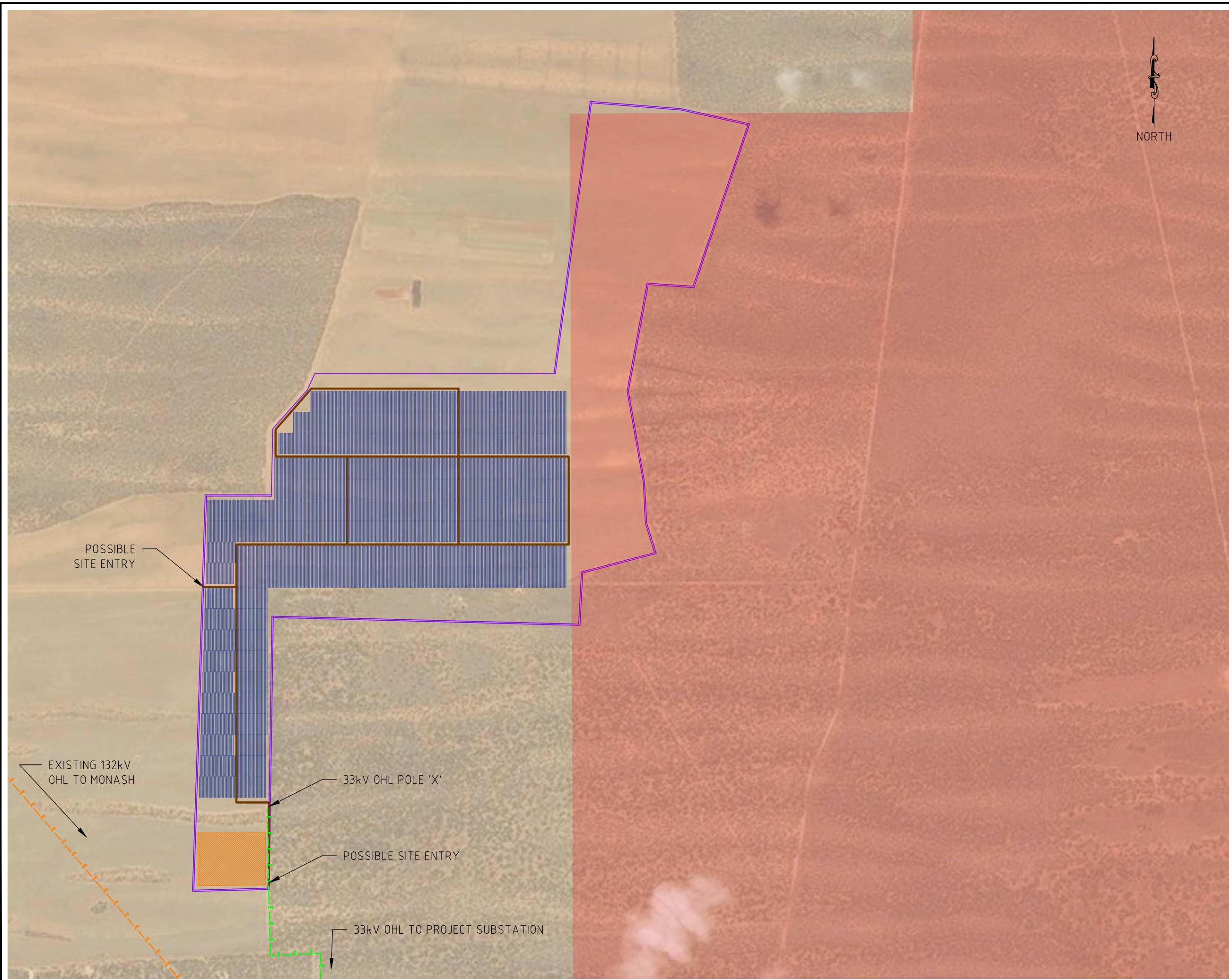
B	EXCLUDED MODULES FROM MINING LEASE	ABC	18.05.2020
A	FIRST DRAWN	ABC	08.12.2019
REV:	DESCRIPTION:	BY:	DATE:

STATUS: **NOT FOR CONSTRUCTION**

Mango Power  
Melbourne, VIC, AUS

PROJECT: MONASH SOLAR FARM			
TITLE: OVERALL PROJECT LAYOUT CONCEPT DRAWING			
SCALE AT A3: 1:25,000	DATE: 18.05.2020	DRAWN: ABC	CHECKED: -
PROJECT NO: CPG01	DRAWING NO: MNS-GA-1	REVISION: B	





**NOTES:**

1. NORTHERN PARCEL ONLY, REFER MNS-GA-1 FOR OVERALL PROJECT.
2. CONCEPT DRAWING ONLY, SUBJECT TO CHANGE DURING DETAILED DESIGN.
3. NO CONTOUR DATA AVAILABLE TO INTERPRET SLOPES - MORE ACCURATE SITE SURVEY REQUIRED TO FURTHER REFINE DESIGN AND CONFIRM EARTHWORKS QUANTITIES.
4. FLOODING ASSESSMENT NOT COMPLETED. LAYOUT AND SUBSTATION LOCATION SUBJECT TO CHANGE.
5. DC:AC RATIO TO BE REFINED FOLLOWING RECEIPT OF SITE ALBEDO DATA AND SELECTION OF FINAL MODULE.

**LEGEND:**

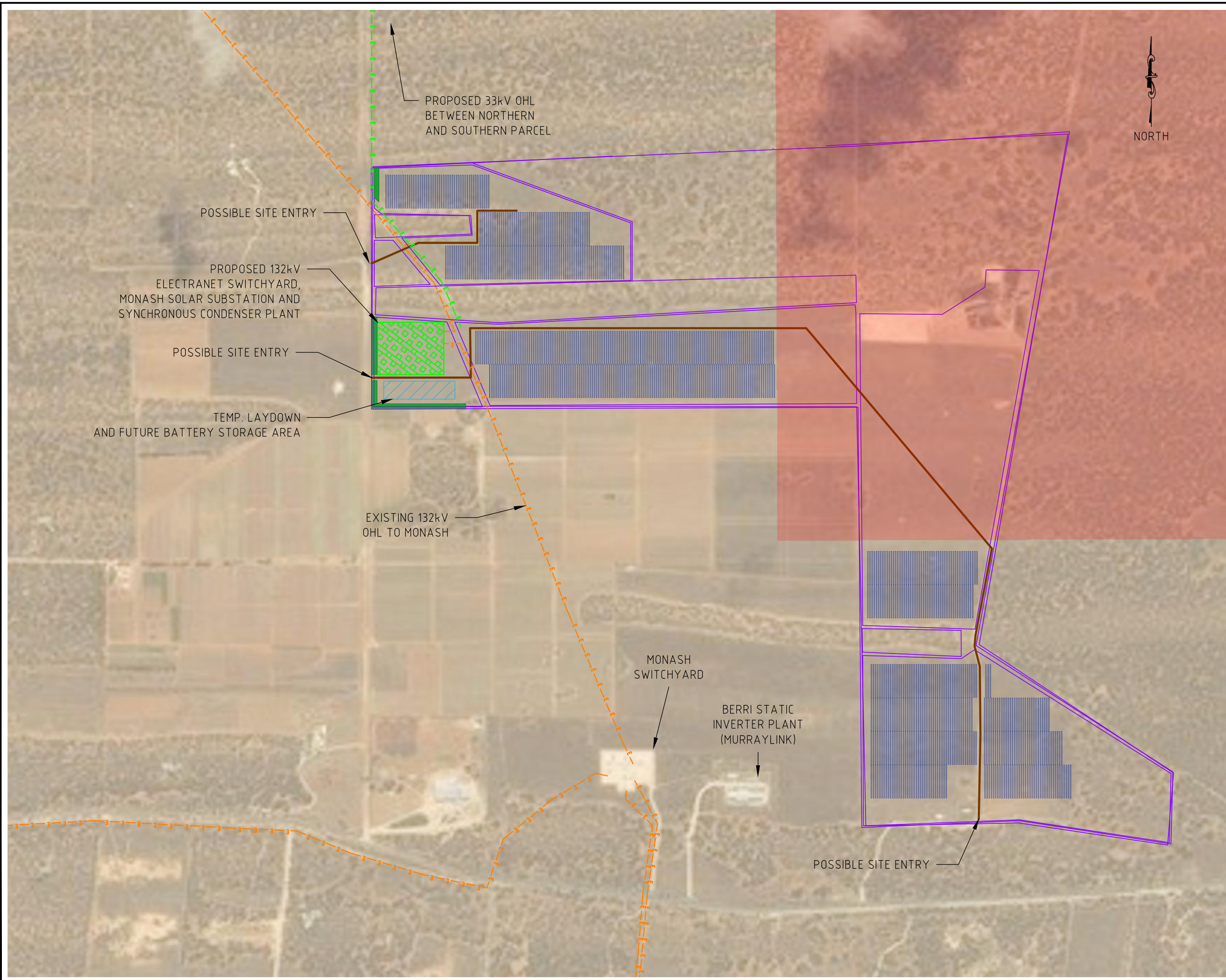
- INDICATIVE BOUNDARY
- ACCESS TRACKS
- STREAMS (TBC)
- EXISTING 132kV OHL
- PROPOSED 33kV OHL
- SOLAR TRACKER
- TEMPORARY FACILITIES
- MINING EXPLORATION LEASE AREA

B	MINING LEASE EXCLUDED	ABC	18.05.2020
A	FIRST DRAWN	ABC	08.12.2019
REV:	DESCRIPTION:	BY:	DATE:
STATUS: <b>NOT FOR CONSTRUCTION</b>			

Mango Power  
Melbourne, VIC, AUS

PROJECT: MONASH SOLAR FARM NORTHERN PROJECT			
TITLE: PROJECT LAYOUT CONCEPT DRAWING			
SCALE AT A3: 1:16,000	DATE: 18.05.2020	DRAWN: ABC	CHECKED: -
PROJECT NO: CPG01	DRAWING NO: MNS-GA-2	REVISION: B	





**NOTES:**

1. SOUTHERN PARCEL ONLY, REFER MNS-GA-1 FOR OVERALL PROJECT.
2. CONCEPT DRAWING ONLY, SUBJECT TO CHANGE DURING DETAILED DESIGN.
3. NO CONTOUR DATA AVAILABLE TO INTERPRET SLOPES - MORE ACCURATE SITE SURVEY REQUIRED TO FURTHER REFINE DESIGN AND CONFIRM EARTHWORKS QUANTITIES.
4. FLOODING ASSESSMENT NOT COMPLETED. LAYOUT AND SUBSTATION LOCATION SUBJECT TO CHANGE.
5. DC:AC RATIO TO BE REFINED FOLLOWING RECEIPT OF SITE ALBEDO DATA AND SELECTION OF FINAL MODULE.

**LEGEND:**

- INDICATIVE BOUNDARY
- ACCESS TRACKS
- STREAMS (TBC)
- EXISTING 132kV OHL
- PROPOSED 33kV OHL
- SOLAR TRACKER
- TEMP LAYDOWN AND FUTURE BATTERY
- TEMPORARY FACILITIES
- PROJECT SUBSTATION, ELECTRANET SW/YARD AND SYNCON YARD.
- MINING EXPLORATION LEASE AREA
- VEGETATION SCREEN

B	EXCLUDED MINING LEASE AREA	ABC	18.05.2020
A	FIRST DRAWN	ABC	08.12.2019
REV:	DESCRIPTION:	BY:	DATE:
STATUS: <b>NOT FOR CONSTRUCTION</b>			

Mango Power  
Melbourne, VIC, AUS

PROJECT: MONASH SOLAR FARM SOUTHERN PROJECT			
TITLE: PROJECT LAYOUT CONCEPT DRAWING			
SCALE AT A3: 1:10,000	DATE: 18.05.2020	DRAWN: ABC	CHECKED: -
PROJECT NO: CPG01	DRAWING NO: MNS-GA-3	REVISION: B	



## **Appendix 5**

### Certificate of Compliance from the Technical Regulator



Ref: D19144630

18<sup>th</sup> December 2019

Chris Butchers  
Director  
Mango Power Pty Ltd  
Suite 153, 461 St Kilda Street  
Melbourne, Victoria 3004  
cbutchers@mangopower.com.au

Energy and Technical  
Regulation

Office of the  
Technical Regulator

Level 8, 11 Waymouth Street  
Adelaide SA 5000

GPO Box 320  
Adelaide SA 5001

Telephone: 08 8226 5500  
Facsimile: 08 8226 5866

[www.sa.gov.au/otr](http://www.sa.gov.au/otr)

Dear Mr Butchers,

***RE: Monash Solar Farm***

The development of the Monash Solar Farm has been assessed by the Office of the Technical Regulator (OTR) under Section 37 of the Development Act 1993.

The *Development Regulations 2008* prescribe if the proposed development is for the purposes of the provision of electricity generating plant with a generating capacity of more than 5 MW that is to be connected to the State's power system – a certificate from the Technical Regulator is required, certifying that the proposed development complies with the requirements of the Technical Regulator in relation to the security and stability of the State's power system.

In making a decision on your application, our office has taken the following information into account:

- Your letter dated 13<sup>th</sup> December 2019.
- Your email regarding synchronous condenser inertia constant 17<sup>th</sup> December 2019.

After assessing the information provided, I advise that approval is granted for the proposed generator on the understanding that the shortfall in inertia will be compensated in full via a synchronous condenser and flywheel solution.

It should be noted that should the shortfall in inertia not be addressed this may have impact on the ESCOSA license for the proposed generator.

Energy and Technical Regulations

Level 8, 11 Waymouth Street Adelaide SA 5000 | GPO Box 320 Adelaide SA 5001 | DX541  
Tel (+61) 8 8226 5500 | Fax (+61) 8 8226 5866 | [www.dpc.sa.gov.au](http://www.dpc.sa.gov.au) | ABN 83 524 915 929



Should you have any questions regarding this matter, please do not hesitate to call Mark Burns on (08) 8429 2707.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Rob Faunt'.

Rob Faunt  
**TECHNICAL REGULATOR**

## **Appendix 6**

### Native Vegetation Clearance Approval



# Native Vegetation Council

File: 2018/3200/752  
Contact: Graham Carpenter  
Telephone: 8207 7714

Level 4  
81-95 Waymouth St  
ADELAIDE SA 5000

12 December 2018

GPO Box 1047  
Adelaide SA 5001

Chis Butchers  
Cullen Capital Pty Ltd  
c/- Wayne Brown  
Environments by Design  
PO Box 62,  
BRIDGEWATER SA 5155

Ph| 08 8303 9777

[nvc@sa.gov.au](mailto:nvc@sa.gov.au)

Dear Chris,

## Re: Native Vegetation Removal Request – Monash Solar solar-farm

I refer to your application on behalf of Cullen Capital Pty Ltd in which approval was sought from the Native Vegetation Council (NVC) for the removal of native vegetation associated with establishing the Monash Solar solar-farm under Native Vegetation Regulation 12(34).

At its meeting of 4 December 2018 the Native Vegetation Assessment Panel (NVAP) considered your application in conjunction with the presentation by yourself and Wayne Brown of Environments by Design and a report from the Native Vegetation Branch. The application for the development, as detailed in the "Native vegetation clearance proposal: Monash Solar data report" prepared by Environments by Design dated 18 July 2018, was considered against Regulation 12(34) – *Clearance of native vegetation associated with the building or provision of infrastructure*.

NVAP considered that the proposed clearance of up to 33 ha and 45 scattered trees satisfies the requirements of Native Vegetation Regulation 12(34). NVAP therefore resolved to endorse the use of NV Regulation 12(34) as described in the "Native vegetation clearance proposal: Monash Solar data report" prepared by Environments by Design dated 18 July 2018, subject to:

1. No clearance to occur until planning approval for the solar farm has been obtained;
2. Written consent is required from the landowner of any land not owned by the applicant prior to the clearance of native vegetation;
3. Clearance to be confined to those areas as shown as exempt in Regulation Advice Plan 2018/3200/752;
4. No clearance is to occur in areas shown as not exempt in Regulation Advice Plan 2018/3200/752;
5. Sufficient fire breaks are to be provided within the development area to avoid the need to create additional breaks or asset protection zones within the adjacent native vegetation on crown land to the east including Cooltong Conservation Park;

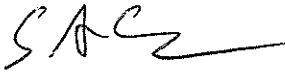
6. The landowner is to permanently set aside a minimum area of land totalling 236 ha within the area marked "SEB area 1, 2 and 3 and the area shown as not exempt (Area 1a)" in the attached Regulation Advice Plan numbered 2018/3200/752 for the growth of native vegetation and for no other purpose;
7. The landowner is to manage the set-aside area in accordance with the Native Vegetation Management Plan for the Monash Solar Farm set-aside areas prepared by Wayne Brown dated July 2018 so as to permanently maintain that land for the purpose of growth of native vegetation. In particular, the landowner must:
  - a. undertake an effective and ongoing weed, rabbit and feral goat control program within the set-aside area to ensure the successful regeneration of native vegetation in the area;
  - b. erect a stock proof fence to exclude stock from the set-aside area, to be completed prior to undertaking the clearance. **(Note: Where the adjoining land is to be kept free of stock, no fencing is required unless grazing of the adjacent land is proposed);**
  - c. maintain and if necessary upgrade fences around the set-aside area so that stock or other domestic grazing animals are excluded from the set-aside area;
  - d. not allow access to the set-aside area by any vehicles or machinery unless that access will assist in promoting growth or regeneration of native vegetation;
  - e. not cause or permit the construction of any buildings or other structures, other than approved signs, on the set-aside area;
8. Payment of \$6056.25 (\$5753.44 for clearance GST exclusive and \$302.81 for the administration fee GST inclusive) to the Native Vegetation Fund to be made within one month of invoice date. (Note the invoice will not be sent until the attached form "Understanding of Regulation Advice" is signed and returned);
9. Members of the Council or a person who is an authorised officer under the Native Vegetation Act may at a reasonable time enter the property of the landowner for the purpose of assessing and recording any matter relevant to this consent. A person undertaking such an assessment may be assisted by other suitable persons. Any such inspection will only be taken after there has been an attempt to contact the landowner; and
10. The landowner must adequately inform any prospective purchaser, lessee or occupier of the land affected by conditions in this consent, of the relevant conditions.
11. The endorsement shall be for a period of two years, after which time a new endorsement is required



---

Please contact Graham Carpenter on 8207 7714 if you have any questions.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'GAC', with a long horizontal flourish extending to the right.

Graham Carpenter

**Assessment Officer  
Native Vegetation Branch**



**Note:** *Please read the Regulation Advice Notification to acknowledge that you have understood the Advice made by the Native Vegetation Council, then sign and return this form by fax, post or email to:*

**Post:** **Graham Carpenter**  
**Native Vegetation Branch**  
**Dept Environment & Water**  
**GPO Box 1047**  
**Adelaide SA 5001**

**Fax:** 8303 9780

**Email:** [graham.carpenter@sa.gov.au](mailto:graham.carpenter@sa.gov.au)

***UNDERSTANDING OF REGULATION ADVICE***

**File:** 2018/3200/752 Cullen Capital Pty Ltd

***I clearly understand the Native Vegetation Council's Regulation Advice Notification and the conditions associated with clearance.***

Name of Landowner(s) or Company: .....

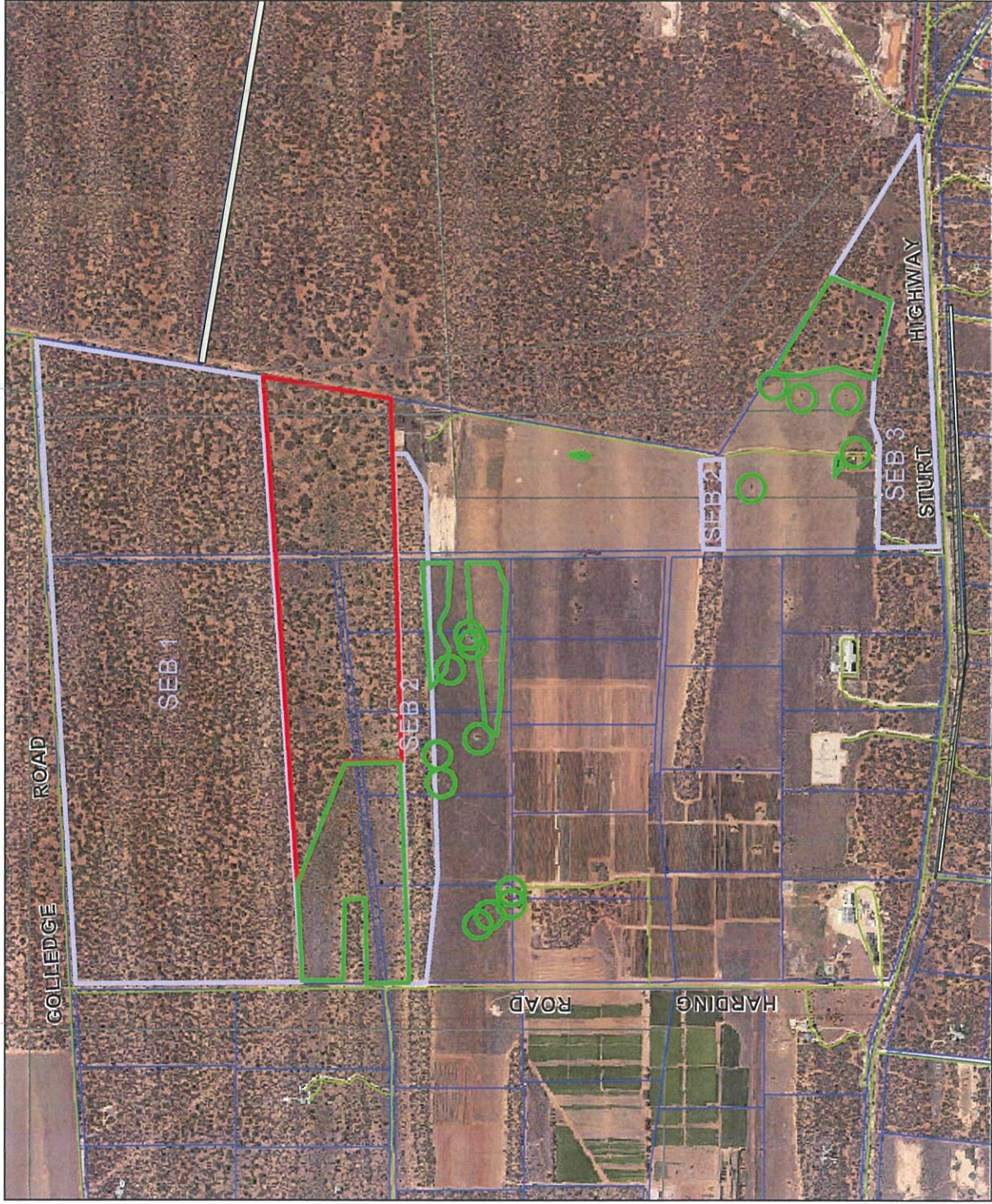
Signature of Landowner(s) or seal of Company and authorised signatory:

.....  
.....  
.....  
.....

Date : .....



# Native Vegetation Regulation 12(34) Application



## REGULATION ADVICE PLAN

TO FORM PART OF THE ADVICE TO THE  
NATIVE VEGETATION COUNCIL

APPLICATION NO. 2018/3200/752

OUT of HUNDREDS

Sns 1265 -66, 994 - 998

Clearance exempt under  
NV Regulation 12(34)  
(subject to conditions)



Clearance not exempt under  
NV Regulation 12(34)



Proposed offset areas



Property/Section Boundary



Native Vegetation Council



Scale: 1:20000

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## **Appendix 7**

### Register of Aboriginal Sites and Objects search results

Damian Dawson  
Planning Chambers  
219 Sturt Street  
Adelaide 5000 South Australia

Dear Damian

Thank you for the search request dated 18 Feb 2020. The search was based on the title details - Title Type: CT, Volume: 6175, Folio: 635. The address for this parcel is: 18953 STURT HWY MONASH SA 5342. Your reference is 1150.

I advise that the central archive, which includes the Register of Aboriginal Sites and Objects (the Register), administered by Aboriginal Affairs and Reconciliation (AAR), has no entries for Aboriginal sites at this location.

The applicant is advised that sites or objects may exist in the proposed development area, even though the Register does not identify them. All Aboriginal sites and objects are protected under the *Aboriginal Heritage Act 1988* (the Act), whether they are listed in the central archive or not. Land within 200 metres of a watercourse (for example the River Murray and its overflow areas) in particular, may contain Aboriginal sites and objects.

Pursuant to the Act, it is an offence to damage, disturb or interfere with any Aboriginal site, object or remains (registered or not) without the authority of the Premier. If the planned activity is likely to damage, disturb or interfere with a site, object or remains, authorisation of the activity must be first obtained from the Premier under Section 23 of the Act. Section 20 of the Act requires that any Aboriginal sites, objects or remains, discovered on the land, need to be reported to the Premier. Penalties apply for failure to comply with the Act. It should be noted that this Aboriginal heritage advice has not addressed any relevant obligations pursuant to the *Native Title Act 1993*.

Please be aware in this area there are Aboriginal groups/organisations/traditional owners that may have an interest. These may include:

**River Murray and Mallee Aboriginal Corporation**

**Chairperson:** Christine Abdulla

**Address:** 1/84 Powell Street Berri SA 5343

**Telephone:** 0428220231

**Email:** abdulla.christine@yahoo.com.au

**Contact Officer:** Christine Abdulla

**Telephone:**

**Email:** abdulla.christine@yahoo.com.au

If you require further information, please contact the Aboriginal Heritage Team on telephone (08) 8226 8900 or send to our generic email address [dpc-aar.heritagesites1@sa.gov.au](mailto:dpc-aar.heritagesites1@sa.gov.au)

Yours sincerely,



Perry Langeberg  
**SENIOR INFORMATION OFFICER (HERITAGE)**  
**ABORIGINAL AFFAIRS & RECONCILIATION**

6 March 2020



Damian Dawson  
Planning Chambers  
219 Sturt Street  
Adelaide 5000 South Australia

Dear Damian

Thank you for the search request dated 18 Feb 2020. The search was based on the title details - Title Type: CT, Volume: 5974, Folio: 344. The address for these parcels is: WARNECKE RD MONASH SA 5342. Your reference is 1150.

I advise that the central archive, which includes the Register of Aboriginal Sites and Objects (the Register), administered by Aboriginal Affairs and Reconciliation (AAR), has no entries for Aboriginal sites at this location.

The applicant is advised that sites or objects may exist in the proposed development area, even though the Register does not identify them. All Aboriginal sites and objects are protected under the *Aboriginal Heritage Act 1988* (the Act), whether they are listed in the central archive or not. Land within 200 metres of a watercourse (for example the River Murray and its overflow areas) in particular, may contain Aboriginal sites and objects.

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**River Murray and Mallee Aboriginal Corporation**

**Chairperson:** Christine Abdulla

**Address:** 1/84 Powell Street Berri SA 5343

**Telephone:** 0428220231

**Email:** abdulla.christine@yahoo.com.au

**Contact Officer:** Christine Abdulla

**Telephone:**

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If you require further information, please contact the Aboriginal Heritage Team on telephone (08) 8226 8900 or send to our generic email address [dpc-aar.heritagesites1@sa.gov.au](mailto:dpc-aar.heritagesites1@sa.gov.au)

Yours sincerely,



Perry Langeberg  
**SENIOR INFORMATION OFFICER (HERITAGE)**  
**ABORIGINAL AFFAIRS & RECONCILIATION**

6 March 2020





Damian Dawson  
Planning Chambers  
219 Sturt Street  
Adelaide 5000 South Australia

Dear Damian

Thank you for the search request dated 18 Feb 2020. The search was based on the title details - Title Type: CT, Volume: 5896, Folio: 224. The address for this parcel is: 85 GOLLEDGE RD MONASH SA 5342. Your reference is 1150.

I advise that the central archive, which includes the Register of Aboriginal Sites and Objects (the Register), administered by Aboriginal Affairs and Reconciliation (AAR), has no entries for Aboriginal sites at this location.

The applicant is advised that sites or objects may exist in the proposed development area, even though the Register does not identify them. All Aboriginal sites and objects are protected under the *Aboriginal Heritage Act 1988* (the Act), whether they are listed in the central archive or not. Land within 200 metres of a watercourse (for example the River Murray and its overflow areas) in particular, may contain Aboriginal sites and objects.

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Yours sincerely,



Perry Langeberg  
**SENIOR INFORMATION OFFICER (HERITAGE)**  
**ABORIGINAL AFFAIRS & RECONCILIATION**

6 March 2020

