

MEMO

WESTERN PLAINS REGIONAL COUNCIL

Incorporating the former
Dubbo City & Wellington councils

Development Application Assessment

Report: Development Application D16-171 for an Electricity Generating Works (Solar Farm) on Lot 21, DP 793541, 20L Sheraton Road, Dubbo

Applicant: Neoen Australia Pty Ltd

Owner: Mr T W & Mrs J Warren

Assessing Officer: Senior Planner 1

Date: 31 May 2016

File: D16-171 Part 1

REPORT

1. DEVELOPMENT DETAIL

Council is in receipt of a Development Application for electricity generating works (solar farm) on the south-eastern outskirts of the Dubbo urban area. The Application was lodged with Council on 27 April 2016. According to the Statement of Environmental Effects, specific details of the solar farm are as follows:

“Neoen proposes to develop the South Keswick Solar Farm (SKSF) utilising proven photovoltaic (PV) technology to generate renewable electricity. PV is the method of generating electricity power by converting solar radiation into direct current electricity using semi-conductors that exhibit the photovoltaic effect: which refers to photons of light knocking electrons into a higher state of energy to create electricity.

The SKSF ... is expected to generate approximately 33,000 MWh of renewable electricity per year. Trenches will be dug for installation of cables between panels, inverters and transformers, up to the delivery point.”

The solar panel modules themselves will occupy an area of approximately 40 hectares. A total of 46,094 panels will be constructed and will have a height of approximately 2-3 metres above ground level. Aside from the construction of the solar panels, other construction works include:

- Construction of a small maintenance building which will include amenities (i.e. toilet) and associated on-site waste water treatment system;
- Construction of two (2) medium voltage photovoltaic delivery stations;
- Construction of six (6) mega volt transformer stations evenly spaced between panels;
- Construction of security fencing around the perimeter of the development comprising chainwire and barbed-wire fencing approximately two metres in height;

- Provision of landscaping around the outside perimeter of the security fencing; and
- Construction of a 3.5 metres wide gravel internal access tracks from the property boundary to the development as well as throughout the development site.

The Applicant has identified that the final mounting technology is still under consideration. The panels may be fixed tilt orientated north or incorporating a tracking system on a north/south axis (i.e. to follow the sun from east to west). While not fully determined, the Applicant has identified the development will probably take the form of the latter proposal.

The development is for infrastructure provided by a private company and has a capital investment value of \$23.25 million. Consequently the Development Application is required to be determined by the Western Joint Regional Planning Panel (JRPP) as the development will be for infrastructure undertaken by a private authority with a capital investment value over \$5 million, as per Schedule 4A, Part 6 of the Environmental planning and Assessment Act 1979.

Plans of the proposed development are included in **Appendix 2**.

2. SITE CHARACTERISTICS

The subject property (Lot 21) is located on the eastern side of Sheraton Road, currently having an area of 183.2 hectares with a frontage to Sheraton Road of 643.4 metres. The site is the subject of an approval to subdivide the land (discussed in Section 3 of this report) however to date the subdivision has not been registered. An aerial view of the site and locality, including the proposed allotment boundaries, is provided in Figure 1.

Slope

The general slope of the land is slight west.

Vegetation

The property is predominantly cleared of native vegetation with the exception of scattered vegetation around the southern and western portions of the property.

Access

Vehicular access to the property is obtained off Sheraton Road.

Drainage

Stormwater conforms to the natural contours of the land. There are no reticulated stormwater services within the vicinity of the property.

Services

The property is not connected to reticulated Council infrastructure (i.e. water or sewerage services). The property however does have connection to electricity and telecommunications infrastructure.

Adjoining uses

Adjoining land uses are predominantly primary production or rural-residential based. A quarry exists to the south.



Figure 1. Aerial view of 20L Sheraton Road and locality – the blue hatched area shows the approximate location of the proposed solar farm within the property (outlined in red)

3. SITE HISTORY

Lot 21 was created via subdivision on 30 October 1989 (SA89-13). The land was recently the subject of a two (2) lot subdivision application (D15-568) which was approved on 18 March 2016 and the Subdivision Certificate subsequently released on 28 April 2016. A copy of the Council approved Subdivision Certificate is shown in Figure 2.

To date, the subdivision has not been registered with the NSW Lands Property Information (LPI). Once this has occurred, the solar farm is proposed to be located on a 90.5 hectare parcel of land known as Lot 210 which is in the northern portion of the property within the area zoned RU2 Rural Landscape.

There are no issues from previous development approvals which require further consideration.

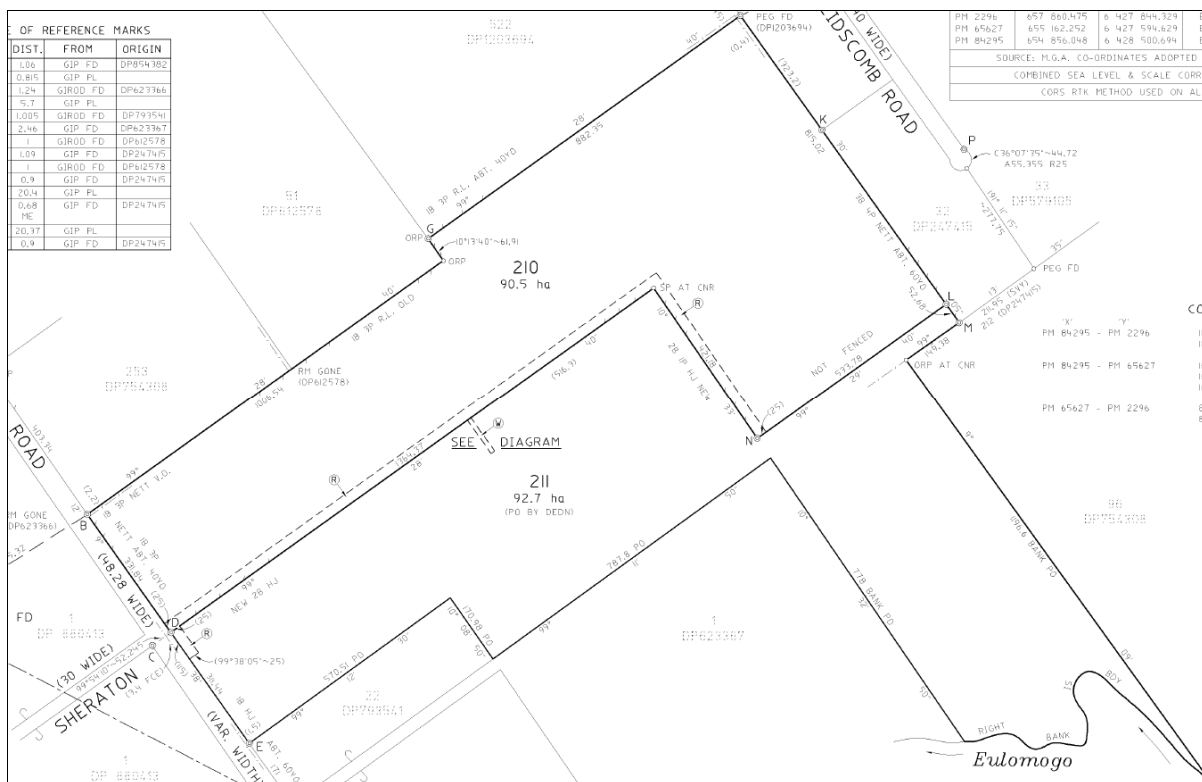


Figure 2. Approved subdivision showing Lot 210 in which the solar farm is proposed to be located

4. SECTION 79C EVALUATION

(a) ENVIRONMENTAL PLANNING INSTRUMENTS (SEPP, REP, OR LEP) DEVELOPMENT CONTROL PLANS AND REGULATIONS

State Environmental Planning Policies (SEPPs)

State Environmental Planning Policy No. 55 – Remediation of Land

The property is not listed on Council's Potentially Contaminated Lands Register. Pursuant to Clause 7 of the SEPP, Council must consider whether the land is contaminated and whether the land is suitable for the proposed use.

While noting the land is potentially contaminated given its past use for agricultural purposes, the proposal is considered to be a non-sensitive land use. In this regard, the potential contamination status of the land is considered to not adversely impact on the proposed use or those persons utilising the development. Therefore, no further investigations in relation to contamination/SEPP 55 are required.

State Environmental Planning Policy (Infrastructure) 2007

Part 3 – Division 4 – Electricity Generating Works or Solar Energy Systems

Clauses 33 to 39 of the SEPP relates to development for the purpose of electricity generating infrastructure including solar energy systems and wind turbines. The subject property, being zoned RU2 Rural Landscape, is identified as being a prescribed rural zone. It is noted the development cannot be exempt or complying development, primarily due to the size and electricity generating capacity of the development.

Pursuant to Clause 34(1) development for the purpose of electricity generating works may be carried out by any person with consent on any land in a prescribed zone. The SEPP does not detail any other assessment or performance criteria to which the development shall conform. Therefore, other than being deemed permissible and requiring development consent, no other assessment against Division 4 can be undertaken.

Part 3 – Division 5 – Electricity Transmission or Distribution

Pursuant to Clause 45 of SEPP (Infrastructure) 2007 the local electricity supply authority (Essential Energy) was notified of the Application due to the overhead powerlines which operate in the vicinity of the development site.

Essential Energy responded on 31 May 2016 stating that there are overhead powerlines operating in the vicinity of the development. Essential Energy raised no objection to the proposed development subject to conditions. The requirements of Essential Energy can be included as a notation on the consent. As per the recommendations of Essential Energy an additional condition can also be included on the consent that an appropriate easement be created encompassing the overhead powerlines on the property which provide electricity services to the dwelling on proposed Lot 211. Such easement would not impact on the construction or operation of the development.

Council particularly sought advice from Essential Energy due to a possible easement for electricity through the property, and specifically, through the proposed development area. The existing Deposited Plan (DP793541) showed an easement 45 metres wide. Noting no powerlines physically being located within this area of the property, Council undertook a title search which showed no easement currently existing. Further investigations have since determined that the easement was extinguished some time ago. Council is therefore satisfied that there is no easement through the property, nor plans to construct electrical infrastructure, that may impede construction of this development.

State Environmental Planning Policy (State and Regional Development) 2011

Pursuant to Schedule 1, Clause 20 of the SEPP, the proposal is not state significant development as the development will have a capital investment value of less than \$30 million. Consequently, the Western JRPP is the consent authority and not the Minister pursuant to Section 89D of the Environmental Planning and Assessment Act 1979.

Note: While a number of other SEPPs apply to the land, none are specifically applicable to this development.

Orana Regional Environmental Plan No. 1 - Siding Springs (Deemed State Environmental Planning Policy)

The subject site is situated in excess of 100 km from the Observatory and the development will not provide a significant level of light spill or glare. The proposed development does not require referral to the Observatory under the provisions of the deemed State Environmental Planning Policy.

Dubbo Local Environmental Plan 2011

The following clauses of Dubbo Local Environmental Plan 2011 have been assessed as being relevant and matters for consideration in assessment of the Development Application.

Clause 1.2 Aims of Plan

The Application is not contrary to the relevant aims and objectives of the plan.

Clause 2.2 Zoning of Land to Which Plan Applies

The land is zoned RU2 Rural Landscape, RE2 Private Recreation and IN3 Heavy Industrial. As discussed, the development will be located on approved Lot 210 which is wholly zoned RU2.

Clause 2.3 Zone objectives and Land Use Table

While not contrary to the zone objectives, none are specifically applicable in this instance.

The proposed development can be defined as *electricity generating works* under the Dubbo Local Environmental Plan 2011. This is defined as:

“A building or place used for the purpose of making or generating electricity.”

Electricity generating works is permissible in the RU2 zone pursuant to Clause 34 of State Environmental Planning Policy (Infrastructure) 2007.

Clause 5.10 Heritage Conservation

In accordance with Schedule 5 of the Dubbo Local Environmental Plan 2011 there are no Heritage Items listed or the vicinity of the property.

Submitted with the Application is an Aboriginal Archaeological Assessment dated February 2014. The Assessment acknowledged the:

“ ... highly disturbed nature of the site through in excess of 130 years of intensive agricultural land-use practices, predominantly involving cultivation.”

Two (2) previously recorded sites were located as part of the Assessment. Both sites were open artefact scatter sites.

The first site, identified in the Assessment as 36-1-0248, has an area of approximately 6 hectares with 58 surface artefacts discovered including cores, flakes, debitage, a hammerstone, and tested cobble. This area is located to the south of the development area.

The second site, identified in the Assessment as 36-1-0249, has an area of approximately 2,800m² with three (3) surface artefacts discovered including a quartzite core, a silcrete core and a tested river cobble. This area is located to the north of the development area.

It is noted that the development has been designed to avoid both sites with the site plan clearly outlining the Aboriginal artefact areas. The Assessment drew the following conclusions and recommendations:

- “1. The Proponent is to avoid impact to recorded Aboriginal sites 36-1-0248 and 36-1-0249 and ensure their protection during construction and operation through the installation of fenced barriers which accord with the activity exemption areas, or buffer zones, provided in this report.*
- 2. Should the Proponent determine that impact to sites 36-1-0248 and 36-1-0249 is unavoidable an Aboriginal Heritage Impact Permit must be obtained from OEH.*
- 3. Those parts of the Study Area which lie outside of delineated exclusion zones for the protection of previously recorded sites 36-1-0248 and 36-1-0249 are exempt from further investigation, as per the Due Diligence process (DECWW 2010a) and the Proponent may proceed with caution utilising an Unanticipated Finds Protocol.*
- 4. All land-disturbing activities must be confined to within the assessed Study Area. Should project impacts change additional assessment may be required.*
- 5. The work crews involved with proposed should be made aware of the legislative protection of Aboriginal sites and objects. In the unlikely event that objects are encountered that are suspected to be of Aboriginal origin (including skeletal material), the Unanticipated Finds Protocol should be followed.”*

It is considered the development proposal adheres to the above recommendations. An appropriate condition can be included on the consent that the recommendations as stipulated in the Aboriginal Archaeological Assessment by Ozark dated February 2016 be adhered to. A separate condition could also be included on the consent requiring that works are to cease and the National Parks and Wildlife Services (NPWS) be notified should any Aboriginal archaeological material be discovered during earthmoving/construction works.

Clause 7.2 Natural Resource – Biodiversity

Part of the land is identified as having high biodiversity according to the Natural Resource – Biodiversity Map. These areas however are not within close proximity to the development site. Flora and fauna impacts including vegetation removal is discussed elsewhere in this report.

Clause 7.4 Natural Resource – Riparian Land and Waterways

Part of the land is identified as having riparian vegetation according to the Natural Resource – Water Map. Such area is along the southern boundary of Lot 21, namely Eulomogo Creek. Such area however is not within close proximity to the development site. Therefore no special considerations in relation to the protection of riparian land and waterways is required.

Clause 7.5 Groundwater Vulnerability

The land is identified as having a combination of high and moderately-high groundwater vulnerability according to the Natural Resources – Groundwater Vulnerability Map. The area around the development site is specifically identified as moderately-high. It is considered the development itself will not cause any adverse impacts to groundwater by way of altering the water table or polluting groundwater. No further investigations in relation to groundwater vulnerability are thus required.

Clause 7.7 Airspace Operations

The solar panels would have a maximum height of 3 metres above the natural surface level ranging from 300 metres AHD to 310 metres AHD. The Obstacle Limitation Surface (OLS) level of the Dubbo City Regional Airport at this location is 430 metres AHD ensuring the development will be well below the OLS. Therefore it is considered that the development will not have an adverse impact on the operations of the airport.

Draft environmental planning instruments (SEPP, REP or LEP)

No draft environmental planning instruments apply to the land to which the Development Application relates.

Development control plan(s)

Dubbo Development Control Plan 2013

An assessment is made of the relevant chapters and sections of this Development Control Plan (DCP). Those chapters or sections not discussed here were considered not specifically applicable to this application or are discussed elsewhere in this report.

Chapter 2.4 – Rural Development and Subdivisions

Section 2.4.8 – Design Elements and Matters for Consideration

Element 1 – Site Integration

Table 1 within this element provides suggested setbacks for development from property boundaries. For land within the RU2 zone the recommended setback is 30 metres.

While noting specified setbacks within this section predominantly pertain to dwelling houses and ancillary buildings (i.e. carports, garages etc) it is noted that the development complies with the 30 metre setback requirement. The development will be setback a minimum of 715 metres from the front (western) boundary, 52 metres from the northern boundary, 104 metres from the eastern boundary and 32 metres from the southern boundary.

Element 2 – Services

The Application identifies that the development requires access to electricity services.

Being an electricity generating development the solar farm will be required to connect into the electricity network. The Applicant has provided correspondence from Essential Energy dated 14 March 2013 regarding specific requirements and connection options for this development. General comments from Essential Energy have been considered and can be included as a notation on the consent.

Element 3 – Access

Vehicular access to the property is obtained via Sheraton Road, a two (2) lane bitumen sealed roadway. Access will be through an existing gateway into the property. Such access will serve both proposed lots (lot 210 and 211) as approved through D15-568. The access point will be located within proposed Lot 211 however the approved subdivision shows a 25 metre wide Right of Carriageway (ROW) within proposed Lot 211 which benefits proposed Lot 210, on which the solar farm will be located upon (see Figure 2).

Submitted plans show access from the entrance gate not correlating with the location of the ROW. An appropriate condition would therefore be required on any consent requiring that access to the development and proposed Lot 210 be provided from the existing access gate in accordance with the ROW on the approved Deposited Plan.

In terms of general access requirements, Council's Technical Support Branch has provided the following comment:

"Access to the subject lot is to be off Sheraton Road which at this location is a bitumen sealed road, with grassed and gravel table drains, maintained by Council."

The comment provided above is noted. A condition was recommended by Technical Support requiring that the vehicular access into the property from Sheraton Road be

upgraded to a Type BAR/BAL intersection. However, given the majority of traffic generated by this development will be during the construction phase, such intersection works would be required to be completed prior to the issue of the Construction Certificate.

Element 4 – Design for Access and Mobility

The development will contain a site maintenance building. Under the Building Code of Australia (BCA) section D3.4 contains concessions for providing disabled access. Given the nature of the development it is envisaged it could avail itself to such concession. An appropriate notation can be included on any consent advising the Applicant to seek such concession if necessary with the Construction Certificate Application.

Element 5 – Flooding

Proposed Lot 210 is not flood prone land and as such there are no flooding considerations with this development.

Element 6 – Waste Management

During construction, solid waste may be generated through waste building materials, packaging and the like. An appropriate condition can be included on any consent requiring that construction waste be disposed of appropriately.

Upon occupation waste will be minimal. The only solid waste anticipated will be domestic waste generated by the maintenance building, or other construction waste generated through maintenance of the development. Again an appropriate condition can be included on any consent requiring that such wastes be stored and disposed of through the appropriate means.

Liquid waste will be generated through the use of plumbing fixtures within the maintenance building. With the land not being serviced by reticulated sewerage services waste water will be required to be disposed of on site through a waste water treatment system. In this regard, an appropriate condition can be included on any consent requiring that the Applicant make application to Council for approval of an Onsite Sewage Management Facility. Such application must be approved prior to any plumbing and drainage works being undertaken. It is considered there is ample space on site for the provision of the effluent disposal field that complies with Environment and Health Protection Guidelines.

Liquid trade waste will not be generated by this development.

It is noted that the development will include transformer stations. No details have been provided as to their construction or operation, specifically whether they will contain oil products. An appropriate condition should therefore be included on any consent requiring that should the development utilise oil filled transformers, the transformers

shall be appropriately bunded to ensure oils are contained and not pollute the local environment.

Chapter 3.5 Parking

As discussed, vehicular access to the development from the site boundary, as well as throughout the development, will be provided by way of a 3.5 metre wide gravel track. The design standard of such is considered appropriate given the infrequent nature of the access to the site, particularly following completion of construction.

Plans show a parking area on the northern side of the delivery stations and the maintenance building. Plans are not sufficiently detailed to show the number of parking spaces or the construction standard of such. It would appear the parking area will be gravel surfaced with space for parking of in excess of 20 vehicles. This is considered suitable and a sufficient area for parking. Given the nature of the facility providing a formal parking area (in terms of line marking of spaces etc) is considered unnecessary in this instance. An appropriate condition can be included on the consent requiring that prior to the completion of construction of the site maintenance building, a suitable parking area be provided adjacent to the maintenance building in accordance with the approved site plan.

Any matter prescribed by the regulation

No matters prescribed by the Regulations impact determination of the Development Application.

(b) LIKELY IMPACTS OF THE DEVELOPMENT

A review of the Application and an inspection of the site demonstrates the site is highly disturbed and modified through an extensive history of agricultural activities such as grazing and cropping. The Application acknowledges that potentially eight (8) mature trees will be required to be removed to enable the development to proceed. The Application also notes that this figure represents the maximum number of trees to be removed and that every effort will be made to minimise vegetation removal or damage.

As noted previously in this report, the area is not identified as having any biodiversity value according to the Dubbo Local Environmental Plan biodiversity maps. Further, a site inspection demonstrated these isolated trees on a highly modified site are unlikely to house any threatened flora or fauna. No threatened species were observed on the property. The trees were also observed as being a type that would not contain hollows or the like for the housing of native fauna.

The trees to be removed are isolated trees that have been impacted by the intensive agricultural practices that have previously been conducted on the property. The trees are unlikely to be creating a connective wildlife corridor for fauna species that may frequent

the locality. The ecological value of the trees is considered to be low due to the lack of supporting understorey and tree species in the immediate locality.

While acknowledging some vegetation will be required to be removed, the Application identifies mitigation measures to minimise potential adverse impacts to the environment (including flora and fauna) which includes:

- Dealing with any noxious weeds under the Noxious Weeds Act 1993 No. 11;
- Ensuring materials, plant, equipment and stockpiles are not placed in a manner that results in damage to trees; and
- Construction staff to be briefed on the requirement to avoid damage or removal of vegetation adjacent to the construction area.

Therefore, given the highly modified nature of the site and the proposed mitigation measures, the removal of these isolated trees is foreseen to be minimal and insignificant and will present no adverse impact to the environmental nature of the site. It is therefore considered the development has been designed and sited so as to minimise flora and fauna impacts on the site and the general locality.

An appropriate condition can be included on the consent requiring the Applicant to undertake the mitigating measures discussed above to ensure environmental impacts to the site and locality are minimised.

Likewise, it is considered the development will not result in any adverse social or economic impacts to the locality. The development will provide positive social and economic impacts to the locality and wider community. The capital investment value of the development is \$23.25 million and it is proposed to employ approximately 20 people during construction and one (1) person during operation. There will also be environmental benefits delivered to the region through this alternative energy producer.

(c) SUITABILITY OF THE SITE

It is not anticipated that the development will have an adverse effect on the landscape or scenic quality of the locality. Further, the development will not reduce access to views or sunlight to neighbouring property.

The external appearance of the development is appropriate having regard to the character of the locality. The size and shape of the land is suitable for the siting of the proposed development.

The development will not have an adverse impact on the existing or likely future amenity of the locality. The development design will be sensitive to environmental conditions and site attributes.

Given the location of the site on the edge of the existing urban area the development will not have an adverse effect on the rural public domain.

The Application has identified that screen planting will be provided around the outside perimeter of the security fencing as a means of screening and improving the visual amenity of the development. Specific details in terms of the type of plantings or heights have not been provided. An appropriate condition can be included on any consent requiring that landscaping to a minimum height of 3 metres that is endemic to the Dubbo climate be provided prior to the issue of the Occupation Certificate. As it is envisaged the development will be undertaken in stages, the condition should be worded so that landscaping is progressively undertaken as per the adjacent solar panel construction.

It is anticipated that the development will not have an adverse impact on the local environment. There are no activities proposed which are expected to cause adverse air, soil or water pollution. Appropriate conditions can be included on the consent to ensure possible environmental impacts are minimised or mitigated.

Minor earthworks will be required to be undertaken for the construction of the development. Such works are considered minor with no erosion or sediment control plans required to be implemented. Upon completion of the development erosion is not considered to be an adverse consequence.

It is anticipated some noise will be generated during construction of the development. To mitigate potential noise impacts an appropriate condition should be included on the consent restricting construction work hours. Upon completion of the development noise generation will be negligible. The solar panels themselves will not generate noise. The only noise generated will be through vehicles accessing the site to perform regular maintenance, cleaning etc., of which noise generation is expected to be minimal. Although minimal noise will be generated, an appropriate condition can be included on the consent requiring that noise from the development shall not exceed the background noise level by more than 5dB(A) when measured at the most affected residence.

The Application identifies that during construction vehicle movements would be approximately 20 heavy vehicles per day. Upon completion of the development access by vehicles will be minimal as the development will largely be operated and monitored remotely. A light vehicle will access the site approximately once per month to undertake these activities.

It is therefore considered that the surrounding road system has the capacity to accommodate traffic generated by the proposed development.

The Application has addressed glare impacts from the solar panels given that solar panels are designed to minimise light glare as the purpose of the panels is to harness the solar light to maximise electricity generation rather than reflect it off. The Application has provided the following information in relation to light glare:

- “1. 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*

not generally create noticeable glare compared with an existing roof or building surface.

2. *According to Spaven Consulting (2011), PV solar panels reflect as little as 2% of the light they receive.*
3. *The commercial viability of the SKSF project is linked to maximising the amount of electricity that can be generated and sold. Developing a PV farm that is not efficient and generates glare (i.e. which is effectively reflected and therefore energy lost), does not maximise a return on assets and compromises the economics of the technology. The commercial imperative of securing an acceptable return on investments justifies the claim that glare will be minimised."*

To further minimise glare potential the Applicant has proposed vegetative screening around the perimeter of the development. The minimal glare as well as landscape screening is considered to also reduce glare impacts to neighbouring property, as well as reduce potential distraction to passing motorists along Wellington Road (Mitchell Highway).

Based on the information provided it is considered the development will not cause adverse glare or distraction impacts to neighbouring property or nearby roadways.

(d) SUBMISSIONS

Pursuant to Section 1.2.11 of the Dubbo Development Control Plan 'electricity generating works' in the RU2 zone require advertising in the local newspaper as well as notification letters to landowners in the general locality. The Application was subsequently advertised in the Daily Liberal on 5 May 2016 advising the exhibition period for the Application as being from 5 May to 19 May 2016. Landowners in the general locality were also advised in writing of the exhibition period. During the exhibition period one (1) written submission was received. The key matters raised in the submission are discussed below:

- Control of noise emissions

Comment: The submission requests that noise emissions measured at the site boundary should not exceed 45dbA or the background level whichever is the lesser. As discussed, apart from during construction, minimal noise will be generated by the development. Nonetheless, an appropriate condition can be included on the consent requiring that noise from the development shall not exceed the background noise level by more than 5dB(A) when measured at the most affected residence.

- The use of bird scare guns or the like should be prohibited

Comment: The development is not anticipated to attract birdlife. Nevertheless, the Applicant in an email dated 20 May 2016 confirmed that the developer does not intend to use any firearms to scare birds during the construction or operation of the solar farm. Council therefore does not intend to impose any special condition relating to the prohibition of firearms to deter birdlife.

- Installation of a stormwater detention basin

Comment: The submission requests that a detention basin be installed to receive all stormwater from the north and west of the site.

Given the area will largely not be hardstand, the development is not anticipated to generate significant stormwater runoff that would warrant the need for any form of stormwater detention infrastructure. Noting there is no stormwater infrastructure in the area, the development is therefore considered to not cause detrimental stormwater impacts to 'downstream' properties. Further, the site does not receive stormwater above that of natural overland flows from 'upstream' properties. Accordingly, no special considerations or conditions are required in relation to stormwater management.

- Construction of a five metre high earth berm around the development

Comment: The submission requests that “... a 5 metre high landscaped earth berm be installed at the western (full width) and northern boundary (300 metres)”. Although not specified it is assumed the reason for the request is to provide a visual screen between the development and the writer's property.

As discussed, the Application proposes vegetative screening around the solar farm. This is considered sufficient to provide a visual screen around the development. Vegetative screening is also considered to be less visually obtrusive and involve less earthworks and disturbance than a 5 metre high earth berm.

- A high tree plantation be established at the frontage

Comment: As discussed, vegetative screening will be provided around the perimeter of the development. It is not considered necessary to provide any additional plantings along the property frontage (facing Sheraton Road).

- No sun 'glint' should be emitted to the east, north or west of the site beyond the site boundary

Comment: Glare has been discussed within this report. It is noted that the sun glare emitted from the panels will be 2%. Vegetative screening will also reduce sun glare to neighbouring properties. Therefore such matters have been suitably considered and thus it has been determined that glare will not adversely affect neighbouring property or nearby road users.

(e) PUBLIC INTEREST

There are no matters other than those discussed in the assessment of the Development Application above that would be considered to be contrary to the public interest.

5. SECTION 64/94 DEVELOPER CONTRIBUTIONS

a) Water Supply Headworks Contributions Policy (Section 64)

The property is not connected to reticulated water services. The Application states that water for the maintenance building will be trucked in and stored in tanks on site. Further, even if the development was utilising Council water, daily water usage is still considered to be minimal and be far less than the 1ET equivalent of 5,000L per day. Therefore water supply headworks contributions are not applicable in this instance.

b) Sewerage Supply Headworks Contributions Policy (Section 64)

The property is not connected to reticulated sewerage services. The Application states that sewage from the site will be disposed of via an on-site septic system. Therefore sewerage supply headworks contributions are not applicable in this instance.

c) Open Space and Recreation Facilities Contributions Plan (Section 94)

As the development is not residential development, open space contributions are not applicable in this instance.

d) Urban Stormwater Drainage Headworks Contributions Plan (Section 94)

The property is located outside the stormwater catchment area and therefore contributions are not applicable in this instance.

e) Urban Roads Contributions Plan (Section 94)

The property has recently been approved for a two (2) lot subdivision (D15-568). Urban roads contributions were paid through a condition of consent for one (1) additional allotment, which under the Plan equates to 11 daily trips. The Application identifies that upon completion of the development, a vehicle will only be required to access the site approximately once per month for maintenance, cleaning etc. This is well below the credit of 11 daily trips and therefore urban roads contributions are not applicable in this instance.

6. INTERNAL REFERRALS

Building Assessment

Council's Building Services Supervisor (BSS) in their report dated 18 May 2016 did not raise any significant issues that require further investigation or that would prevent the Application from being granted consent subject to conditions. The conditions and notations recommended by the BSS have been included in **Appendix 1** to this report.

The BSS has identified that although the subject land is not designated as being Bushfire Prone Land under the NSW RFS Commissioners map, the land is bushfire prone by reason of the grassland hazard present on the rural land. On review of the requirements of the *Planning for Bushfire Protection Guideline 2006* it has been recommended that an Asset Protection Zone (APZ) be provided around development as well as a dedicated water supply for bushfire purposes. Appropriate conditions in this regard have been included in **Appendix 1**.

Engineering Assessment

Council's Manager Technical Support (MTS) in their report dated 25 May 2016 did not raise any significant issues that require further investigation or that would prevent the Application form being granted consent with conditions. The conditions recommended by the MTS have been included in the recommended conditions included in **Appendix 1**.

7. SUMMARY

The Applicant is seeking development consent to undertake electricity generating works, specifically a 40 hectare solar farm, at Lot 21 DP 793541, 20L Sheraton Road, Dubbo (**Appendix 2**).

The proposed development is not considered likely to have any significant negative impacts upon the environment or the amenity of the locality.

The proposed development is consistent with the objectives of the applicable Environmental Planning Instruments, Development Control Plans and Council Policies and is therefore recommended for approval subject to the conditions of consent provided in **Appendix 1**.

8. RECOMMENDATION

Having considered the matters raised and discussed in the assessment of the Application proposal, the subject Development Application D16-171 for electricity generating works (solar farm) at Lot 21 DP 793541, 20L Sheraton Road, Dubbo is recommended for approval subject to the conditions included here as **Appendix 1**.

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Shaun Reynolds
Senior Planner 1

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Melissa Watkins
Director Environmental Services
Date:

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Mark Riley
Interim General Manager
Date: