



## Coonamble Shire Council

# Development Application for Moorambilla Solar Farm at Lot 3 DP 547529, Coonamble Development Assessment Report

October 2017

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# 1. Introduction

## 1.1 Purpose of this report

This report has been prepared on behalf of Coonamble Shire Council (Council) in order to provide an independent third party assessment of a development application (DA/026/2017) lodged with Council for the Moorambilla Solar Farm, located at Lot 3 DP 547529, Coonamble.

It provides a review of the development application pursuant to section 79C(1) of the *Environmental Planning and Assessment Act 1979* (EP&A Act) taking into account:

- The plans and documentation lodged with the development application
- Comments received from external referral agencies
- Submissions received during the neighbour notification period
- Applicable planning instruments and development control plans relating to the development.

The following reports have been prepared as separate sections and are structured as follows:

- Compliance and assessment section: providing an evaluation of the form, content and general compliance of the DA application, with the purpose of certifying that it is complete and suitable for the purpose of making a recommendation for Council's determination, or otherwise documenting any deficiency. It will also detail the scope of assessment, issues identified and resolution of issues. This report will contain a recommendation in respect of the grant of consent. Refer to section 2.
- Conditions section: detailing either recommendations for or conditions of approval; alternatively it will contain the 'reasons' for refusal. Refer to section 3.
- Submissions section: the content, evaluation and recommendation in respect of any public or other submission received in relation to either public exhibition of the application or other referral that invites comment. Refer to section 4.

A Council Business Paper will also be prepared as a separate stand-alone report. It will comprise a report for consideration by the Council in Chambers and by the Joint Regional Planning Panel (JRPP). It will provide a précis of the DA, issues, evaluation, exhibition, submissions received, and recommendation as to the merit suitability of the application for the grant of development consent.

## 1.2 Scope and limitations

This report: has been prepared by GHD for Coonamble Shire Council and may only be used and relied on by Coonamble Shire Council for the purpose agreed between GHD and the Coonamble Shire Council as set out in section 1.1 of this report.

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

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

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no

responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

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

GHD has prepared this report on the basis of information provided by Coonamble Shire Council and others who provided information to GHD (including Government authorities), which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

## 2. Compliance and assessment

### 2.1 Preamble

#### 2.1.1 Site description

The site is located at Lot 3 DP 547529, Coonamble. It is located to the south of the town of Coonamble, approximately 400m south of the intersection of Dubbo and King Streets. The site has an area of 35.71 hectares and is currently used for grazing. Access is provided over Lot 4 DP 547529, Lots 213 and 225 DP 754227 and Lot 7007 DP 1029777.

The site is zoned RU1 – Primary Production under *Coonamble Local Environmental Plan 2011* (CLEP 2011).

#### 2.1.2 Proposal description

The proposal will consist of the establishment and use of a solar farm to be located on the western portion of the site. It will comprise a fixed tilt solar farm with approximately 16,128 modules. It will generate approximately 10 Gigawatt hours (GWh) of clean energy per year, which is equivalent to powering approximately 1,500 homes and reducing greenhouse gas (GHG) emissions by 11,500 tonnes of carbon dioxide equivalent (CO<sub>2</sub>e) annually. The solar farm will be connected to the Coonamble Zone substation, which is located on the south-western corner of the intersection of Dubbo and King Streets (Lots 1 and 2 DP 542760), by an underground cable. The connection to the substation does not form part of this application as it constitutes development without consent.

The site is zoned RU1 – Primary Production under CLEP 2011. The proposed development is defined as ‘Electricity Generating Works (Solar Energy System)’, which is permissible with consent pursuant to Clause 34 of the *State Environmental Planning Policy (Infrastructure) 2007*.

The description of the proposal is considered sufficient for an adequate assessment to be made by Council.

### 2.2 Considerations under section 79C of the Environmental Planning and Assessment Act 1979

The following matters are to be considered in the assessment of a development application under Section 79C of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The preceding sections provide an assessment of the adequacy of the information supplied in the development application.

#### 2.2.1 (a)(i) The provisions of any environmental planning instrument

The development application has been assessed against the relevant provisions of the CLEP 2011.

The relevant matters of the CLEP 2011 are considered in Table 2-1.

Table 2-1 Relevant matters of the CLEP 2011 addressed in SEE

Coonamble Local Environmental Plan 2011 Requirement	Provided in SEE	Adequate for assessment?
Summary		
Zoning	RU1 – Primary Production	Yes
Development defined as	Electricity Generating Works (Solar Energy System)	Yes
Permissibility	The proposal would not contravene the RU1 zone objectives. The proposed development is defined as an 'electricity generating works' and a 'solar energy system' under ISEPP. These land uses are not specifically listed in either items 2 of 3 of the RU1 Land Use table. Therefore, such a land use is prohibited in the RU1 zone. However, the ISEPP prevails over the LEP where there is inconsistency and the ISEPP permits the development with consent.	Yes
Specific Clauses		
Clause 1.2 – Aims of the Plan	The proposal does not contravene the objectives of the CLEP 2011.	Yes
Clause 5.10 – Heritage conservation	A Cultural Heritage Inspection of the site was carried out by Mr Ray Fazldeen of the Coonamble Local Aboriginal Land Council (LALC) on 5 January 2017. The inspection did not identify any Aboriginal Sites.	Yes
Clause 5.11 – Bush fire hazard reduction	Management measures are proposed to avoid adverse impacts.	Yes
Clause 5.14 – Siding Spring Observatory – Maintaining dark sky	The proposal includes some minor external security building lighting. The proposed lighting would be designed in accordance with the Dark Sky Planning Guidelines.  Additionally, Clause 5.14(7) requires that the consent authority cannot grant consent, without the concurrence of the Secretary, if a development more than 18kms from the observatory would result in the emission of light of 1,000,000 lumens or more. The site is approximately 70km from the observatory and the proposal would not emit 1,000,000 lumens.	Yes

Coonamble Local Environmental Plan 2011 Requirement	Provided in SEE	Adequate for assessment?
Clause 6.1 – Terrestrial Biodiversity	Management measures are proposed to avoid adverse impacts.	Yes
Clause 6.5 – Essential Services	Suitable arrangements have been made for appropriate services to be made available for the proposal.	Yes
Clause 6.6 – Flood Planning	The proposal will be affected by the 1% AEP event. The proposal will provide for predominantly permeable structures which are unlikely to obstruct flood waters. The structures will be designed to withstand the flood affectation and thus be compatible with the flood hazard of the land. The proposal is therefore not expected to result in increased flood affectation of other properties and is not likely to result in unsustainable social or economic impacts to the community as a result of flooding.	Yes
Clause 6.7 – Earthworks	Minor land excavation would be required for the purpose of establishing suitable pads for the buildings, array footings, and roads. The proposal is considered to satisfy the objective of Clause 6.7.	Yes

The submitted development application has been assessed against the necessary criteria of the CLEP 2011 and meets the necessary criteria relevant to the development application.

## 2.2.2 State Environmental Planning Policies

The development application has been assessed against the following State Environmental Planning Policies (SEPP), as discussed in Table 2-2.

Table 2-2 Relevant SEPP matters addressed in SEE

SEPP	Comment/relevant section of SEE	Adequate for assessment?
SEPP (Infrastructure) 2007	<p><b>Clause 8 – Relationship to other environmental planning instruments</b></p> <p>Clause 8 of <i>State Environmental Planning Policy (Infrastructure) 2007</i> (ISEPP) provides:</p> <p><i>(1) ...if there is an inconsistency between this Policy and any other environmental planning instrument, whether made before or after the commencement of this Policy, this Policy prevails to the extent of the inconsistency.</i></p>	Yes

SEPP	Comment/relevant section of SEE	Adequate for assessment?
	<p>The ISEPP prevails in terms of inconsistency with the LEP in relation to permissibility.</p> <p><b>Part 3, Division 4 – Electricity generating works or solar energy systems</b></p> <p>The proposed solar farm is defined as a ‘Solar Energy System’ under the ISEPP as outlined in clause 33 which states:</p> <p><i>means any of the following systems:</i></p> <p>(a) a photovoltaic electricity generating system,</p> <p>(b) a solar hot water system,</p> <p>(c) a solar air heating system.</p> <p>Clause 34(7) of the ISEPP permits Solar Energy Systems to be carried out by any person with consent on any land.</p> <p><b>Part 3, Division 5, Subdivision 1 – Electricity transmission or distribution networks</b></p> <p>The connection of the solar farm to the Coonamble Zone Substation would be undertaken by the applicant on behalf of Essential Energy as these connection assets will become Essential Energy assets post commissioning. In this regard, the underground Electricity Transmission Line (ETL) connection from the solar farm to the substation is considered to form ‘electricity transmission or distribution network’ as defined by clause 40 of ISEPP which states:</p> <p><i>electricity transmission or distribution network includes the following components:</i></p> <p>(a) above or below ground electricity transmission or distribution lines (and related bridges, cables, conductors, conduits, poles, towers, trenches, tunnels, ventilation and access structures),</p> <p>(b) above or below ground electricity kiosks or electricity substations, feeder pillars or transformer housing, substation yards or substation buildings.</p> <p>Clause 41 of ISEPP permits:</p> <p><i>Development for the purpose of an electricity transmission or distribution network may be carried out by or on behalf of an electricity supply authority or public authority without consent on any land.</i></p> <p>These works therefore comprise ‘development without consent’; and will be considered through a separate Part 5 assessment process, outside of this DA.</p>	



SEPP	Comment/relevant section of SEE	Adequate for assessment?
SEPP (State and Regional Development) 2011	<p>Part 4 of <i>State Environmental Planning Policy (State and Regional Development) 2011</i> (SRD SEPP) applies to development included in Schedule 4A of the EP&amp;A Act, which includes electricity generating works that has a capital investment of more than \$5 million.</p> <p>For such developments, Clause 21 of SRD SEPP provides that inter alia a regional panel will exercise the consent authority functions of the council. In this regard, the Western Joint Regional Planning Panel (JRPP) will be the consent authority for this development.</p>	Yes
SEPP No 44 – Koala Habitat Protection	<p>The site has an area of more than 1 hectare and is located within the local government area of Coonamble. <i>As such State Environmental Planning Policy No.44 – Koala Habitat Protection</i> (SEPP 44) is applicable to the development application.</p> <p>The site does not comprise 'potential koala habitat' as it does not contain any trees of the type as listed in Schedule 2 of SEPP 44. In this regard, no other provisions of the SEPP are applicable to the proposal.</p>	Yes

#### 2.2.3 Section 79C (1) (a) (ii) Draft environmental planning instrument

No draft Environmental Planning Instruments are known to be applicable to the site or development. The submitted development application has been assessed against the necessary criteria.

#### 2.2.4 Section 79C (1) (a) (iii) Any Development Control Plan

As outlined in Table 2-3, no Development Control Plans are relevant to the proposed development.

**Table 2-3 Relevant Coonamble DCP matters addressed in SEE**

Matter for consideration	Comment/relevant section of SEE	Adequate for assessment?
DCP 1 – Coonamble Township & Surrounds	The site is not located within the Coonamble Village Zone and surrounds. Accordingly, DCP 1 does not apply to development.	Not required
DCP 1 – Coonamble Township & Surrounds Annexure A	The site is not located within the Coonamble Village Zone and surrounds. Accordingly, DCP 1 Annexure A does not apply to development.	Not required
DCP 2 – Small rural holdings	The site is not located within Zone No.1(c) (Rural Small Holdings). Accordingly, DCP 2 does not apply to development.	Not required

Matter for consideration	Comment/relevant section of SEE	Adequate for assessment?
DCP 3 – Small cattle feedlots	The proposed development is not for a cattle feedlot. Accordingly, DCP 3 does not apply to the development.	Not required
DCP 4 – Small intensive piggeries	The proposed development is not for a piggery. Accordingly, DCP 4 does not apply to the development.	Not required

## 2.2.1 Section 79C(1)(b) The likely impacts of the development site

### **Context and setting**

#### **Land use and compatibility**

The site is located within the rural fringe of the peri-urban area of Coonamble. The land to the south and east of the site is characterised by agricultural grazing land. Directly to the north and west of the site are smaller agricultural lots used for grazing and cropping. Beyond this to the north and west is the urban area of Coonamble. Solar farms are an innocuous type of land use, particularly of the scale proposed. The primary impacts would be limited to the relatively short construction period from possible dust, noise and traffic movements. Once operational the proposal would have little impact as it would only require minimal amounts of maintenance and would otherwise be automated. The establishment and operation of the proposal is not expected to produce any external impacts that would result in land use conflict for the adjacent or nearby properties.

#### **Glare**

Glare from solar farms is a commonly raised concern amongst the community and the Civil Aviation Safety Authority (CASA) in relation to impact on airports. A Glare Analysis for the proposed development was undertaken by Geolyse Pty Ltd in response to specific concerns raised by CASA. The potential for glare associated with non-concentrating PV systems which do not involve mirrors or lenses is relatively limited. The reason is that PV panels are designed to absorb as much solar energy as possible in order to generate the maximum amount of electricity or heat. As such, PV panels will generally not create noticeable glare compared with an existing roof or building surface. In this regard, the proposed development is unlikely to have an adverse impact in terms of glare for road users or surrounding properties.

#### **Visual impacts**

The site is characterised by open flat paddocks used for grazing. The flood levy located to the north and west of the site has recently been increased in height. This has substantially restricted views to and from the site from the urban area of Coonamble. There is not considered to be any adverse impact in terms of visual amenity from the public road reserve.

In terms of neighbouring properties, viewshed analysis by the proponent indicates seven (7) residences may have views of the solar farm. Appropriate mitigation measures are in place including, vegetative screening and the presence of the flood levy. Overall, due to the distance to the site, and mitigation measures, the proposal is not expected to have a significant adverse visual impact.

### **Access, transport and traffic**

Vehicular access to the site will be via an internal access road over Lots 4, 213 and 225 to the south of Lot 3. This is currently a grazed paddock. The internal road will then connect to the Castlereagh Highway by a rural access road over Lot 7007. This is currently an unformed access track.

### **Construction**

Construction traffic will be dependent on the successful tenderer. It is expected that construction will occur over a period of approximately 6 months or 26 weeks. The construction workforce would comprise 15-20 people.

During site preparation works, it is expected that all heavy machinery would be brought to site prior to commencement of works and then removed from site post construction works. The solar farm infrastructure would be delivered to site by 19m articulated vehicles.

The construction phase of the proposal has the most significant change to traffic. Due to the low background levels on Lot 7007, the increase in traffic as a result of the proposal is significant. It is noted that the following mitigation measures are in place:

- Upgrading of the access track on Lot 7007 to a rural road standard from the intersection of the Castlereagh Highway to the site entry (Lot 225) to cater for the largest design vehicle accessing the site. Design plans for the upgrade are to be submitted to and approved by Council prior to commencement of any works on site. All road upgrade works are to be completed to Council's satisfaction prior to any works commencing on site.
- Upgrading of the intersection of the Castlereagh Highway and the access road on Lot 7007 to a BAR/BAL intersection, to the NSW RMS' specifications.
- A Construction Traffic Management Plan (CTMP) is to be prepared in consultation with Council and the Roads and Maritime Services to address:
  - Suitable construction traffic routes for heavy/oversized vehicles
  - The details of any measures to be employed to ensure the safety of the local road network during construction
  - Any road dilapidation assessments and remedial works.

### **Operation**

The solar farm is expected to operate for 25- 30 years. It would be remotely operated and as such would be unattended apart from servicing of any faults and quarterly cleaning and maintenance. Conservatively, operation of the proposal would generate two vehicles or four trips per day, with a peak generation of 0.5 vph.

With the upgraded intersection, the proposal is considered to be suitable in terms of access and is not expected to result in adverse impact in terms of capacity, safety or functioning of the intersection and associated road network. Draft conditions will apply for the access and internal road to accommodate the increased traffic and will condition that all required road works are to be completed prior to the commencement of construction works.

### **Utilities**

#### **Water**

The site has a connection to the reticulated water supply. The proposal is unlikely to require a connection to the reticulated water infrastructure. However, if the successful tenderer

determines a potable water supply is required, requisite approvals for any connections would be sought separately.

### **Sewerage**

The site does not have a connection to the reticulated sewerage system in Coonamble. The proposal is not expected to require a connection to the reticulated sewerage infrastructure as it would be unmanned. If, however, the successful tenderer requires amenities within the control building, then options for effluent disposal would be considered and requisite approvals sought.

### **Electricity**

The site would be connected to an AC power supply from the substation.

If the successful tenderer determines that additional amenities are required to be included in the control building, the requisite approvals for additional utility connections are to be sought along with any impact assessments required.

### **Heritage**

A Cultural Heritage Inspection of the site was carried out by Mr Ray Fazldeen of the Coonamble Local Aboriginal Land Council (LALC) on 5 January 2017. The inspection did not identify any Aboriginal Sites. An Aboriginal Cultural Heritage Assessment & Due Diligence Report was prepared following the site inspection. It concludes that the activity is not likely to affect any Aboriginal relics and is unlikely to affect places of significance.

### **Other land resources**

The site is currently and has historically been used for cattle grazing. It is zoned as RU1 – Primary Production under CLEP 2011. The proposed solar farm would limit the ability of the site to be used for agricultural purposes for at least 25-30 years. After which it may be refurbished and continued for use as a solar farm or infrastructure removed and returned for agricultural use.

The site forms a small proportion of the productive agricultural land available in the region. Post development the site is able to be returned to agricultural land use. A decommissioning plan will be prepared prior to the cessation of use of the solar farm with the plan being implemented post use.

The operation of the proposal would not result in any negative externalities that would impact upon the productivity of adjoining or adjacent agricultural land. In this regard, the proposed development is not expected to have an unacceptable adverse impact on productive agricultural land.

### **Water**

#### **Surface water**

The site is currently used for grazing. The establishment of the solar farm would have a minor increase in impervious areas, however the limited ground contact and spacing of the trackers would retain large areas of natural surface.

Erosion and sediment control measures will be implemented to ensure the runoff from the areas of hardstand, any exposed areas during construction and stockpile areas do not transport materials off site and cause pollution of receiving waters.

The proposal is therefore expected to have a minimal impact on surface water.

## **Groundwater**

The proposal would not require the extraction of any groundwater, nor would it involve the application of water or materials that would impact upon groundwater. In this regard, the proposed development is not expected to impact upon groundwater.

## **Soils**

The nature of the soils on site will require specific structural and footing designs to accommodate the nature and limitations of the soils. These designs are to be based on detailed geotechnical assessments included as part of the construction certificate documentation.

To avoid potential soil erosion, a coverage of maintained grass to APZ standard, is required to be provided over the site at all times. Any areas of exposed soils is to be provided with appropriate erosion and sediment control measures and revegetated as soon as practicable following exposure.

It is noted that mitigation measures are in place, including the preparation of a Construction Environmental Management Plan (CEMP) and an Operations Environmental Management Plan (OEMP), addressing potential soil impacts occurring during construction activities. The CEMP is to be prepared in consultation with and to the satisfaction of Council and implemented prior to the commencement of any works associated with the proposal.

The proposal is therefore expected to have a minimal impact on soils.

## **Air and microclimate**

### **Construction**

Construction of the proposal has the potential cause adverse air quality impacts primarily through dust generation from site preparation works, road construction and vehicular movements. These activities can all be managed to minimise any adverse impacts. A Construction Environmental Management Plan (CEMP) is to be prepared for the proposal addressing potential air quality impacts occurring during construction activities. The CEMP is to be prepared in consultation with and to the satisfaction of Council, and implemented prior to the commencement of any works associated with the proposal.

### **Operation**

The proposal would have minimal site activity once operational and as such dust generated from internal and external road use would be very limited. Grass on site would be managed through a combination of mowing or grazing sheep. The proposal would not generate any other particulates, odours, fumes, gases or pollutants.

In this regard, the operation of the proposed development is not expected to generate any adverse air quality impacts.

## **Flora and fauna**

Vegetation on site has been heavily modified through previous agricultural activities. The vegetation comprises largely pasture grasses, with some scattered trees located along the boundary fences.

The solar farm will impact an area of approximately 14.5 hectares. The impacted vegetation has been heavily disturbed through previous land uses. Once the solar farm arrays have been installed, the grass would be allowed to regrow in the disturbed areas. Therefore, a managed grass cover would remain over the solar farm site. A windbreak style landscape strip will be included along the boundaries of the solar farm site to provide for screening of visual impacts.

The site is not expected to contain or provide habitat for any threatened species or ecological communities. Furthermore, the proposed development will not result in the clearing of any significant vegetation and is not expected to adversely impact upon any species or communities listed under the *Threatened Species Conservation Act 1995* or *Environment Protection and Biodiversity Conservation Act 1999*.

In this regard, it is therefore considered the proposed development is not expected to generate any adverse flora and fauna impacts.

### **Waste**

Any waste associated with the proposal would be generated during the construction phase. During construction, the proposal would generate waste from:

- Soil material from excess cut from earthworks
- Packaging from the solar farm infrastructure
- Excess building materials
- Putrescible waste from the construction workforce.

A Waste Management Plan is to be included in the CEMP to ensure that construction waste is appropriately managed on site and disposed of in an appropriate facility.

The operation of the proposal would generate minimal solid waste. The likely waste generated from the operation of the proposal would be limited to replacement of faulty or broken infrastructure.

No effluent disposal systems are proposed as part of the operation of the solar farm unless the successful tenderer determines they are required.

Temporary amenities would be provided within the construction compound for the duration of the construction period. These facilities would be transported to the site and be serviced by contractors to remove effluent off site.

### **Energy**

The Solar Farm will generate approximately 10 Gigawatt hours (GWh) of clean electricity each year. This will reduce greenhouse gas (GHG) emissions by 11,500 tonnes of carbon dioxide equivalent (CO<sub>2</sub>e) annually.

### **Noise and vibration**

#### **Operational noise**

The proponent has submitted a noise assessment as part of the Statement of Environmental Effects, outlining sources of noise and mitigation measures. The noise assessment has been modelled using the *International Standard ISO 9613-2 (1996(E)) 'Acoustic – Attenuation of sound during propagation outdoors Part 2 General method of calculation'*. At the closest noise sensitive location to the nearest point of the site (300 metres) the noise level for the operational plant is predicted to be 29 dBA. This meets the noise goals (intrusive and sleep disturbance) under a worst case operational scenario with normal meteorological conditions. For mild temperature inversions or mild adverse wind conditions the noise level is not predicted to increase more than 5 dB, hence the noise goals are still met.

GHD has reviewed the noise assessment, identifying the following issues:

- Modifying factor adjustments have not been considered for the potential tonal and low-frequency noise emanating from the high voltage transformers in the substation. Data should be supplied confirming the substation can be designed to ensure there is no tonal or

low frequency noise or modifying factor adjustments should be applied in accordance with the *Industrial Noise Policy* (EPA, 2000)

- No octave band data has been reported and it is unclear if the predictions considered frequency bands. Noise from the substation has the potential to be dominated by the lower frequency bands and the frequency content should be considered in the assessment
- The ground effects parameter between 0 and 1 that was used in the assessment should be reported and justified.

To this regard, the proponent has provided the following information:

The connection from the solar farm to the Coonamble Zone Substation would be undertaken by the applicant on behalf of Essential Energy, a public authority, as these connection assets will become Essential Energy assets post commissioning. Therefore these works would be covered by a separate Part 5 assessment process, outside of this DA. Essential Energy has advised that they are undertaking a separate Review of Environmental Factors for this aspect of the development.

### **Construction noise**

Based on the estimated sound level of the construction plant, the cumulative sound power level (LWA) is estimated to be a maximum of 114 dBA, which would only occur for a temporary period of time during construction works. At the closest noise sensitive location to the nearest point of the site is 300 metres, the noise level for the construction plant is predicted to be 52 dBA.

All dwellings within a 1 km radius could be 'noise affected' (i.e. over 40 dBA, RBL + 10 dB) on occasions during the day time.

Mitigation measures have been proposed which appropriately address these potential impacts. No dwellings are predicted to be highly noise affected (75 dBA) as at any time.

This is deemed appropriate for the proposal however, a draft condition has been imposed.

### **Road traffic noise**

Due to the relatively small number of vehicle movements predicted during use of the development, no significant increase in road traffic noise is predicted along the Castlereagh Highway. There will also be minimal increase in existing traffic noise on access road to the development due to the relatively large distances between these roads and neighbouring dwellings.

### **Natural hazards**

#### **Bushfire**

The site is not mapped on Council's or the RFS' mapping as being bushfire prone. The lack of bushfire prone land on the mapping does not mean that the site would not be affected by bush fire. The site currently contains pasture grasses, which has the potential to carry a bushfire particularly if/when the grasses become cured and would likely be considered as Vegetation Category 3 under the RFS' guide for Bush Fire Prone Land Mapping (NSW Rural Fire Service, 2015).

The development also has the potential to ignite a fire through accidental ignition associated with human activities on site or ignition through infrastructure fire. Due to site vegetation management, it is less likely that a fire starting on site would spread off-site.

Bushfire Protection Measures (BPM) will be implemented as part of the project, consistent with the RFS' *Planning for Bush Fire Protection* (NSW Rural Fire Service, 2006) and consultation



with the RFS to mitigate the spread of bushfire to the site and the spread of any fire from the site to surrounding areas.

### **Flooding**

The site is not mapped on Council's LEP mapping as being within the flood planning area (FPA), which is the 1:100 average recurrent interval flood event plus 500mm freeboard. Nevertheless, the site is known to be subject to periodic inundation through localised flooding of Bibleroi Creek which traverses the site.

The 1% Annual Exceedance Probability (AEP) level for the solar farm site is expected to be 180.91m AHD and the FPL for the site would be 181.41m AHD. The entire solar farm site would be affected by both the 1% AEP event and the FPA.

The following mitigation measures are to be implemented to minimise flood risk to the development:

- Structural components of the site infrastructure are to be designed to withstand the flood impacts to the site
- Electrical infrastructure is to be designed to be provided above the 1% AEP Flood Level or as required by the detailed design
- A flood management and evacuation plan is to be included in the CEMP and OEMP to ensure the safe, orderly and timely preparation.

Provided the mitigation measures are complied with for bush fire and flooding hazard, it is not anticipated that the development will result in unacceptable adverse impacts.

### **Technological hazards**

Operations on site present a potential fire risk. In relation to bushfire, mitigation measures have been included as part of the development to minimise the impact of bushfire on the development. These measures would also assist with the minimising the spread of any fire originating on the site to off site. A Fire Management Plan (FMP) will be prepared for the operation of the development that addresses both bushfire risk and development fire risk. The FMP is to be developed in consultation with and to the satisfaction of the local District Fire Control Centre, prior to the operation of the development.

In this regard, it is not anticipated that the development will result in unacceptable adverse impacts.

### **Safety, Security and crime prevention**

The proposed development is not considered to create a crime risk or exacerbate a crime risk. In terms of the Crime Prevention Through Environmental Design (CPTED) principles, the following mitigation measures are included in the development to ensure appropriate safety, security and crime prevention:

- Provide for a new 2.81m perimeter fence comprised of 2.31m high chain-link galvanised steel fence topped with a 0.5m cranked barbed wire.
- Provision of measures in the CEMP and OEMP to ensure appropriate security of the site, including any lighting to ensure compliance with the Dark Sky Planning Guidelines.

Providing these measures are complied with, it is not anticipated that the development will result in unacceptable adverse impacts.



### ***Social impacts in the locality***

Table 1 of the *NSW Government Planning & Environment's Draft Social Impact Assessment: Draft Guidelines for State Significant Mining, Petroleum Production and Extractive Industry Development* (NSW Government Planning & Environment, 2016) has been used as a guide to consider potential social impacts from the proposed development. The following social impact matters have been considered:

- Way of life
- Culture
- Community
- Political systems
- Environment
- Health and wellbeing
- Personal and property rights
- People's fears and aspirations.

Additionally, mitigation measures have been included for the development. Providing these measures are complied with, it is not anticipated that the development will result in unacceptable adverse impacts.

### ***Economic Impacts in the Locality***

The proposed development is expected to result in positive economic impacts in the locality. It would provide employment for 15 to 20 people during construction, which would occur over a six (6) month period. It is expected that this may provide for some local employment opportunities as well as flow on economic impacts from contractors being accommodated in town during the construction period.

During operation, the development would provide for minimal economic impact as the site is expected to be unmanned, with only period maintenance occurring during its lifespan.

#### **2.2.2 Section 79C(1)(c) Suitability of the site**

The development would be carried out on land zoned RU1. The objectives of the RU1 zone are:

- *To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.*
- *To encourage diversity in primary industry enterprises and systems appropriate for the area.*
- *To minimise the fragmentation and alienation of resource lands.*
- *To minimise conflict between land uses within this zone and land uses within adjoining zones.*

The development would not contravene the RU1 zone objectives. The proposed development is defined as an 'electricity generating works' and a 'solar energy system' under ISEPP. These land uses are not specifically listed in either items 2 of 3 of the RU1 Land Use Table. Therefore, such a land use is prohibited in the RU1 zone. However, the ISEPP prevails over the LEP where there is inconsistency and the ISEPP permits the development with consent.

The road works would occur on land zoned RU1. 'Roads' are permissible with consent in the RU1 Zone.

The submitted development application appears to provide sufficient information for Council to adequately address the requirements of section 79C (1) (c).

### 2.2.3 Section 79C (1) (e) The public interest

The proposed development will provide for an alternative and renewable form of electricity generation. This, combined with the minimal impacts of the development, is considered to provide for a development that is in the public interest.

## 2.3 Considerations under part 1, schedule 1 of Environmental Planning and Assessment Regulation 2000

The relevant matters under part 1, schedule 1 of the EP&A Reg are considered in Table 2-4 below.

Table 2-4 Relevant matters under part 1, schedule 1 of EP&A Reg

Matter for consideration	Requirements	Adequate for assessment?
Clause 1 – Information to be included in development application	<i>(1) A development application must contain the following information:</i>	
	(a) the name and address of the applicant,	Yes, has been provided
	(b) a description of the development to be carried out,	Yes, has been provided
	(c) the address, and formal particulars of title, of the land on which the development is to be carried out,	Yes, has been provided
	(d) an indication as to whether the land is, or is part of, critical habitat,	Yes, has been provided
	(e) an indication as to whether the development is likely to significantly affect threatened species, populations or ecological communities, or their habitats, unless the development is taken to be development that is not likely to have such an effect because it is biodiversity compliant development,	Yes, has been provided
	(ea) for biodiversity compliant development, an indication of the reason why the development is biodiversity compliant development,	Not required
	(f) a list of any authorities from which concurrence must be obtained before the development may lawfully be carried out or from which concurrence would have been required but for section 79B (2A) or 89J,	Yes, has been provided
	(g) a list of any approvals of the kind referred to in section 91 (1) of the Act that	Not required

Matter for consideration	Requirements	Adequate for assessment?
	must be obtained before the development may lawfully be carried out	
Clause 2.1 – Documents to accompany development application	<i>(1) A development application must be accompanied by the following documents:</i>	
	(a) a site plan of the land,	Yes, has been provided
	(b) a sketch of the development,	Yes, has been provided
	(c) a statement of environmental effects (in the case of development other than designated development or State significant development),	Yes, has been provided
	(d) in the case of development that involves the erection of a building, an A4 plan of the building that indicates its height and external configuration, as erected, in relation to its site (as referred to in clause 56 of this Regulation),	Not required
	(e) an environmental impact statement (in the case of designated development or State significant development),	Not required
	(f) a species impact statement (in the case of land that is, or is part of, critical habitat or development that is likely to significantly affect threatened species, populations or ecological communities, or their habitats), but not if the development application is for State significant development,	Not required
	(g) if the development involves any subdivision work, preliminary engineering drawings of the work to be carried out,	Not required
	(h) if an environmental planning instrument requires arrangements for any matter to have been made before development consent may be granted (such as arrangements for the provision of utility services), documentary evidence that such arrangements have been made,	Not required
	(i) if the development involves a change of use of a building (other than a dwelling-house or a building or structure that is ancillary to a dwelling-house and other than a temporary structure):	Not required

Matter for consideration	Requirements	Adequate for assessment?
	(i) a list of the Category 1 fire safety provisions that currently apply to the existing building, and	
	(k) if the land is within a wilderness area and is the subject of a wilderness protection agreement or conservation agreement within the meaning of the <i>Wilderness Act 1987</i> , a copy of the consent of the Minister for the Environment to the carrying out of the development,	Not required
	(l) in the case of development to which clause 2A applies, such other documents as any BASIX certificate for the development requires to accompany the application,	Not required
	(m) in the case of BASIX optional development—if the development application is accompanied by a BASIX certificate or BASIX certificates (despite there being no obligation under clause 2A for it to be so accompanied), such other documents as any BASIX certificate for the development requires to accompany the application,	Not required
	<i>2) The site plan referred to in subclause (1) (a) must indicate the following matters:</i>	
	a) the location, boundary dimensions, site area and north point of the land,	Yes, has been provided
	(b) existing vegetation and trees on the land,	Yes, has been provided
	(c) the location and uses of existing buildings on the land,	Yes, has been provided
	(d) existing levels of the land in relation to buildings and roads,	Yes, has been provided
	(e) the location and uses of buildings on sites adjoining the land.	Yes, has been provided
	<i>3) The sketch referred to in subclause (1) (b) must indicate the following matters:</i>	
	(a) the location of any proposed buildings or works (including extensions or additions to existing buildings or works) in relation to	Yes, has been provided.

Matter for consideration	Requirements	Adequate for assessment?
	the land's boundaries and adjoining development,	
	(b) floor plans of any proposed buildings showing layout, partitioning, room sizes and intended uses of each part of the building,	Yes, has been provided
	(c) elevations and sections showing proposed external finishes and heights of any proposed buildings (other than temporary structures),  (c1) elevations and sections showing heights of any proposed temporary structures and the materials of which any such structures are proposed to be made (using the abbreviations set out in clause 7 of this Schedule),	Not required
	(d) proposed finished levels of the land in relation to existing and proposed buildings and roads,	Yes, has been provided
	(e) proposed parking arrangements, entry and exit points for vehicles, and provision for movement of vehicles within the site (including dimensions where appropriate),	Yes, has been provided
	(f) proposed landscaping and treatment of the land (indicating plant types and their height and maturity),	Yes, has been provided
	(g) proposed methods of draining the land,	Yes, has been provided
	(h) in the case of development to which clause 2A applies, such other matters as any BASIX certificate for the development requires to be included on the sketch,	Not required
	(i) in the case of BASIX optional development—if the development application is accompanied by a BASIX certificate or BASIX certificates (despite there being no obligation under clause 2A for it to be so accompanied), such other matters as any BASIX certificate for the development requires to be included on the sketch.	Not required
	<i>(4) A statement of environmental effects referred to in subclause (1) (c) must indicate the following matters:</i>	

Matter for consideration	Requirements	Adequate for assessment?
	(a) the environmental impacts of the development,	Yes, has been provided
	(b) how the environmental impacts of the development have been identified,	Yes, has been provided
	(c) the steps to be taken to protect the environment or to lessen the expected harm to the environment,	Yes, has been provided
	(d) any matters required to be indicated by any guidelines issued by the Director-General for the purposes of this clause.	Yes, has been provided
	(5A) The species impact statement referred to in subclause (1) (f) is not required in relation to the effect of the development on any threatened species, populations or ecological communities, or their habitats, if the development is taken to be development that is not likely to significantly affect those threatened species, populations or ecological communities, or their habitats, because it is biodiversity compliant development.	Not required as development will have minimal impact
Clause 2A BASIX certificate required for certain development	(1) In addition to the documents required by clause 2, a development application for any BASIX affected development must also be accompanied by a BASIX certificate or BASIX certificates for the development, being a BASIX certificate or BASIX certificates that has or have been issued no earlier than 3 months before the date on which the application is made.	Not required
	(2) If the proposed development involves the alteration, enlargement or extension of a BASIX affected building that contains more than one dwelling, a separate BASIX certificate is required for each dwelling concerned.	Not required

## 2.4 Summary

The application appears to provide sufficient information for Council to adequately assess the proposal in accordance with the provisions of Section 79C of the EP&A Act, including Council's LEP and relevant DCPs/policies and is generally considered satisfactory.

The proposed development is permissible with the consent of Council pursuant to Clause 34 of *State Environmental Planning Policy (Infrastructure) 2007*.

The development complies with the relevant aims, objectives and provisions of the LEP. A section 79C assessment of the development indicates that the development is acceptable in this instance. Section 4 of this report provides those conditions considered appropriate to ensure that the development proceeds in an acceptable manner.

## 2.5 Recommendation

It is recommended that the application be approved subject to conditions of consent provided in Section 4.

## 3. Submissions

### 3.1 Overview of community submissions and state agency comments

The development application was available for public comment from 6 August 2017 to 14 September 2017.

#### 3.1.1 State agency comments

Comments on the proposal were received from the following State agencies:

- Roads and Maritime Services (RMS) dated 15 September 2017 (refer to Table 3-1)
  - Comments from RMS were originally provided on 4 September 2017, however, discussions between RMS and the applicant were held after the comments had been issued, whereby the following additional information was provided to RMS:
    - All construction traffic accessing the site will approach the site entrance from the north (from Coonamble) only. No traffic will approach the site from the south
    - Due to the Crown land access and works issues, the applicant seeks a reduction in the seal of the site entrance from 20 metres to 15 metres.

Following review of this additional information, RMS revised their submission and reissued on 15 September 2017.

- Civil Aviation Safety Authority dated 13 September (refer to Table 3-2).
- NSW Aboriginal Land Council dated 6 October 2017 (refer to

### 3.1 Evaluation of state agency comments

Responses in relation to State agency comments have been prepared and are provided in Table 3-1.

Table 3-1 Roads and Maritime Services

Date	Recommended condition of consent	Comment
15 September 2017	A Basic Left (BAL) turn treatment as shown in Figure 8.2 Part 4A Austroads Guide to Road Design 2010 is to be provided in the Castlereagh Highway at its intersection with the vehicular access. The BAL facility will also need to be sealed and built for a 90km/h speed environment. The intersection is to be designed to accommodate the turning paths of the largest vehicle required to access the site.	Will form a condition of development consent.
	Prior to the commencement of construction work, the access to Castlereagh Highway is to be sealed a minimum of fifteen (15) metres from the edge of the Castlereagh Highway.	Will form a condition of development consent.
	The Castlereagh Highway is a state road and the developer will be required to undertake private financing and construction of works on a road in which Roads and Maritime Services has a statutory interest. A formal agreement in the form	Will form a condition of development consent.



Date	Recommended condition of consent	Comment
	of a Works Authorisation Deed (WAD) is required between the developer and Roads and Maritime Services prior to works commencing.	
	Prior to the commencement of construction work, the proponent is to contact Roads and Maritime's Field Traffic Manager to determine if a Road Occupancy Licence (ROL) is required. In the event that an ROL is required, the proponent is to obtain the ROL prior to works commencing within three (3) metres of the travel lanes in the Castlereagh Highway.	Will form a condition of development consent.
	Safe Intersection Sight Distance (SISD) requirements outlined in Part 4A Austroads Guide to Road Design is to be provided and maintained in both directions at the intersection of the vehicular access and the Castlereagh Highway. For a 90km/h speed environment, SISD is 214 metres.	Will form a condition of development consent.
	All required road works are to be completed prior to the commencement of construction works.	Will form a condition of development consent.

Table 3-2 Civil Aviation Safety Authority

Date	Recommended condition of consent	Comment
13 September 2017	<p><b>Departure and Approach Procedures</b></p> <p>Any proposed structures and cranes if used in construction should be referred to the procedure design organisation/s responsible for the maintenance of instrument flight procedures at the Aerodrome. Please be aware that there may be more than one organisation responsible for the procedures at the aerodrome.</p> <p>To check which organisations are responsible you can view the procedures at <a href="http://www.airservicesaustralia.com/aip/aip.asp">http://www.airservicesaustralia.com/aip/aip.asp</a> then Departure and Approach Procedures. The logo on the bottom of each procedure plate indicates the design organisation responsible.</p> <p><b>Compliance with standards</b></p> <p>Any aerodrome developments to aviation facilities associated with the planning proposal need to be consistent with the requirements of Civil Aviation Safety Regulations 1998 Part 139 and the associated Manual of Standards. Further details are available on the CASA website. <a href="https://www.casa.gov.au/standard-pa.qe/casr-part-139-aerodromes">https://www.casa.gov.au/standard-pa.qe/casr-part-139-aerodromes</a></p> <p>The National Airports Safeguarding Framework provides guidance on planning requirements for development that affects aviation operations. This includes building activity around airports that might penetrate operational airspace and/or affect navigational procedures for aircraft. The</p>	Will form a condition of development consent.

Date	Recommended condition of consent	Comment
	<p>Framework consists of a set of guiding principles with six guidelines relating to aircraft noise, windshear and turbulence, wildlife strikes, wind turbines, lighting distractions and protected airspace. Further information is available from the following link:</p> <p><a href="https://infrastructure.flov.au/aviation/environmental/airport/safeguarding/nasf/">https://infrastructure.flov.au/aviation/environmental/airport/safeguarding/nasf/</a></p> <p><b>Aerodrome operations</b></p> <p>Consultation should also be undertaken with the aerodromes operational management team to manage the following issues with developments adjacent to any aerodromes:</p> <ul style="list-style-type: none"> <li>• Airport master planning: Council should ensure that the proposal does not affect any future development or upgrades planned by the aerodrome's operational management.</li> <li>• Obstacle limitation surfaces (OLS) and Procedures for Air Navigation Services – Aircraft Operations: Prior to construction, the development and crane activity should be reviewed by the aerodrome's management team for the protection of these surfaces.</li> <li>• Wildlife hazard management plan: Consideration needs to be given to the final heights and bird attractions of landscaping provisions which potentially may cause a risk to aviation activities.</li> <li>• Lighting in the vicinity of an aerodrome: Any proposed non-aeronautical ground light in the vicinity of an aerodrome may by reason of its intensity, configuration or colour, cause confusion or glare to pilots and therefore might endanger the safety of aircraft.</li> <li>• Gaseous plume: Exhaust plumes can originate from a number of sources and aviation authorities have established that an exhaust plume with a vertical gust in excess of 4.3 metres/second may cause damage to an aircraft airframe, or upset an aircraft when flying at low levels.</li> <li>• Control of dust: During any construction the emission of airborne particulate may be generated which could impair the visual conditions.</li> </ul>	

Table 3-3 NSW Aboriginal Land Council

Date	Recommended condition of consent	Comment
6 October 2017	<p><b>Crown licence</b></p> <p>Regarding a Crown licence for access through Lot 7007 DP 1029777 and Lot 224 DP 754227. As you know, Lot 7007 DP 1029777 and Lot 224 DP 754227 are part of Travelling Stock Reserve (TSR) 68250, which is the subject of undetermined Aboriginal Land Claim (ALC) 11563 lodged on 18 May 2006. Should this claim be determined to be a grant in the future, the land will transfer to the Coonamble Local Aboriginal Land Council (CLALC). As such, we have referred the matter to CLALC for comment.</p> <p>NSWALC's general position is that an ALC should be settled before dealings with the subject land are considered. However, NSWALC and CLALC have considered this proposal based on the information at hand and as a result, we consent to the Crown Licence, on the condition that:</p> <ul style="list-style-type: none"> <li>• the tenure is no higher than a licence agreement;</li> <li>• the licensed area is limited to the area identified in the documentation at Attachment A; and</li> <li>• the licence is terminated if the ALC settles in favour of the Aboriginal Land Council in the future.</li> </ul> <p>We understand that there is no longer a requirement to seal a 5 metre portion of Lot 7007 DP 1029777, with the new option being sealing the portion of approaching land in the road reserve and placing gravel within the 5 metre portion of Lot 7007. As you would be aware, in NSW proponents have an obligation to exercise due diligence during works, to ensure that works will not harm Aboriginal places, sites, or objects, in accordance with the National Parks &amp; Wildlife Act 1974 (NSW) (NPW Act). In this regard, our consent is also conditional upon due diligence being exercised and the Aboriginal culture and heritage provisions of the NPW Act being complied with.</p>	

### 3.1 Summary

It is recommended that the proposal is approved subject to reasonable and relevant conditions. These conditions are provided in the conditions report in section 4.

## 4. Conditions of consent

### 4.1 Recommendations for conditions of approval

It is recommended that the following conditions are incorporated into any Development Consent for the proposal.

#### 1. CONDITIONS THAT IDENTIFY APPROVED PLANS

##### Objective

To ensure that the form of the development undertaken is in accordance with the determination of Council

##### Performance

The development being carried out in accordance with the development application, the drawings referenced below, and Statement of Environmental Effects dated 24 July 2017 except where amended by the following conditions.

DRAWING NO'S	REVISION	DRAWN BY	DATE
26444_PO1	C	Barnson	21/02/2017
26444_PO2	C	Barnson	21/02/2017
26444_PO3	C	Barnson	21/02/2017
26444_PO4	C	Barnson	21/02/2017
60536291-000-20-0000-E-0004	C	AECOM	27/06/2017

##### Objective

To ensure that the form of the development undertaken is in accordance with the determination of Council

##### Performance

A copy of all stamped approved plans, specifications and documents must be kept on site at all times so as to be readily available for perusal by any officer of Council or the Principal Certifying Authority.

#### 2. CONDITIONS THAT MUST BE COMPLIED WITH AT ALL TIMES

##### Objective

To ensure suitable disposal of stormwater

##### Performance

Unless otherwise approved by Council at all times stormwater from the development including all hard standing and overflows from rainwater tanks is to be collected and disposed of by way of properly constructed stormwater lines to:

- A minimum distance of 6m clear of the proposed and adjoining buildings

### 3. SCALE

#### Objective

To ensure the scale of the activity does not increase beyond the scope of this approval without the further assessment of possible impact.

#### Performance

This approval enables the applicant to operate at a scale as submitted in the proposal. Any increase in the scale of the activity as submitted, will require the further approval of Council.

### 4. APPOINTMENT OF PRINCIPAL CERTIFYING AUTHORITY

#### Objective

To ensure compliance with s81A of the *Environmental Planning and Assessment Act 1979* as amended.

#### Performance

The person having the benefit of this consent must appoint a Principal Certifying Authority for the development, pursuant to Section 81A of the *Environmental Planning and Assessment Act 1979*, as amended and advise Council in writing of that appointment BEFORE WORKS COMMENCE.

That Certifying Authority may be the Council, or an Accredited Certifier appointed under the Act. The required written notice to Council may be satisfied by supplying a copy of the Application for a construction Certificate (Form 11) under the *Environmental Planning and Assessment Regulation 1994*, as amended and must include the name, contact address, telephone and accreditation numbers of the selected Certifying Authority.

The Principal Certifying Authority and any other Certifiers appointed by that Authority will be responsible for the post-consent certification of the development. Copies of all certification is to be submitted to Coonamble Shire Council referenced by the Development Application Number.

### 5. APPLICATION FOR CERTIFICATION

#### Objective

To satisfy the post-consent requirements of this Development Consent, and to comply with S.109 of the *Environmental Planning and Assessment Act 1979*, as amended.

#### Performance

The person having the benefit of this consent is required to apply for a: CONSTRUCTION CERTIFICATE OCCUPATION CERTIFICATE.

### 6. SECTION 68 APPROVAL

#### Objective

To satisfy the requirements of the *Local Government Act 1993* for any manufactured buildings.

#### Performance

Prior to the commencement of any works, an Activity Approval is required under Section 68, Part A – 1, of the *Local Government Act 1993*, for the installation of the relocatable buildings on the land.

### 7. IDENTIFICATION OF SITE

#### Objective

To clearly identify the site.

#### **Performance**

Provide a clearly visible sign to the site stating:

- a) Unauthorised entry is prohibited;
- b) Builders name and licence number; or owner builders permit number;
- c) Street number or lot number;
- d) Contact telephone number/after hours number;
- e) Identification of Principal Certifying Authority.

### **8. CONSTRUCTION AND OPERATIONAL ENVIRONMENTAL MANAGEMENT PLAN**

#### **Objective**

To ensure that construction and operational related activities do not result in any adverse environmental impacts.

#### **Performance**

A Construction and Operational Environmental Management Plan is to be prepared and approved by Council prior to commencement of works. The plan shall address issues such as traffic management, noise, air quality, emergency responses, OH&S regulations,

### **9. PROVISION OF TEMPORARY FACILITIES**

#### **Objective**

To provide temporary toilet facilities.

#### **Performance**

A temporary sewer or chemical toilet is to be provided on the property while building work is in progress to comply with the requirements of the Workcover Authority. NOTE: This must be on-site prior to the first inspection.

### **10. NOISE**

#### **Objective**

To limit the impact of noise on adjoining properties.

#### **Performance**

Building work may only be carried out on the site between the following hours: 7.00am and 6.00pm Monday to Saturday Building works carried out on Sundays and Public Holidays must not cause offensive noise as defined under the *Protection of the Environment Operations Act*. This includes site works and deliveries. Works carried out on Sunday or a public holiday will need to comply with the EPA Interim Guidelines for construction noise at all times.

The mitigation and work practices outlined in Section 7 of the Noise Assessment report prepared by Noise and Sound Services (dated July 2017) are to be implemented throughout the construction and operation of the project.

### **11. DRAINAGE**

#### **Objective**

To ensure satisfactory disposal of roof stormwater run-off.

## Performance

All roofwater shall be collected through guttering and downpiping, connected to a 100mm or 90mm PVC pipeline and shall be disposed of:

1. 3m away from the building
2. well clear of the effluent absorption area to prevent infiltration or runoff to the area.
3. convey all roof rainwater to an approved absorption / rubble trench, having a cross-sectional area of 600 mm x 600 mm and being one (1) metre long for every 25m<sup>2</sup> of roof area drained thereto. Trenches are to be located three (3) metres clear of any Building or Lot boundary and not in a position to permit infiltration or overland flow to an effluent disposal area.

## 12. ASSET PROTECTION ZONE

### Objective

To reduce the risk to the proposed future building from bushfire.

### Performance

The area within and surrounding the development for a distance of 10 metres, is to be permanently maintained free of all combustible material in accordance with the requirements of *Planning for Bushfire Protection 2006*.

## 13. SPILLAGE OF LIGHT/ GLARE

### Objective

To protect the amenity of the surrounding area.

### Performance

Spillage of light and glare, if any, shall be controlled so as not to cause nuisance to the amenity of adjoining land.

## 14. ENGINEERING DESIGN

### Objective

To ensure design works are undertaken by a suitably qualified person and fulfil the relevant authority's requirements.

### Performance

All engineering works to be designed by a competent person (e.g. Professional Engineer) and carried out in accordance with Council's Codes and Development Control Plans, unless otherwise indicated, to ensure that these works are of a sustainable and safe standard.

Details to be provided to the satisfaction of the Certifying Authority BEFORE THE ISSUE OF ANY CONSTRUCTION CERTIFICATE FOR THE DEVELOPMENT.

Relevant work to be completed to the satisfaction of the Director of Environmental Services' nominee BEFORE THE ISSUE OF AN OCCUPATION CERTIFICATE.

## 15. PROVISION OF PRIVATE ACCESS

### Objective

To ensure that safe and practical access is provided to the subject land.

### Performance

A Basic Left (BAL) turn treatment as shown in Figure 8.2 Part 4A Austroads Guide to Road Design 2010 is to be provided on the Castlereagh Highway at its intersection with the proposed vehicular access. The BAL facility will also need to be sealed and built for a 90km/h speed environment. The intersection is to be designed to accommodate the turning paths of the largest vehicle required to access the site.

Prior to the commencement of construction work, the access to Castlereagh Highway is to be sealed a minimum of fifteen (15) metres from the edge of the pavement of the Castlereagh Highway.

The Castlereagh Highway is a state road and the developer will be required to undertake private financing and construction of works on a road in which Roads and Maritime Services has a statutory interest. A formal agreement in the form of a Works Authorisation Deed (WAD) is required between the developer and Roads and Maritime Services prior to works commencing.

Prior to the commencement of construction work, the proponent is to contact Roads and Maritime's Field Traffic Manager to determine if a Road Occupancy Licence (ROL) is required. In the event that an ROL is required, the proponent is to obtain the ROL prior to works commencing within three (3) metres of the travel lanes in the Castlereagh Highway.

Safe Intersection Sight Distance (SISD) requirements outlined in Part 4A Austroads Guide to Road Design is to be provided and maintained in both directions at the intersection of the vehicular access and the Castlereagh Highway. For a 90km/h speed environment, SISD is 214 metres.

All required road works are to be completed prior to the commencement of construction works.

A joint inspection with the Principal Certifying Authority is to be held prior to commencing construction of the access. Please telephone Council's Development Engineer on (02) 6827 1900 to arrange a suitable date and time for the inspection.

## **16. ABORIGINAL CULTURAL HERITAGE**

### **Objective**

To ensure that Aboriginal cultural heritage is not impacted as a result of the development.

### **Performance**

The development will be carried out so as not to harm Aboriginal places, sites, or objects, in accordance with the National Parks & Wildlife Act 1974 (NSW) (NPW Act). If it is suspected Aboriginal material has been uncovered as a result of the development:

- a) work in the surrounding area is to stop immediately;
- b) a temporary fence is to be erected around the site, with a buffer zone of at least 10 metres around the known edge of the site;
- c) an appropriately qualified archaeological consultant is to be engaged to identify the material; and
- d) if the material is found to be of Aboriginal origin, the Aboriginal community is to be consulted in a manner as outlined in the OEH guidelines: Aboriginal Cultural Heritage Consultation Requirements for Proponents (2010) and an Aboriginal Heritage Impact Permit ('AHIP') be sought prior to the works proceeding.



## 17. SAFE OPERATION OF COONAMBLE AERODROME

### Objective

To ensure that development and the operation does not have a negative impact on the nearby Coonamble Aerodrome.

### Performance

#### Departure and Approach Procedures

Any proposed structures and cranes if used in construction should be referred to the procedure design organisation/s responsible for the maintenance of instrument flight procedures at the Aerodrome. Please be aware that there may be more than one organisation responsible for the procedures at the aerodrome.

To check which organisations are responsible you can view the procedures at <http://www.airservicesaustralia.com/aip/aip.asp> then Departure and Approach Procedures. The logo on the bottom of each procedure plate indicates the design organisation responsible.

#### Compliance with standards

Any aerodrome developments to aviation facilities associated with the planning proposal need to be consistent with the requirements of Civil Aviation Safety Regulations 1998 Part 139 and the associated Manual of Standards. Further details are available on the CASA website. <https://www.casa.qov.au/standard-pa.qe/casr-part-139-aerodromes>

The National Airports Safeguarding Framework provides guidance on planning requirements for development that affects aviation operations. This includes building activity around airports that might penetrate operational airspace and/or affect navigational procedures for aircraft. The Framework consists of a set of guiding principles with six guidelines relating to aircraft noise, windshear and turbulence, wildlife strikes, wind turbines, lighting distractions and protected airspace. Further information is available from the following link:

<https://infrastructure.flav.au/aviation/environmental/airport-safeguarding/nasf/>

#### Aerodrome operations

Consultation should also be undertaken with the aerodromes operational management team to manage the following issues with developments adjacent to any aerodromes:

- a) Airport master planning: Council should ensure that the proposal does not affect any future development or upgrades planned by the aerodrome's operational management.
- b) Obstacle limitation surfaces (OLS) and Procedures for Air Navigation Services – Aircraft Operations: Prior to construction, the development and crane activity should be reviewed by the aerodrome's management team for the protection of these surfaces.
- c) Wildlife hazard management plan: Consideration needs to be given to the final heights and bird attractions of landscaping provisions which potentially may cause a risk to aviation activities.
- d) Lighting in the vicinity of an aerodrome: Any proposed non-aeronautical ground light in the vicinity of an aerodrome may by reason of its intensity, configuration or colour, cause confusion or glare to pilots and therefore might endanger the safety of aircraft.
- e) Gaseous plume: Exhaust plumes can originate from a number of sources and aviation authorities have established that an exhaust plume with a vertical gust in excess of 4.3 metres/second may cause damage to an aircraft airframe, or upset an aircraft when flying at low levels.

- f) Control of dust: During any construction the emission of airborne particulate may be generated which could impair the visual conditions.

## **18. PUBLIC LIABILITY INSURANCE**

### **Objective**

To ensure that the applicant and Council are both protected against any liability claim.

### **Performance**

Prior to the commencement of any works on Council controlled land including a public road, the applicant is to affect Public Liability Insurance in the minimum amount of \$20 million. This insurance is to note Council's interest and is to remain current for at least the period from the issue of the Construction Certificate until the issue of a Compliance Certificate for the works. Documentary evidence of the currency of the cover is to be provided to Council prior to the issuing of any Access Construction Certificate.

## **19. CONTROL OF NUISANCE**

### **Objective**

To protect the amenity of the surrounding area.

### **Performance**

No nuisance or interference with the amenity of the area is to be created by reason of any process or operation on the premises causing the emission of noise, dust, smoke or any polluted discharge whatsoever. NOTE: Amendments to the *POEO Act 1997*, require Council to investigate complaints where only one person complains.

## **20. ENTRANCE / EXIT POINTS**

### **Objective**

To ensure on-site traffic flows in the manner assessed by Council.

### **Performance**

Entrance / exit points are to be clearly signposted and visible from both the street and the site at all times.

## **21. LOADING / UNLOADING**

### **Objective**

To ensure loading / unloading does not interfere with the amenity of the street.

### **Performance**

All loading and unloading operations are to take place at all times wholly within the confines of Lot 3 DP 547529.

## **22. SOIL EROSION**

### **Objective**

To protect the water catchments.

### **Performance**

Provide and maintain a silt intercept fence along the lower boundary of the site or as otherwise directed by the Council to ensure that silt does not enter the stormwater system/catchment.

## 29. COMPLIANCE WITH CONDITIONS OF CONSENT

### Objective

To ensure all conditions of consent are complied with and development proceeds in the manner assessed by Council.

### Performance

The use or occupation of the approved development shall not commence until such time as all conditions of this development consent have been complied with. The use or occupation of the development prior to compliance with all conditions of development consent may make the applicant / developer liable to legal proceedings.

### ADVISORY NOTES

- Prior to construction work commencing you should ensure that all services have been clearly located and identified by contacting “Dial before you Dig” by telephoning 1100.
- It is possible that a covenant may affect the land, which is subject to this consent. The granting of this consent does not necessarily override any covenant.
- You should seek legal advice regarding the effect of any covenants that may affect the land.

### RIGHT OF REVIEW

Section 82A of the *Environmental Planning and Assessment Act 1979* provides that the applicant may request the Council to review the determination. The request must be made in writing within six (6) months *after receipt of this Notice of Determination*, together with payment of the appropriate fees. It is recommended that the applicant discuss any request for a review of the determination with Council Officers before lodging such a request. Section 82A review does not apply to designated or integrated development.

### RIGHT OF APPEAL

If you are dissatisfied with this decision, Section 97 of the Environmental Planning and Assessment Act, 1979 gives you the right to appeal to the Land and Environment Court within six (6) months after the date on which you receive this notice.

## 5. Conclusion

This report has been prepared on behalf of Coonamble Shire Council in order to provide an independent third party assessment of a development application lodged to Council for the Moorambilla Solar Farm, located at Lot 3 DP 547529, Coonamble.

It provides a review of the development application under section 79C(1) of the EP&A Act in consideration of:

- The plans and documentation lodged with the development application
- Comments received from external referral agencies
- Submissions received during the neighbour notification period
- Applicable planning instruments and development control plans relating to the development.

The application provides sufficient information to adequately assess the proposal in accordance with the provisions of Section 79C of the EP&A Act, including Council's LEP and relevant DCPs/policies and is considered a suitable use of the site.

The development application was available for public comment from 6 August 2017 to 14 September 2017. A total of two submissions from State agencies were received in regard to the proposal.

It is therefore recommended that the proposal is approved subject to reasonable and relevant conditions. These conditions are provided in the conditions report in section 4.

GHD

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Document Status

Revision	Author	Reviewer		Approved for Issue		
		Name	Signature	Name	Signature	Date
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