

COUNCIL ASSESSMENT REPORT

Panel Reference	PPSSTH - 32
DA Number	DA20/0016
LGA	Wagga Wagga
Proposed Development	Electricity Generating Works (solar farm)
Street Address	157 Windmill Road, Bomen, NSW 2650
Applicant/Owner	Applicant: Metka EGN Owner: Andrew & Melissa Lowe
Date of DA lodgement	17 January 2020
Number of Submissions	22
Recommendation	Approve with conditions and GTAs
Regional Development Criteria (Schedule 7 of the SEPP (State and Regional Development) 2011)	5. Private infrastructure and community facilities over \$5 million Development that has a capital investment value of more than \$5 million for any of the following purposes— (a) electricity generating works,
List of all relevant s4.15(1)(a) matters	<ul style="list-style-type: none"> Wagga Wagga Local Environmental Plan 2010 Wagga Wagga Development Control Plan 2010 s91 Water Management Act – integrated approval s90 National Parks and Wildlife Act 1974 – integrated approval
List all documents submitted with this report for the Panel's consideration	<ul style="list-style-type: none"> plans landscape plans Visual Amenity Assessment Aboriginal Cultural Heritage Assessment Biodiversity Assessment Hydraulic Assessment Noise and Vibration Assessment Statement of Environmental Effects
Clause 4.6 requests	Nil
Summary of key submissions	<ul style="list-style-type: none"> Visual impact of solar farm Loss of trees and biodiversity impacts Overland flow
Report prepared by	Amanda Gray
Report date	30 July 2020

Summary of s4.15 matters

Have all recommendations in relation to relevant s4.15 matters been summarised in the Executive Summary of the assessment report?

Yes

Legislative clauses requiring consent authority satisfaction

Have relevant clauses in all applicable environmental planning instruments where the consent authority must be satisfied about a particular matter been listed, and relevant recommendations summarized, in the Executive Summary of the assessment report? e.g. *Clause 7 of SEPP 55 - Remediation of Land, Clause 4.6(4) of the relevant LEP*

Yes

Clause 4.6 Exceptions to development standards

If a written request for a contravention to a development standard (clause 4.6 of the LEP) has been received, has it been attached to the assessment report?

Not Applicable

Special Infrastructure Contributions

Does the DA require Special Infrastructure Contributions conditions (S7.24)?

Note: Certain DAs in the Western Sydney Growth Areas Special Contributions Area may require specific Special Infrastructure Contributions (SIC) conditions

Not Applicable

Conditions

Have draft conditions been provided to the applicant for comment?

Note: in order to reduce delays in determinations, the Panel prefer that draft conditions, notwithstanding Council's recommendation, be provided to the applicant to enable any comments to be considered as part of the assessment report

Yes / No

Executive Summary

- The proposed development is for the installation of an 18.7 mega-watt (MW) solar farm to include approximately 49,364 panels. The solar panels are installed on trackers that automatically track the position of the sun in the sky and each tracker post is directly driven into the ground
- In addition to the solar panels the development includes electrical transformers and inverters with associated electrical cabling and internal access routes between the solar installations. A single access to the site is proposed from East Bomen Road through the approved solar farm to the north of the subject site.
- The application is an integrated development requiring referral from both Department of Planning, Industry and Environment (DPIE) and Natural Resources Access Regulator (NRAR). DPIE have issued General Terms of Approval associated with the disturbance of Aboriginal objects on the site. NRAR have issued General Terms of Approval associated with the installation of panels within proximity of the bank and bed of an existing waterway.
- The proposal requires the removal of vegetation from the site including hollow and non-hollow bearing trees and groundcover. A biodiversity assessment has concluded that whilst there is harm the impact of the vegetation removal on either flora or fauna present on the site is not significant. Notwithstanding the findings a biodiversity management plan will be secured by condition to enhance vegetation and habitat within the locality
- Landscaping is proposed to the site and includes native revegetation in the form of 10 metre wide corridors to the eastern and western site boundaries, native screen planting to the southern corridor and supplementary planting within existing corridors. In addition compensatory planting is proposed at a ratio of 10 trees to one for the 14 trees proposed to be cleared.
- Noise associated with the installation will predominantly be associated with construction activities and will be subject to standard and specific mitigation measures as detailed in the report.
- A hydraulic assessment has concluded that earthworks and site works will not result in increased run-off from the site. A stormwater management plan will be required to manage impacts during construction.
- The subject land is zoned as RU1 Primary Production under the Wagga Wagga Local Environmental Plan and is currently in use as grazing and cultivation land. The proposed use is permitted with consent in this zone.
- The site is undulating and visible from many different viewpoints, visually this development will have an impact on the existing character of the land. A visual a but this is balanced against the regional and state demands for achieving energy targets.
- A number of submissions (22) have been received from local and neighbouring properties in objection to the development.
- The capital investment value of the project is \$26,800,000.
- The development is recommended for approval, subject to conditions as detailed in the report.



City of
Wagga Wagga

Report of Development Application Pursuant to Section 4.15 of the Environmental Planning and Assessment Act 1979

APPLICATION DETAILS

Application No.:	DA20/0016
Modification No.:	N/A
Council File No.:	D/2020/0016
Date of Lodgement:	17/01/2020
Applicant:	Metka C/- Premise Australia Pty Ltd 154 Peisley St ORANGE NSW 2800
Proposal:	Electricity Generating Works (Solar Farm) – Integrated Development
Description of Modification:	N/A
Development Cost:	\$26,800,000
Assessment Officer:	Amanda Gray
Determination Body:	Southern Regional Planning Panel
Other Approvals	Integrated approval under Section 91 of the <i>Water Management Act 2000</i> and under s90 of the <i>National Parks and Wildlife Act 1974</i> .
Type of Application:	Development Application
Concurrence Required:	No
Referrals:	Natural Resource Access Regulator Department of Planning Industry & Environment Essential Energy Transgrid Internal Referral Groups
Adjoining Owners Notification:	9 March - 8 April 2020
Advertising:	9 March - 8 April 2020
Owner's Consent Provided:	Yes
Location:	Land on the western side of Windmill Lane and to the south of East Bomen Road.

SITE DETAILS

Subject Land:	157 Windmill Rd BOMEN NSW 2650 Lot 15 DP 1108978
Owner:	AMG Lowe & MJK Lowe

REPORT

DESCRIPTION OF DEVELOPMENT

The application is for the installation of an 18.7mega-watt (MW) solar farm that covers an area of approximately 55ha and includes 49,364 panels. The development is the second application for a solar farm on the same land parcel, the first is located to the north of the subject site on which early site works have commenced. The solar farm that is the subject of this application will be linked to the approved one via internal access roads.

The development works consist of the placement of photovoltaic panels onto a tracking system that is fixed to pile driven galvanised support posts. The panel arrays are arranged in a linear pattern extending to a maximum of 88.7 metres in length. The height of each panel installation will be up to 2.8 metres depending on the angle of the tracker, again the distance between each will vary depending on the tracker position but the posts will be up to 6 metres apart.

Earthworks are proposed to accommodate the linear infrastructure which requires the slope of the land to be more uniform in profile. Proposed cut and fill across the site will be no greater than 1.5 metres and no additional fill or loss of material is anticipated, i.e. the earthworks are balanced across the development site.

The panels are connected via a DC collection system consisting of cables mounted on the module support structure, inverters convert the DC current to AC current and transformers increase the voltage into grid compatible energy. There are 12 inverters across five inverter stations throughout the site which are stand alone structures similar in size to a shipping container. The AC cabling is contained in trenches of approximately 1 metre in depth, this will connect to the substation within the approved solar farm to the north of the site.

Landscaping is proposed to the development in the form of a 10 metres wide native screen planting corridor to the southern boundary, 10 metres wide native revegetation corridors to the eastern and western boundaries and supplementary planting within the corridors of existing trees where gaps exist. Compensatory planting is proposed at a ratio of 10 new trees for every tree removed at pre development stage.

It is proposed to clear 14 trees to allow for the installation of the panels. Of the 14 trees 11 are hollow bearing trees which will be retained on site in a suitable location. Eight of the trees are isolated and 6 are within patches of remnant vegetation covering an area of 0.46ha.

Access to the solar farm will be from East Bomen Road using the approved access driveway and internal roads associated with the approved solar development at the north of the site. The solar farm will not be accessed from Windmill Road.

The proposed solar farm will feed into the new substation on the northern site under legal agreement and would also utilise the operational and maintenance buildings on the northern site. Chainwire perimeter fencing up to 2.4 metres in height is proposed to the boundary of the solar farm. Landscaping will be on the outside of the fence.

The construction stage for the development will be approximately 12 months and the estimated life span for the facility is 30 years. After the thirty years a decision would be made to either upgrade or decommission the facility. Decommissioning would result in the land being returned to primary production purposes by the removal of all infrastructure associated with the development. Construction of this solar farm is not anticipated to overlap with construction of the first solar farm on this land parcel.

The proposed development is classified as Integrated Development and requires the following two approvals: Controlled Activity Approval under Section 91 of the *Water Management Act 2000* in relation to works on waterfront land and an Aboriginal Heritage Impact Permit (AHIP) under s90 of the *National Parks and Wildlife Act 1974*. The panels are proposed to be installed within proximity of a watercourse and therefore require an activity approval and the works will harm identified Aboriginal objects and therefore require an AHIP.

SITE AND LOCALITY

The subject site is legally identified as Lot 15 DP1108978 and is known as 157 Windmill Road. The site is located at the south-western corner of the junction of Windmill Road and East Bomen Road and extends to an area of 269ha. The part of the site that is covered by the subject application extends to an area of 55ha, towards the south-western corner of the lot.

The northern section of the same site has an existing development consent for a 30 mega-watt solar farm extending to an area of 70ha. This application (DA17/0679) was approved by the LEC in Jan 2019 having previously been refused by the SRPP. Site works have commenced on site in relation to this approved development.

There is an existing dwelling on the site that is located towards the south of the proposed solar farm, the dwelling is accessed via a driveway from Windmill Road. Neither the dwelling or the driveway are included in the development footprint. The site is largely cleared and currently used for grazing purposes. There are scattered trees across the site as well as corridors of planted trees.



The subject site has frontage to both East Bomen Road and Windmill Road, the site slopes away from the road in an undulating nature. Whilst the approved solar farm is all visible from East Bomen Road the proposal that is subject to this application is predominantly screened due to the slope of the land that rises approximately 40 metres from east to west. There are overhead transmission lines traversing the site.

Adjoining and neighbouring land uses are generally rural in nature. There are two residential properties that adjoin the subject site to the north east of the proposed installation that front onto Windmill Road. Residential properties are also located on the opposite side of East Bomen Road to the north, on Bavin Road to the south and further to the east on Pattersons Road, Dunns Road and Oura Road. An existing electricity sub-station adjoins the site to the west and Riverina Water infrastructure is contained within the site boundaries on a separate lot. The Bomen Industrial area is to the north west of the site. The recently constructed Bomen Solar Farm is approximately 1km to the north of East Bomen Road and is visible from the subject site.

Easements and Covenants

There are a number of existing easements on the site as follows:-

- ☐ 20 metre wide easement for transmission lines
- ☐ 30 metre wide easement for overhead lines
- ☐ 45 metre easement for transmission lines
- ☐ 5m and 10m wide easements for water supply

The development does not encroach into any of the identified easements.

Previous Development Consents

DA07/0601 - Rural Dwelling. Approved 2.6.08.

DA06/0350 - Proposed Rural Subdivision (3 lots) and Dwelling permit. Approved 15.6.06.

DA17/0679 - Electricity Generating Works (Solar Farm). Approved 10 Jan 2019 on appeal.

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

The following matters pursuant to the provisions of Section 4.15(1) of the *Environmental Planning and Assessment Act 1979*, have been taken into consideration.

Section 4.15(1)(a)(i) - The provisions of any environmental planning instrument (EPI)

Wagga Wagga Local Environmental Plan 2010

2.3 Zone objectives and Land Use Table

Under the provisions of the Wagga Wagga Local Environmental Plan, the subject site is zoned as RU1, Primary Production.

The objectives of the RU1, Primary Zone are:

- ☐ To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.

The land is zoned for rural use and the agricultural land class of this part of the site is 3. Class 3 land is summarised as being grazing land or land well suited to pasture improvement. The overall production level is classed as moderate because of soil conditions or environmental constraints.

The site is currently being used for grazing and whilst the development will not encourage sustainable primary industry production on the site, the development will not impact significantly on the natural resource base or the existing agricultural potential of the site. There is scope for grazing to continue on the land and across parts of the subject site that are not developed for the solar farm.

- ☐ *To encourage diversity in primary industry enterprises and systems appropriate for the area.*

The proposed development is for a non-rural use which will not encourage diversity of primary industry enterprises or systems for the locality. However the use of the land for a solar farm is diversification into an alternative land use that is considered suitable within the rural zone and consistent with recently approved developments in the locality.

- ☐ *To minimise the fragmentation and alienation of resource lands.*

The proposed development does not result in the fragmentation of land but will minimise the ability for the land to be used for agriculture. The value of current resources on the land for agricultural purpose is not considered to be significant as the land parcel is not being subdivided and the intention is to return the land to agricultural use in 25-30 years.

- ☐ *To minimise conflict between land uses within this zone and land uses within adjoining zones.*

The proposed development has the potential to conflict with other land uses in terms of visual and environmental impacts. The potential impacts of the development and proposed mitigation methods are discussed in more detail later in this report. The suitability of the use being located away from densely populated areas and upon an area of open rural land is considered appropriate. If the facility is managed and operated in an appropriate manner the impacts on existing land uses in the locality can be mitigated to a suitable and acceptable level.

- ☐ *To foster strong, sustainable rural community lifestyles.*

Rural communities are characterised by a diverse culture with different perceptions and expectations of the rural landscape. It is the differences in people's perceptions and expectations that lie at the root of most amenity conflicts and these vary significantly within rural communities and between different communities. Apart from agriculture, there are many other land uses that are allowed in a rural setting which can cause conflict, but at the same time also contribute to a sustainable rural lifestyle, including quarries and rural industrial activities.

Consideration of the effect of the proposed development on the lifestyle of the local community has been undertaken, and it is considered that the proposed development has the potential to have an impact on the amenity of the existing landscape. However, there are also positive impacts associated with the proposed development such as contributing towards energy efficiency and renewable energy targets.

- *To maintain the rural landscape character of the land.*

The proposed development will change the existing character of the rural landscape by the introduction of a significant array of solar panels. The existing character of sloping, open land will take on a different appearance through the introduction of the solar farm. The development will be sited adjacent to a previously approved solar farm on the northern section of the same site, in addition the site is approximately 1km to the south of the state approved Bomen solar farm that has recently been constructed and parts of which are visible from the subject site. The rural landscape to the north and north west is already affected by the proximity of the industrial precinct around Bomen and when viewed in the context of this industrial area and existing solar installations the overall impact on landscape character is one that is considered acceptable. The rural landscape to the south and east of the site includes undulating land with various type of agricultural use as well as the floodplains adjacent to the Murrumbidgee River. The character of this adjoining area of rural land is maintained. The proposed planting of vegetation to the site boundaries assists in maintaining the rural landscape by screening the panels from certain views. It is acknowledged that vegetation will not completely screen the solar farm but will assist in the softening of the development site.

- *To allow tourist and visitor accommodation only where it is in association with agricultural activities.*

The development does not propose any tourist and visitor accommodation.

The RU1 zone objectives provide for agricultural and other land uses to co-exist. The zone purpose and provisions support the continuation and growth of farming but also provide the opportunity for non-farming uses to be considered in appropriate locations. A wider range of uses may be considered in this zone due to the availability of larger land parcels, the proximity to the industrial area and its locality further away from more sensitive receivers including densely populated areas. Other non-rural uses that are identified as being consistent and permitted within the RU1 zone include extractive industries, hardware and building supplies and timber yards.

The project lifespan for the facility is approximately 30 years after which the facility may be upgraded with new technology or will be decommissioned and the land made available for another land use consistent with the rural zoning of the land.

The installation of the solar farm would not inhibit the future potential of the land to be developed for rural purposes in accordance with the zone objectives. The LEP does not prohibit this type of development and the investment into the alternative energy supplies is consistent with the NSW *Government Net Zero Plan: Stage 1 2020-2030* and the Riverina Murray Regional Plan. The Regional Plan lists renewable energy as a priority growth sector and has a listed direction within the plan to “*promote the diversification of energy supplies through renewable energy generation.*”

Part 2 Permitted or prohibited development

Electricity generating works are defined in the WWLEP as follows:

a building or place used for the purpose of making or generating electricity.

The use is permitted with consent in the RU1 zone being “any other development not specified in item 2 or 4” of the land use table.

Part 3 Exempt & Complying Development

The proposed development is not Exempt or Complying Development. The application is seeking consent.

Part 4 Principal development standards

There are no principal development standards applicable to this application.

Part 5 Miscellaneous Provisions

5.10 Heritage conservation

The applicable objectives of this clause are :

- (a) *to conserve the environmental heritage of Wagga Wagga,*
- (c) *to conserve archaeological sites,*
- (d) *to conserve Aboriginal objects and Aboriginal places of heritage significance.*

Development consent is required for:

- (a) *demolishing or moving*
 - (ii) *an Aboriginal object,*
- (c) *disturbing or excavating an archaeological site while knowing, or having reasonable cause to suspect, that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed,*
- (d) *disturbing or excavating an Aboriginal place of heritage significance,*
- (e) *erecting a building on land:*
 - (ii) *on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance,*

The proposed development will impact Aboriginal heritage sites and therefore requires approval. An Aboriginal Cultural Heritage Assessment has been prepared in accordance with the applicable guidelines and regulations.

(8) The consent authority must, before granting consent under this clause to the carrying out of development in an Aboriginal place of heritage significance, consider the effect of the proposed development on the heritage significance of the place and any Aboriginal object known or reasonably likely to be located at the place by means of an adequate investigation and assessment.

Six areas of *Potential Archaeological Deposits* (PADs) were identified for excavation testing across the subject site. A total of 49 test pits were excavated, with thirty four stone artefacts recovered from 19 of those pits. A total of 13 stone artefact sites were identified during this assessment, of which seven are situated within the development area and would be impacted by the proposed solar farm. These sites include four artefact scatters and three isolated artefacts. A further four artefact sites will be partially impacted by the development with two sites not impacted by the proposal.

In broad terms, the archaeological material located during this investigation is similar to what has been found previously within the region, comprising of isolated finds and low-density artefact scatters dominated by quartz lithology. The result of this Aboriginal heritage assessment supports the proposed model of site location and site distribution, whereby objects and sites could be expected to occur across all landscapes and in particular in close proximity to a water source, even in areas of highly disturbed farming activities.

The impact to the sites with stone artefacts is likely to be most extensive where earthworks occur, such as the installation of cabling, which may involve the removal, breakage or displacement of artefacts. This is considered a direct impact on the sites and the Aboriginal objects by the development in its present form. GTAs have been issued for the proposed works and subject to the approval of an Aboriginal Heritage Impact Permit (AHIP) it is proposed to salvage the artefacts and move them to a safe area within the property that will not be subject to any ground disturbance. The new locations will be recorded on the AHIMS database. This will be secured by condition.

The significance of Aboriginal archaeological sites is based upon an assessment of values. Feedback about the cultural value of the sites while in the field with representatives was that all sites hold cultural value to the Aboriginal community. It was the view of the community representatives that the stone artefacts should be collected before any development occurs and be placed in a safe location to avoid future disturbance. Furthermore, it was noted that this area of Bomen, covering land outside of the current assessment area, holds high significance to the community as the locations of the Bomen Axe Quarry and the Bomen Lagoon. The scientific value of the sites located across the subject site however is considered to be low as the potential for further research is limited. The aesthetic value is also limited due to the modified and heavily disturbed landscape within the solar farm development area. There are no known historic values specifically relating to the proposal area.

The impact on the heritage significance of the place and Aboriginal objects has been considered in accordance with this clause. The ACHA found that the archaeological values of the site within the development footprint, considering the scientific, representative and rarity values assigned to them was deemed to be low. Furthermore the assessment of harm overall for the project based on the small areas of disturbance was assessed as low to moderate. It is believed therefore that the proposed impacts to the stone artefact sites through the development of this particular solar farm proposal would not adversely affect the broader archaeological record for the local Bomen area or the wider Wagga Wagga region.

A series of recommendations are made within the ACHA to ensure that the artefacts are protected. The recommendations include making an application to Heritage NSW (previously the Department of Planning, Industry and Environment (DPIE)) to receive an Aboriginal Heritage Impact Permit (AHIP) which will be secured by condition. Additional recommendations including to salvage and relocate the artefacts will also be secured by conditions of consent.

Part 6 Urban release areas

The subject site is not within the Bomen urban release area. Land to the north and north-west of the subject site is within the urban release area and is zoned for industrial purposes. The siting of a solar farm in the subject location is not anticipated to impact on the objectives for development within the Bomen area.

Part 7 Additional Local Provisions

7.1A Earthworks

(1) The objectives of this clause are as follows:

(a) to ensure that earthworks for which development consent is required will not have a detrimental impact on environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land,

(b) to allow earthworks of a minor nature without requiring separate development consent.

(3) Before granting development consent for earthworks, the consent authority must consider the following matters-

- (a) the likely disruption of, or any detrimental effect on, existing drainage patterns and soil stability in the locality,*
- (b) the effect of the proposed development on the likely future use or redevelopment of the land,*
- (c) the quality of the fill or the soil to be excavated, or both,*
- (d) the effect of the proposed development on the existing and likely amenity of adjoining properties,*
- (e) the source of any fill material and the destination of any excavated material,*
- (f) the likelihood of disturbing relics,*
- (g) the proximity to and potential for adverse impacts on any watercourse, drinking water catchment or environmentally sensitive area.*

In order to prepare the site to accommodate the 88.7 metre long strings, some earthworks are required to ensure the slope beneath the trackers does not exceed 8.5 degrees (14% slope). Panel arrays are arranged to make the best use of the uniform sections of the site. The proposed earthworks have been designed to ensure that the overall cut and fill required does not exceed more than 1.5 metres (with the majority less than 1 metre) and that no off-site disposal or transport of fill from offsite is required (ie, an earthworks balance is achieved).

The hydraulic impact assessment prepared to consider the impacts of the development found there to be no adverse impacts to drainage patterns. The development includes decommissioning of the solar farm and as such does not prevent the future use of the land for a variety of uses including agriculture. There will be no importation of fill to the site and there is not anticipated to be any fill leaving the site, the use of material will be balanced with the proposed earthworks and is suitable for this purpose. The development will impact the amenity of neighbouring properties predominantly this would be a visual impact. Given the existing topography, the location of the panels and both existing and proposed vegetation the visual impact and subsequent impact on residential amenity is not significantly adversely affected by the earthworks. Aboriginal objects will be impacted by the development as noted earlier in the report. The identification, salvage and relocation of artefacts has been proposed and will be the subject of an AHIP. The development is in proximity to a watercourse, the earthworks are the subject of an approval from Natural Resource Access Regulator (NRAR) and GTAs have been issued for the works.

In considering the required matters listed under this clause the proposed earthworks are an ancillary part of the solar farm installation. During site works sediment and erosion control measures will be installed across the site to ensure no adverse effects to neighbouring properties occur.

7.2 Flood Planning

The south eastern corner of the subject site is identified as prone to flooding. This part of the site is not impacted in any way by the development. The proposed solar farm is not anticipated to contribute to or be affected by any flooding to this part of the site that fronts onto Windmill Road to the east.

Hydrologic modelling was undertaken using specific runoff software to provide a preliminary estimate of the peak discharges from the proposed solar farm. Although the solar panels are 100% impermeable the ground underneath the solar panels will remain as grassland. Any rainwater falling onto the panels will drain freely onto the underlying ground which remains permeable.

Due to the minimal increase in impervious areas from the development negligible change in peak flow rates was predicted from the hydrologic modelling. A detailed hydraulic assessment was undertaken to consider the impacts from these minor changes in the hydrologic flows together with increased roughness across the development area represented by approximately 1 tracker post per 30 m². Based on the detailed hydraulic assessment, a reduction of peak flow rates from the site was predicted. Notwithstanding the findings of this report a detailed stormwater management plan will be required and will include any required on-site detention systems and supporting calculations. This will be secured by condition.

2D flood mapping has been conducted for peak flood level, velocity, depth and flood level impact across the range of ARI events for both the pre and post development scenarios. The modelling identified a slight change in the behaviour of the flooding across the site. This has reduced the flooding near the existing farm buildings and caused slight impacts in the paddocks south of the proposed works. These impacts are contained within the property boundary and do not impact surrounding premises and infrastructure.

7.6 Environmentally Sensitive Land Groundwater

A small part of the subject site is covered by the groundwater layer and as such this clause is applicable. The layer covers the south-eastern corner of the site, that is not affected by the proposed solar farm development. The development is not one of the land uses listed as applicable to this control.

Accordingly the objectives of this clause are deemed to have been satisfied.

7.9 Primacy of Zone B3 Commercial Core

Clause 7.9 states that development consent must not be granted to development on any land unless the consent authority is satisfied that the development maintains the primacy of Zone B3 Commercial Core as the principal business, office and retail hub of Wagga Wagga. The development is for a solar farm in a rural zone and will not detract from the ongoing primacy of the CBD.

There are no other relevant additional local provisions.

State Environmental Planning Policies

State Environmental Planning Policy (Infrastructure) 2007

By virtue of Clause 34 of Division 4 of Part 3 of the SEPP development for the purpose of electricity generating works is permitted with consent on any land in a prescribed rural, industrial or special use zone, by any person. The RU1 zone is a prescribed rural zone.

As the SEPP is a State document the legislation within it overrides any legislation within a Local Environmental Plan with which it may conflict. The solar farm is permitted with consent under both the SEPP and the WWLEP 2010.

Clause 45 of the SEPP relates to the determination of a development application which has the potential to affect an electricity transmission line. Before determining a development application which meets the relevant criteria provided by Clause 45, the consent authority must first notify the relevant electricity supply authority and give consideration to any comments made by this authority within 21 days of the notice.

There is a Transgrid sub-station and associated infrastructure directly adjacent to the site on the south-western boundary and various transmission line easements running across the site to the sub-station.

No formal response from either Transgrid or Essential Energy has been received within the legislated 21 day period or at the time of the writing of this report. Standard conditions of consent that reference works within the proximity of overhead transmission lines and electricity infrastructure are recommended.

The required consultation has occurred in accordance with the SEPP. There are no other aspects of SEPP Infrastructure relevant to this development.

State Environmental Planning Policy No 55-Remediation of Land (SEPP 55)

Clause 7 of SEPP 55 states that:

(1) A consent authority must not consent to the carrying out of any development on land unless:

- (a) it has considered whether the land is contaminated, and*
- (b) if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and*
- (c) if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.*

The subject site is within a rural area and it is not identified as potentially contaminated land on Council's mapping system. Whilst agriculture is listed as a land use that has the potential to lead to contamination the historical agricultural practices on site have been grazing and arable cultivation. There is no evidence on site of contamination and the land is considered to be in a suitable state for a solar farm. It is not considered necessary to request any investigation reports on the subject site prior to determination of the application.

State Environmental Planning Policy (State and Regional Development) 2011

Under Section 4.5(b) of the Act a regional planning panel is identified as the consent authority for development of a kind that is declared by an environmental planning instrument as regionally significant development.

Development specified in Schedule 7 of the SEPP is declared to be regionally significant development for the purposes of the Act and includes (of relevance to this application):-

Private infrastructure and community facilities over \$5 million

Development that has a capital investment value of more than \$5 million for any of the following purposes- (a) electricity generating works,

Due to the value of the proposed development exceeding \$5 million (\$26.8 million), it is declared regionally significant development and has been referred to the regional planning panel for determination.

State Environmental Planning Policy (Activation Precincts) 2020

The Activation Precincts SEPP facilitates a new planning framework for Special Activation Precincts (SAPs) in regional NSW, streamlining planning processes and guiding the delivery of the Precincts. The subject site is within the area that has been identified as the Wagga Wagga SAP.

The Activation Precincts SEPP requires a Master Plan and Delivery Plan for each stage of development to be prepared, prior to development commencing, as well as the introduction of a new strategic merit assessment step that requires an Activation Precinct Certificate to be obtained from the Regional Growth NSW Development Corporation ahead of any application for development. The requirements will ensure development is consistent with the vision and staging for the Precincts, and consistent with the planning controls.

Each SAP will be included in the Activation Precinct SEPP as its own Schedule. The Wagga Wagga SAP is not yet included as a schedule and no masterplan or delivery plan has yet been exhibited.

Therefore, there are no parts of the SEPP that apply to the assessment or determination of the application.

Section 4.15(1)(a)(ii) - The provisions of any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved)

No relevant planning instrument under this clause is currently the subject of public exhibition or comment.

Section 4.15(1)(a)(iii) - The provisions of any development control plan

Wagga Wagga Development Control Plan 2010 (DCP)

The proposed development complies with the development standards of the Wagga Wagga Development Control Plan 2010 as follows:

Section 1 - General

1.10 Notification of Development Application

Pursuant to this provision, notification and advertising of the application are required. Notification was conducted to properties surrounding the development and two advertisements were placed on the subject site and in the local newspaper.

The application was notified and advertised between 9 March and 8 April 2020, 22 submissions were received during the notification period, all of the submissions received were in objection to the development.

Referral to the two integrated approval bodies (DPIE and NRAR) also occurred and copies of all submissions were provided to the approval bodies in accordance with legislation.

The objections are discussed in detail later in this report under s4.15(1)(d).

Section 2 - Controls that Apply to All Development

2.1 Vehicle access and movements

C1 Access should be from an alternative secondary frontage or other non-arterial road where possible.

The site has frontage to both East Bomen Road and Windmill Road. It is proposed to access the solar farm from East Bomen Road which is a non-arterial road. This access point has already been approved as part of the adjoining solar development directly to the north. No new access points are required to serve the subject development. The internal access roads constructed in association with the solar farm on the northern portion of the subject site will be used to access the southern solar farm that is the subject of this application.

The existing dwelling on the site will maintain access from the driveway off Windmill Road.

C2 A Traffic Impact Study may be required where adverse local traffic impacts may result from the development. The traffic impact study is to include the suitability of the proposal in terms of the design and location of the proposed access, and the likely nature, volume or frequency of traffic to be generated by the development.

A traffic impact assessment was not required for this development. Other than during construction the number of vehicles travelling to and from the solar farm will be minimal. Details of the vehicle movements during construction will be included as part of the Construction Management Plan. A condition of consent will limit the movement of construction vehicles along East Bomen Road from Byrnes Road and/or Merino Road only.

C3 Vehicles are to enter and leave in a forward direction unless it can be demonstrated that site conditions prevent it.

The site is large enough and has sufficient manoeuvring capacity that allows for any vehicles to enter and leave the site in a forward direction. The access point from East Bomen Road is to be constructed as part of the approved solar farm located to the north of the subject site. The access roads between the rows of solar panels are 4 metres wide with turning areas also to be provided across the site.

C4 Provide adequate areas for loading and unloading of goods on site. The loading space and facilities are to be appropriate to the scale of development.

After the installation of the solar farm is complete the development is not one that will require any significant loading and unloading of goods. Any maintenance vehicles can enter and access the site easily with any required materials or infrastructure.

C5 Access driveways are to be located in accordance with the relevant Australian Standard at the time of lodgement of an application.

The site will be accessed via the new access driveway that is to be constructed in association with the approved solar farm to the northern part of this site. The access driveway is located at a point 390 metres to the east of the western site boundary and is afforded good visibility and sight lines in both directions.

C6 Ensure adequate sight lines for proposed driveways.

Sightlines in and out of the site onto East Bomen Road are satisfactory.

2.2 Off-street parking

This section requires developments to provide off-street parking to meet anticipated demands.

The DCP outlines minimum parking standards for different identified land uses. There are no adopted standards for a solar farm.

Traffic generation associated with the ongoing operation of the solar farm is considered to be negligible as it would be for maintenance purposes only. There are no permanent staff members on site and therefore there is no requirement for any off street parking to be provided. There is an informal area for parking identified adjacent to the operations and maintenance building that is sited within the approved solar farm to the north.

Sufficient access-ways between the blocks of panels allow for vehicle access if required.

2.3 Landscaping

Landscaping is proposed to the site and includes native revegetation in the form of 10 metre wide corridors to the eastern and western site boundaries, native screen planting to the southern corridor and supplementary planting within existing corridors. Compensatory planting is proposed at a ratio of 10 trees to one for the 14 trees proposed to be cleared.

A mix of native trees and shrubs have been selected to provide a maximum screening effect. The plants have been selected to form an effective visual screen in the short term. Equally some of the species will disperse seed and new plants will regenerate so that a self-sustaining vegetation screen is maintained in the long term. Trees and shrubs will be staggered and established in three off set rows to maximise the screening effect of the proposed planting.

Revegetation areas will include a mix of locally native trees and shrubs including species to provide habitat for native wildlife. This mix of trees will create a framework for natural regeneration. The set out will intermix trees and shrubs in an informal layout. Larger trees are to be setback from the solar farm fence. Any felled limbs with hollows and bush rock encountered during construction will be scattered sparsely within the native revegetation areas to provide habitat for ground dwelling fauna.

Where gaps exist in the existing planted areas, supplementary native tree and shrub planting is proposed. This supplementary planting would be a mix of native trees and shrubs. Additional plants will be installed where there is a 5x5 metre gap in the canopy of existing planted areas and where a visual break is apparent. New plants are to achieve an overall ratio of 80% shrubs and 20% trees.

A landscape strategy has been prepared that includes the basis of plant selection, set-out details, planting methods and implementation as well as maintenance and establishment periods. A recommended condition of consent will require the preparation of a detailed landscape plan that incorporates the content of the strategy.

It is acknowledged that the site will undergo visual changes because of the physical works required in establishing the solar farm and the subsequent visibility of the installation. The proposed landscaping will not and is not proposed to completely screen the development but will assist in softening and screening the solar farm when viewed from the surrounding locality.

2.4 Signage

No signage requiring consent is proposed as part of this application.

2.5 Safety and Security

The site will be secured by a 2.4 metres high perimeter fence around the area that is to be developed with a secure entry gate to East Bomen Road. The fence will be placed behind a 10 metres wide landscape buffer which will reduce the impact of the new, required fence in the rural landscape.

The site would be largely passive with minimal on-going operational works necessary. The site would be monitored from a security perspective via regular site visits and maintenance undertaken as required.

The ongoing use of the solar farm will be managed via an Operational Management Plan that will include site safety and security measures. The development is not anticipated to create a crime risk and appropriate security measures have been addressed.

2.6 Erosion and Sediment Control Principles

Site works associated with the development will include cut and fill earthworks, landscaping works and access driveways.

A Construction Management Plan is required to ensure that the on-site operations are carried out in accordance with approved details relating to the protection of waterways, sediment and erosion control and dust mitigation. This will be secured by condition.

2.7 Development adjoining open space

The development does not adjoin land that is zoned as public open space.

Section 3 - Heritage Conservation

The site is not within the heritage conservation area.

As noted under the LEP section the site is within an area of known Aboriginal objects and an Aboriginal Cultural Heritage Assessment (ACHA) has been prepared in support of the development application.

The ACHA found that the archaeological values of the site within the development footprint, considering the scientific, representative and rarity values assigned to them were deemed to be low. Furthermore the assessment of harm overall for the project based on the small areas of disturbance was assessed as low to moderate. The proposed impacts to the stone artefact sites through the development of this particular solar farm proposal would not adversely affect the broader archaeological record for the local Bomen area or the wider Wagga Wagga region.

As the development will result in harm to objects it will be necessary for the applicants to obtain an Aboriginal Heritage Impact Permit (AHIP) prior to any works commencing. DPIE (BCD) have issued GTAs for the development as proposed.

Section 4 - Environmental Hazard and Management

4.1 Flooding

A small part of the subject site is identified as prone to riverine flooding. This part of the site is not affected by the solar farm development in any way and therefore flood controls in this

section of the DCP are not applicable to this development. A summary of the findings of the hydraulic assessment have been included under section 7.2 of the LEP section of this report.

4.2 Bushfire

The land is not mapped as bushfire prone land, therefore this section does not apply.

Planning for Bushfire Protection 2019 applies to land that is zoned as bushfire prone and also to any development that is potentially exposed to a bush fire threat. This threat is subsequently assessed as part of the impacts under the Act and this is therefore addressed later in this report.

Section 5 - Natural Resources and Landscape Management

The objectives and controls within this section of the DCP relate to the management of trees in urban areas and rural residential areas. Furthermore, this section includes controls related to new native vegetation plantings associated with new subdivisions.

The subject site is zoned as RU1 and the application proposes the removal of trees and ground vegetation from the site. A biodiversity assessment was completed and submitted in support of the development and the findings of this are discussed in greater detail within the impacts section of this report.

As mentioned under part 7 of the LEP a part of the site is identified as groundwater on the Water Resources Map. The impacts have been assessed as acceptable.

Section 6 - Villages

The proposal is for a solar farm in the rural zone. Section 6 is not applicable to this development.

Section 7 - Subdivision

The proposal is for a solar farm in the rural zone and does not include any subdivision. Section 7 is not applicable to this development.

Section 8 Rural Development.

8.1 Development in rural areas

The following controls apply to developments in rural areas:-

C1 Uses are to be compatible with the character of the locality in terms of buildings, structures and the nature of operations.

Solar installations of this scale (and much larger) are being developed across the state predominantly in rural locations where there is access to large areas of land close to transmission infrastructure. The demand for sustainable energy has seen this type of development competing with more traditional agricultural land uses and landscapes.

The local landscape will be impacted visually but within the context of a location that is close to an industrial area, other approved solar farms and existing electricity infrastructure. The use is one that can be considered as compatible and acceptable in this location.

- C2 Provide adequate buffer areas and setbacks to minimise potential conflicts with adjoining lawful land uses. Where there is potential for a conflict between land uses, priority will be given to the existing productive use.*

The solar farm will be developed across existing agricultural land that has the potential to cause impact on neighbouring residential properties. The closest dwellings are within approximately 300 metres of the proposed installation. The proposal includes 10 metre wide landscape buffers of native revegetation to soften and screen the installation to neighbouring properties.

The topography of the land together with the distance from which residential properties will view the panels assists in there being minimal conflict.

- C3 Use landscaping and other screening options to help integrate new uses and developments into the rural landscape.*

The proposed development will change the existing character of the rural landscape by the introduction of a significant array of solar panels. The existing character of gently sloping, open land will remain but will take on a different appearance through the introduction of the solar farm which will be visible from many different locations and from existing properties across the locality.

The proposed landscape buffers together with the topography of the land will assist in integrating the solar farm into the rural landscape. It is acknowledged that the proposed and existing vegetation will not be able to completely screen the solar farm but it will assist in the softening of the development site.

A detailed visual assessment has been prepared and is discussed in greater detail within the impacts section of this report. The assessment concluded that overall the impacts are deemed to be acceptable.

- C4 Uses must be capable of operating within capacities of available existing services.*

The proposed development will generate electricity and be connected to existing infrastructure on an adjacent land parcel.

- C5 Provide adequate facilities for additional traffic in terms of vehicle access and movements, parking areas, and loading and unloading of goods.*

The development will not generate any significant traffic movements to and from the site once it is operational. Access to and from the site will be taken via the solar farm to the northern part of the site and parking would also occur within this area adjacent to the maintenance building that will be used for both sites. Vehicle access movements and parking arrangements during construction will be detailed and secured within the Construction Management Plan.

- C6 In the case of larger projects Council may require the applicant to demonstrate that the roads in the locality are of satisfactory construction and condition to accommodate the size, weight and volume of vehicles that could be generated by the use, and that the local traffic conditions are suitable.*

As noted above there are no permanent staff members and there will be no public access to the site. Arrangements regarding deliveries and the manoeuvring of large plant and/or infrastructure to and from the site will be secured within the Construction Management Plan.

- C7 Provide satisfactory arrangements for storage and disposal of waste.*

The Construction Management Plan is required to include details regarding waste management during works as well as appropriate disposal details.

Section 9 - Residential Development

The proposal is for a solar farm in the rural zone. Section 9 is not applicable to this development.

Section 10 - Business Development

The proposal is for a solar farm in the rural zone. Section 10 is not applicable to this development.

Section 11 - Industrial Development

The proposal is for a solar farm in the rural zone. Section 11 is not applicable to this development.

Section 12 - Specific Uses and Developments

The proposal is for a solar farm in the rural zone. There are no specific use or development controls applicable to this development.

Section 13 - Bomen Urban Release Area

The development is not within the Bomen urban release area but the subject site does have an adjoining boundary to the urban release area to the west and is within approximately 200 metres to the north. The proximity of the subject site to land that is within the urban release area impacts the context and character of the area as discussed earlier in the report.

Section 14 - Boorooma Urban Release Area

The proposal site is not within the Boorooma urban release area. Section 14 is not applicable to this development.

Section 15 - Lloyd Urban Release Area

The development is not within the Lloyd urban release area. Section 15 is not applicable to this development.

Section 16 - Gobbagombalin Urban Release Area

The development is not within the Gobbagombalin urban release area. Section 16 is not applicable to this development.

Section 4.15(1)(a)(iiia) - any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4.

There are no planning agreements in place for this proposal.

Section 4.15(1)(a)(iv) - any matters prescribed by the regulations

Matters prescribed by the *Environmental Planning and Assessment Regulation 2000* have been satisfied.

Section 4.15(1 (b) The likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,**Context and setting**

The site is located within a rural area with the predominant surrounding land uses being agricultural in nature. There are residential properties to the south and east of the subject site fronting both Bavin Road and Windmill Road respectively as well as properties further to the east on Pattersons Road, Dunns Road and Oura Road and to the north on East Bomen Road. These properties include a mix of built form with small clusters of farm buildings and homesteads accessed by gravel and sealed roads.

To the north west of the subject site is the Bomen Industrial area consisting of both established industrial land uses and vacant land zoned for future industrial investment. The context of this area is dominated by large sheds, a mix of general industrial uses and heavy vehicle activity. Directly to the west of the site is a substation with associated transmission lines and infrastructure.

Directly to the north of the subject site, within the same property boundary is the approved 30MW solar farm that fronts East Bomen Road. A further 1km to the north is the recently constructed Bomen Solar Farm a state significant development approved by the Department of Planning in 2018.

Views to and from the site are open and undulating, the development is set within the existing landscape that allows for views above and beyond the development to be maintained. The visual compatibility of the proposal with the future development of solar farms and large-scale industry, as expected in the areas zoned general industrial, would also be increased.

The use of the site as a solar farm would not lead to any ongoing impacts that would detrimentally impact on the operations of nearby properties and does not prohibit or limit future redevelopment opportunities for surrounding sites. It is considered that from a long term sense the proposal will be consistent with the character of the area and compatible with adjacent land uses in the existing context and setting.

Access, transport and traffic

Access to the site will be from East Bomen Road via a single access point that is already approved under a previous development application for land directly to the north. The entry is to be sited 390 metres to the east of the western most boundary on East Bomen Road and achieves good visibility in both directions.

Traffic generation associated with the solar farm is considered to be negligible as it would be for maintenance purposes only. Whilst there are no marked parking spaces laid out there is capacity within the proximity of the maintenance building approved as part of the stage 1 development to the north for the parking of vehicles. There are 4 metres wide access routes provided through the site allowing access to the panels for maintenance purposes. The access roads will be required to be an all-weather material but there is no requirement for sealing as they are not open to the public.

Construction is expected to be completed over a 12 month period with an expected peak period of six months. During the peak period it is anticipated that up to 100 workers will be on site daily dropping to 20 during the other six months. Employee vehicles during this time could

number up to 70 although the use of a shuttle bus is also proposed/predicted.

Heavy vehicle movements to and from the site will be via Byrnes Road and Merino Road, this detail will be contained in the required Construction Management Plan and will assist in minimising impacts to existing rural residential properties. Over the construction period a total of 450 heavy vehicles will be required to access the site including infrastructure deliveries (panels, inverters, piles etc), concrete, gravel, sand and water trucks. There could be up to a maximum of 20 heavy vehicles per day during the peak period generating 40 vehicle movements.

There is sufficient capacity on the site to accommodate a construction compound and parking for construction staff and plant, again the details of which will be secured within the Construction Management Plan.

Visual amenity and glare

A visual amenity assessment has been prepared that considers the potential visual influence of the proposal on the surrounding landscape.

Firstly, the assessment identifies a 'zone of visual influence' (ZVI) which creates a theoretical area from which the proposal may be visible. It is created using topographic data and the height of the proposal elements. It does not include the filtering effect of trees and buildings.

Secondly the assessment determines the 'visual absorption capacity' which is the ability for a landscape to accommodate change without the loss of its valued attributes. The attributes of this landscape are the undulating hills, areas of vegetation and rocky outcrops, scenic views across the rural landscape, and views to the middle-distance ridgelines to the east and west, and distant views across the Murrumbidgee River floodplain to distant ranges in the south. Scattered trees and blocks of vegetation within the fields, along field boundaries and roads, and on the ridgelines contain and break-up views to and from the site.

An assessment of the visual impact is based on sensitivity and magnitude of change where sensitivity refers to how sensitive the existing character of the setting is to the proposed nature of change and magnitude of change refers to the extent of change that would be experienced by receptors. This change can be adverse or beneficial and will be influenced by factors such as the proportion of the view which is affected and the size and scale of the change. Each of the selected views was assigned a sensitivity level and a magnitude of change level.

Photomontages were prepared to illustrate the expected changes to views as a result of the project. The viewpoints used to create these photomontages were chosen to represent a range of viewing locations, and from a distance and orientation where the project would be most visible. The photomontages prepared included both the approved solar farm to the north of this site and the one that is the subject of this application.

Based on the above assessment methodology the assessment(s) found that the overall visual impact was negligible to minor, the reasons for this conclusion include:-

- ☐ The site is well enclosed by landform and existing vegetation and as a result has a relatively low potential visibility from most areas within the potential zone of visual influence (ZVI) of the project.
- ☐ The landscape has a high visual capacity to absorb views to development of this type due to the undulating landform, existing corridors of vegetation, existing built elements

such as overhead power lines and poles, the substation and concrete water tanks in the vicinity of the site.

- ☐ The existing industrial development, which characterise areas to the north of the site, detract from the rural character of westerly views towards Bomen.
- ☐ There would be mainly negligible visual impacts from publicly accessible locations surrounding the site as the project is visually contained by landform and existing vegetation and the project would not obstruct views to the upper fields, ridgeline and rocky outcrops which are a local visual feature.
- ☐ There would be a minor adverse visual impact experienced in views from Pattersons and Oura Roads. While the project would be more visible and comprise a greater area of the view, the character of the solar farm would not contrast with the surrounding landscape.
- ☐ Intervening landform screens views from the north and south almost entirely, and northern areas of the solar farm in most views.
- ☐ The existing corridors of vegetation extending through the southern and western areas of the site would be retained on the site and would provide some localised screening. Some scattered trees would be removed from within the site, however, these trees are not prominent in views from the surrounding areas as they are located mainly on the lower slopes of the site.
- ☐ The low-profile development form, visual merging of the panel arrays into blocks, and patches of field being retained would assist in the visual integration of the project infrastructure.

The visibility of construction works would also be largely contained by intervening landform and vegetation. The earthworks and equipment required to construct the solar farm would be seen from locations to the northeast, east and southeast. During this time the site would be more visually prominent and there may be a slightly higher potential for visual impact. However, this would be a temporary and short-term impact.

Due to the nature of the solar farm, the minor adverse visual impacts identified are reversible with the decommissioning of the solar farm at the end of the project life.

An additional assessment of the visual impact upon private residential properties has also been completed in support of the development application. The views that are affected are generally across the rural landscape including foreground fields and a background of undulating hills and ridgeline. Views also include built elements such as transmission poles and wires, water tanks and other solar farms.

The extent of impact on private residences surrounding the site is mainly negligible. However, there would be negligible-minor visual impact expected on properties to the west of Pattersons Road over 2 kms from the installation. There would also be a minor-moderate visual impact on a small number of properties to the south east of the site on Oura Road. These impacts are reasonable as the panels have a low-profile and would generally follow the contours of the site. The existing vegetation would further break up the view to the blocks of panel arrays and provide some screening. Furthermore whilst there would be several groups of panel arrays visible, they are grouped into blocks with large patches of undeveloped pasture that break up the development and assist in the visual integration of the development into the surrounding

landscape.

The solar farm is located in the vicinity of other solar farms, industrial development and a substation, and has a character consistent with this transitioning area of Bomen. The addition of the proposed solar farm in the context of the other approved solar farms does not reach a threshold which would result in a cumulative visual impact that is unreasonable.

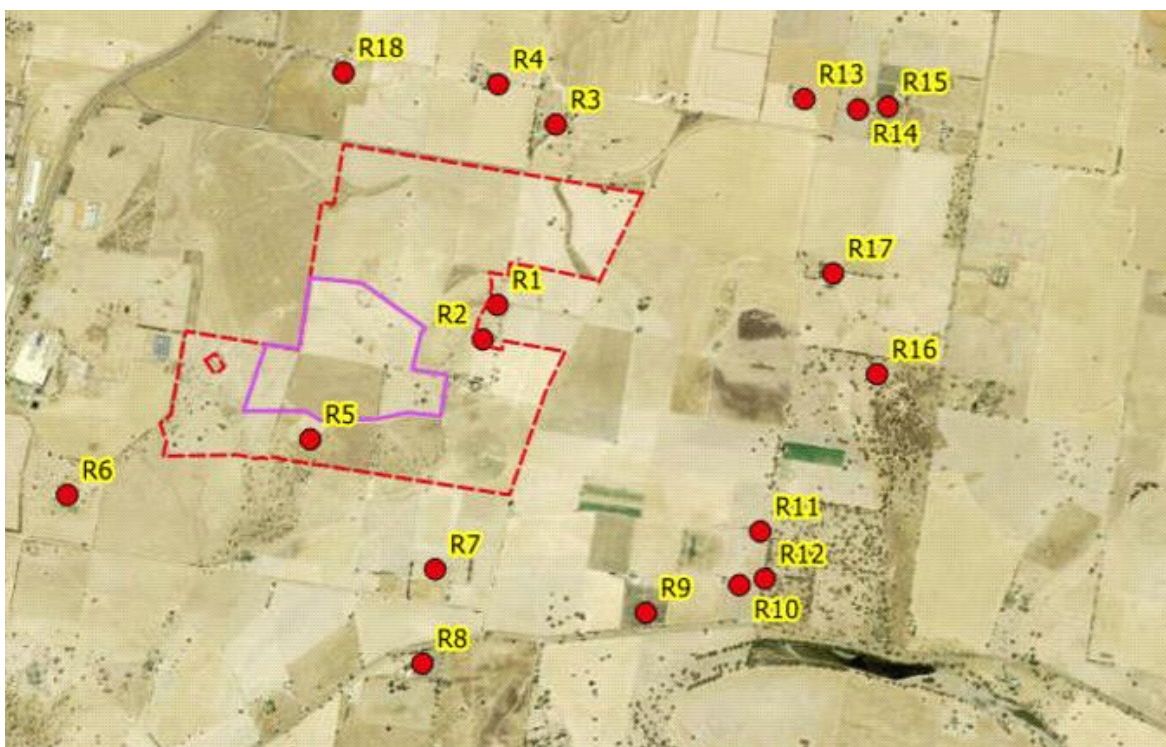
The solar farm would use a single axis tracking system, which tracks the sun for most of the day and has a lower glare risk than a fixed frame photovoltaic system. An assessment of potential glare from the solar farm has been modelled. The *GlareGauge* analysis has not identified any potential glare risk on the selected residential receptors, or locations along surrounding roads, during the operation of the project.

While there would be some risk of glare during construction, this impact would be temporary and experienced for a short period of time. Overall, this potential risk of glare would have a negligible impact on the amenity of surrounding residents. It is proposed that if there is a glare effect experienced during construction, the solar panels be stowed facing away from the receivers to minimise this temporary effect.

The glare assessments for the approved solar farms each have not identified a glare risk during operation of the project. Therefore, it is concluded that there is no cumulative glare risk during operation of the project.

Noise and vibration

A noise and vibration impact assessment has been prepared to assess the potential impacts of the construction and operation of the proposed solar farm on nearby sensitive receptors in accordance with applicable NSW policies and guidelines. The nearest residential receptors to the proposed solar farm are identified on the plan below.



The sensitive receptors include 17 existing single dwellings located within 3 km of the development. One of the dwellings is within the land parcel associated with the application and is identified as R5.

The construction of the proposed development is expected to take approximately 12 months with several different activities to be undertaken over that time. Noise during construction will be experienced from site clearing and preparation works of approximately two months, construction including piling and installation of solar infrastructure of approximately 8 months and commissioning of the solar farm over approximately two months.

In terms of noise emissions, the site preparation activities and the driving of the support posts into the ground have the most significant potential for adverse impacts. An indicative project schedule has determined these two activities may occur concurrently, therefore, the impacts associated with these two elements were assessed cumulatively.

Construction works are expected to progress across the site therefore plant and equipment would only be in a single area for a short period of time. For example, each post takes approximately 25-30 seconds to drive into the ground thereby providing the ability to install a new pile approximately every 2.5 minutes. Given this, the potential for adverse impacts at any one receptor is expected to only occur for a short period of time.

The noise modelling used to determine the impacts from noise emissions incorporated the influence of meteorology, terrain, ground type and air absorption as well as the sound power levels from the different types of equipment being used. The Interim Construction Noise Guidelines (2009) include construction noise criteria against which noise from the works should be measured. During standard construction hours the noise management level is the rating background level (RBL) +10dB(A) and outside standard hours it is (RBL) +5dB(A). In accordance with the *Noise Policy for Industry* the minimum RBL is 35dB(A) which results in a noise affected limit of 45dB(A) for construction during standard hours. For the evening and night the minimum RBL is 30dB(A) which results in a noise affected limit of 35dB(A).

For the majority of the receptors, the highest noise levels will be experienced during site works and clearing activities. The high noise levels are associated with the piling of posts, the use of a mulching machine (for packaging material) and onsite vehicle movements. A review of the predicted noise levels confirms compliance with the noise management levels provided in the Interim Construction Noise Guidelines (ICNG) for all receptors during standard construction hours. For construction outside of standard hours, the results of the modelling indicate exceedences of the noise limits could occur at the two closest properties located on Windmill Road (R1 & R2), to the north-east of the site and at one property directly to the south (R7).

Where nearby sensitive receptors are predicted to be noise affected recommended noise mitigation measures are to be implemented. For example, it is recommended that the mulching machine be sited as far away from sensitive receptors as possible and if practical be shielded by a temporary noise barrier. This and other recommendations within the report will be secured by condition.

Given the rural location and the relatively large separation distances between the development and the majority of nearby sensitive receptors, the assessment considered the potential for adverse amenity impacts associated with construction outside of standard construction hours. The report found that due to the size of the site there is potential for limited quiet construction works to be undertaken outside standard hours subject to appropriate mitigation measures. Further, given the tendency for agricultural activities to be undertaken during evening and

night periods (e.g. during harvest season etc.), construction during these periods, when undertaken concurrently with these agricultural activities is unlikely to represent a significant amenity impact for residences in the area. These conclusions from the assessment report are noted however the standard hours of construction will still be applied as a recommended condition of consent. It is anticipated that if occasional construction works are proposed outside of the standard hours specific application to Council will be made and considered on a case by case basis.

When reviewing the cumulative impacts from both solar farms, the construction stages of both projects are unknown at present, however it is expected that the preparatory works for the approved solar farm would have been completed prior to construction activities commencing on the farm that is the subject of this application. Furthermore it is not anticipated that installation activities will be concurrent. Worst case scenarios have been modelled to determine the cumulative impacts of both solar farms being constructed and installed concurrently.

A review of the predicted noise levels if preparatory site works were to occur at the same time confirms that compliance with the noise criteria will be achieved for all receptors for construction during standard hours, with the exception of R5 (the subject site), which has a noise agreement in place. If installation of both farms occurs at the same time compliance with the noise criteria is predicted to be achieved for all receptors during standard hours. As noted, the works for both solar farms are not expected to occur at the same time.

Operational noise is associated with the single axis tracking panels that will rotate throughout the day using small motors to track the suns movement and maximise the solar effect. Noise emissions from the tracking motors are expected to occur for approximately one minute out of each 15-minute period (providing for up to five degrees' rotation per hour) during day periods. An assessment of the predicted noise levels confirms that compliance with the intrusive noise criteria established in accordance with the *Noise Policy for Industry* can be achieved for all receptors for day periods under worst-case meteorological conditions. During evening and night periods where solar radiation is present (e.g. early mornings or late afternoons), the reduced load on the inverters results in a reduction in noise emissions. There are no noise mitigation measures recommended during the operation of the solar farm.

The assessment includes the predicted receptor noise levels during the operational phase of both solar farms. The report confirms that compliance with the intrusive noise criteria can be achieved for all receptors for day periods under worst-case meteorological conditions, with the exception of R5 (the subject site), which has an agreement in relation to noise from the Project.

During the construction phase high traffic volumes have the potential to result in noise disturbance. Construction is expected to be completed over a 12-month period with an expected peak period of six months during which it is anticipated that up to 100 workers would be on-site daily, dropping to 20 workers for the six-month shoulder period. For assessment purposes it is assumed that only 30% of the workers would participate in some form of carpooling. Therefore, the modelling has assumed an estimated maximum of 63 private light vehicles travelling to and from the site daily for this peak period. The delivery of infrastructure via heavy vehicle movements during the peak of the construction period is not expected to exceed 15 (i.e. generating a total of 30 heavy vehicle movements in a day).

The noise impact assessment was based on the maximum expected light and heavy vehicle movements from the site entry along the local access road (East Bomen Road) onto Byrnes Road. All vehicle movements are expected to occur during standard construction hours however, as a worst-case, it has been assumed that vehicle movements associated with

arrival of construction workers to site could occur over the one-hour period from 6 am - 7 am (i.e. during night periods). The assessment found minimal impact associated with road traffic noise given that Byrnes Road is an established 24 hour heavy vehicle route and properties along this road are set well back from the roadway. Any impacts associated with increased vehicle movements along East Bomen Road will be short term and subject to details contained in the Construction Management Plan. Noise impacts associated with vehicle movements during the operational phase of the solar farm are expected to be negligible given the small number of movements expected.

Vibration impacts associated with the site preparation and construction works have been assessed in accordance with technical guidelines (Assessing Vibration: A technical Guide [2006] DECCW). The modelling determines continuous vibration, impulsive vibration and intermittent vibration and associated amenity impacts. The predicted vibration levels indicate compliance with the criteria due to the separation distance from residences. Vibration impacts are not expected to be cumulative.

Flora and fauna

The development application proposes the removal of trees and ground vegetation from the site. A biodiversity assessment was completed and submitted with the application. The need for a biodiversity development assessment report (BDAR) is not triggered and this is discussed in greater detail below under the Biodiversity Act section.

The aims of the assessment were to firstly identify all vegetation communities and fauna habitats and determine their extent and condition and secondly to determine the potential impacts of the proposal on the identified vegetation, habitats and species.

Remnant vegetation remaining in the locality is comprised of scattered and isolated paddock trees. The native vegetation communities remaining are isolated patches of open grassy woodlands. The proposal area occurs in an undulating terrain which has been heavily cleared for agricultural purposes. Narrow linear plantings of native species occur along paddock boundaries. The proposal area has been largely cultivated.

Field surveys were carried out on site and identified a total of 40 flora species comprising 15 native and 25 exotic species. No threatened flora species were identified in the proposal area during the field survey. Based on the desk top and site evaluations no threatened flora species were considered likely to occur within the proposal area due to the high disturbance and cultivation of the proposal area.

One Plant Community Type (PCT) was identified within the proposal area, the *Blakely's Red Gum - Yellow Box grassy tall woodland* which is listed as endangered under the NSW BC Act (2016). One endangered ecological community (EEC) was identified within the proposal area and identified as the White Box Yellow Box Blakely's Red Gum Woodland (Box-Gum Woodland) listed under the BC Act. Thirty-four hollow-bearing trees occur within the proposal area. Five of these hollow-bearing trees are stags (dead trees).

No threatened fauna was detected during field surveys. This does not indicate fauna is not present or do not utilise habitat present within proposal area. The report identifies 19 fauna species, and one endangered ecological population, the squirrel glider, as having the potential to occur within the proposal area. Key fauna habitat types were identified as White Box Yellow Box Blakely's Red Gum Woodland, Mature hollow-bearing gum trees and planted native *Melaleuca* shrubs.

The proposed development would have a direct impact on vegetation communities and fauna habitat in the proposal area as a result of habitat removal and temporary disturbance to groundcover. A total of fourteen trees would be cleared comprising of eight isolated trees and six non-isolated trees within two patches of remnant EEC vegetation (total 0.46 ha). The two patches extend to 0.38 ha (including four large mature HBTs) and 0.08 ha, (including two large mature HBTs). All felled trees shall be relocated to the northern remnant vegetation patch or along the riparian zone, to retain as habitat for native fauna.

The key impacts associated with the tree removal is the impact on biodiversity. An assessment of the impacts to the different flora and fauna types found that the impacts are unlikely to be significant given the heavily cleared nature of the land, the small areas of habitat that are impacted, the presence of alternate habitats on the site and on adjoining land parcels and the retention of native vegetation on site. Notwithstanding the above conclusion that the impact is not significant an element of harm has been identified and a Biodiversity management plan (BMP) is recommended to address this harm. Actions identified in this plan are not restricted to the subject site and may include off-site plantings or habitat works. The BMP will be secured by condition.

Natural Hazards

The south-eastern corner of the site is identified as flood prone. The proposed solar farm does not encroach onto the flood affected land. A Hydraulic Impact Assessment has concluded that the proposed solar farm does not cause adverse flood impacts to neighbouring properties and infrastructure. Increased roughness due to the installation of tracker posts over the site and changes in the topography results in a reduction of peak flow rates from the site for all AEP events. No flood level increase was predicted on the neighbouring properties and infrastructure, therefore flood mitigation measures are not required.

As mentioned earlier in the report, *Planning for Bushfire Protection* 2019 (PBP) applies to land that is mapped as bushfire prone and also to any development that is potentially exposed to a bush fire threat. A bush risk threat must be considered in this case as a result of the grassland nature of the site and the potential ignition and combustion inherent with the solar farm.

The relevant section of PBP2019 is Chapter 8 that includes controls for specific types of development including solar farms and notes:-

In order to comply with PBP the following conditions must be met:

- ☐ *satisfy the aim and objectives of PBP outlined in Chapter 1;*
- ☐ *consider any issues listed for the specific purpose for the development set out in this chapter; and*
- ☐ *propose an appropriate combination of Bushfire Protection Measures.*

The aim of PBP is to provide for the protection of human life and minimise impacts on property from the threat of bush fire, while having due regard to development potential, site characteristics and protection of the environment.

The objectives are to:

- ☐ *afford buildings and their occupants protection from exposure to a bush fire;*
- ☐ *provide for a defendable space to be located around buildings;*
- ☐ *provide appropriate separation between a hazard and buildings which, in combination with*
- ☐ *other measures, prevent the likely fire spread to buildings;*

- ☐ *ensure that appropriate operational access and egress for emergency service personnel and*
- ☐ *occupants is available;*
- ☐ *provide for ongoing management and maintenance of BPMs; and*
- ☐ *ensure that utility services are adequate to meet the needs of firefighters.*

There are no buildings proposed on site and there will be no occupants. Persons visiting the site will be for maintenance purposes only and will utilise the maintenance building previously approved on the first stage of development on the site.

The site is accessible from the entrance off East Bomen Road and access tracks within the site are of a sufficient width to allow access by emergency vehicles.

Specific controls for solar farms are provided under section 8.3.5 as follows:-

- ☐ *a minimum 10m APZ for the structures and associated buildings/infrastructure; and*
- ☐ *the APZ must be maintained to the standard of an Inner Protection Area (IPA) for the life of the development.*

Infrastructure for the purposes of requiring APZ excludes road access to the site and power or other services to the site and associated fencing.

A 10 metres wide Asset Protection Zone is proposed on all sides of the proposed development.

A Bush Fire Emergency Management and Operations Plan should identify all relevant risks and mitigation measures associated with the construction and operation of solar farm.

A recommended condition of consent requires the preparation of a Bush Fire Emergency Plan in accordance with PBP2019 as well as bush fire protection measures being included in the ongoing Operational Management Plan for the site.

The proposal is consistent with the requirements of PBP 2019.

Man Made Hazards

The site is not identified as contaminated and shows no history or evidence of any previous land use that may contribute toward contamination of the site.

Risks to the environment in respect of the use of solar technologies are considered to be low. Materials used in the construction of solar modules have the potential to be recycled following the decommissioning of the site. All infrastructure will be removed from site reducing any risk to human health and/or the local environment.

Heritage

The application is accompanied by an Aboriginal Cultural Heritage Assessment which was discussed in detail earlier in the report.

The ACHA found that the archaeological values of the site within the development footprint, considering the scientific, representative and rarity values assigned to them was deemed to be low. Furthermore the assessment of harm overall for the project based on the small areas of disturbance was assessed as low to moderate. The proposed impacts to the stone artefact

sites through the development of this particular solar farm proposal would not adversely affect the broader archaeological record for the local Bomen area or the wider Wagga Wagga region.

As the development will result in harm to objects it will be necessary for the applicants to obtain an Aboriginal Heritage Impact Permit (AHIP) prior to any works commencing. DPIE (BCD) have issued GTAs for the development as proposed.

Stormwater and drainage management

This Hydraulic Impact Assessment includes an analysis of pre-development site conditions to establish the base flood characteristics, and quantification of the potential impacts associated with the proposed development.

Although the solar panels are 100% impermeable the ground underneath the solar panels will remain as grazing and therefore any rainwater falling onto the panels will drain freely onto the underlying ground which remains permeable. Due to the minimal increase in impervious areas from the development negligible change in peak flow rates was predicted from the hydrologic assessment

The detailed assessment found that these minor changes in hydrological flows together with increased roughness across the development site from the installation of the posts results in a reduction of peak flow rates from the site and no flood level increase was predicted onto the neighbouring properties.

There is no requirement for any flood mitigation measures as a result of these findings. A standard condition requiring a stormwater management plan will be required to ensure that during site works there are no adverse impacts from run-off and that pre-development flows are maintained. A standard condition requiring sediment and erosion control measures during construction will also be included.

Soil

Both the construction and decommissioning activities have the potential to impact upon soil conditions. Earthworks are required to shape the land for the footings and trenching associated with installation works and the works have been designed to minimise the risk of soil erosion by avoiding the steepest parts of the site.

Disturbance of the site is limited to cut and fill with a maximum extent of 1.5 metres, with this being the exception in a number of areas. For the majority of the site, cut and fill is limited to no more than 1 metre. The earthworks design has ensured a balance of materials, meaning that there is no need to export excess material off-site, or bring in fill from off site. The support poles for the solar trackers could compact and disturb soils but in general the footprints would be small and impacts are considered minimal. The maintenance and access roads could lead to soil compaction, including decreasing permeability and increasing run-off but the limited use of these roads again results in minimal impact.

A positive impact associated with the development could be afforded to the fact that the development allows the existing soil profile to be rested during the operation of the solar farm with potential benefits to the local soil environment into the future.

A Soil and Water Management Plan is required to be submitted for approval prior to works commencing which will detail the controls and measures to be employed during construction to prevent erosion. Furthermore, an Operational Management Plan is required to be submitted

for approval prior to the solar farm becoming operational that will detail the measures that will be implemented on an ongoing basis to manage groundcover and prevent erosion.

Services

The proposed development is not anticipated to have any significant impact on services other than providing a renewable energy source to the benefit of the City's power supply. The applicant has been referred to both Transgrid and Essential Energy for comment who have raised no objection to the development.

Waste

Waste generated through the construction phase will be removed from the site and either recycled or disposed of at an appropriate waste disposal facility. A Waste Management Plan is conditioned to be included as part of the Construction Management Plan and the SEE notes that this plan will seek to minimise waste and maximise opportunities for recover and reuse. The ongoing operation of the solar farm is not expected to create waste. The decommissioning of the site will require the removal of all infrastructure associated with the development to a suitable waste facility.

Air Quality

The subject site is at the edge of the Bomen Industrial Estate and emissions from nearby operations such as the Riverina Oils and Bioenergy plant, located to the north of the site, as well as various industrial land uses in the existing Bomen Industrial Estate to the west, are likely to effect the site at times.

There is the potential for dust to be generated during the construction phase, but the operation of the facility is not anticipated to create any long-term air quality impacts. A Dust Management Plan is required under the recommended conditions of consent which must be implemented as part of the Construction Management Plan. Dust from earthworks as well as dust associated with stockpiles of material will be addressed in the dust mitigation plan.

Any area that was temporarily used during construction would be restored back to its original condition or re-vegetated with native plants. Any other areas that may have been disturbed in some form during site works would be vegetated with seeds native to the area.

Socio - Economic Impact

The installation of the solar farm will provide employment opportunities for the local labour force during the construction phase offering an opportunity to enhance existing and develop new skills and expertise whilst working on the project. Additional employment opportunities may arise from the supply of goods and materials that are needed during the installation phase from local manufacturing companies and suppliers. There are no ongoing employment opportunities other than required maintenance work.

The development is of a nature that is compatible with the long term vision of the nearby Bomen Master Plan that has a strong focus on enabling renewable energy in the locality. On a broader scale the proposed development contributes to achieving increased renewable energy outputs and investment into the local area.

Social impacts of the development are associated with impacts on existing levels of residential amenity. The results of the community engagement carried out by the applicants

demonstrated a high level of perceived social impact from this development linked to visual impacts, noise disturbance and traffic. The assessment report has demonstrated that any noise and traffic impacts are both short term and within acceptable industry approved parameters. The visual impact has also been assessed as negligible based on the existing topography of the land and the landscaping that is existing and proposed.

Decommissioning

Decommissioning of the facility will occur at the end of the useful life of the infrastructure, this is anticipated to be around 30 years from commencement of energy generation. At the end of the facilities life a decision on whether to upgrade or decommission the facility will be taken.

To ensure that the land is left in a suitable state for a return to primary production purposes a decommissioning plan is to be prepared. The plan will include as a minimum, timeline for the rehabilitation program, decommissioning of all solar panels, above and below the ground infrastructure, inverter stations, fencing and any other structures or infrastructure relating to the approved development and a programme of site restoration to return the land back into agricultural production. The objective of the decommissioning plan would be to restore the land capability to its pre-existing agricultural value and use.

In order to ensure that adequate funds are set aside for the decommissioning phase, a decommissioning financing arrangement is in place between the landholder and the project owner. The retrieval and reuse/recycling of key components (such as copper in electrical wiring) also provides sufficient revenue to assist in financing the decommissioning process. Specific matters that would be addressed in the decommissioning plan would mirror those matters outlined in the CEMP applying to the site.

A recommended condition of consent requires that the plan be created prior to operation of the facility commencing.

Operational and land management

As there will be no permanent staff members on site the equipment will be monitored remotely with personnel coming to site for routine maintenance and repair work only. The management of groundcover will also be included as part of the Operations Management Plan. This could include the use of selective grazing by livestock, mechanical slashing and the establishment and maintenance of a suitable vegetative groundcover that provides effective competition for weeds, maintained through regular inspection.

Cumulative Impacts

The primary potential causes of cumulative impact include the cumulative visual impacts associated with the development of multiple solar developments in the general locality and the cumulative noise impacts associated with construction and transport during construction.

The visual impact assessment included both the approved and proposed solar farms across the subject property and concluded that cumulative impacts are unlikely due to the differing views experienced to the two sides of the site and the topography of the land.

As noted earlier in the report it is not anticipated that the solar farms will be constructed and installed at the same time but the noise assessment did include a worst case scenario if all works were completed concurrently and this found that the noise levels were within acceptable industry approved parameters. Again, traffic movements have been assessed as acceptable

as the increased vehicle movements are accessing the site via approved heavy vehicle routes and all entering via East Bomen Road.

On the basis of the above, significant and unacceptable cumulative impacts associated with the project are not anticipated.

The Principles of Ecologically Sustainable Development

1 The precautionary principle

Where there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. The principle requires decision-making to give the environment the benefit of the doubt.

The proposal is not considered to cause serious or irreversible damage to the environment as the solar farm will be subject to a decommissioning process that will restore the land back to full agricultural capability. Furthermore, the proposal supports the development of sustainable forms of renewable energy, and in doing so reduces reliance on traditional forms of electricity generation, including the burning of fossil fuels.

2 Intergenerational equity

The present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations (that is, a partnership among all of the generations that may use or expect to benefit from the nation's resources).

At all stages of the proposed development mitigation measures are proposed to ensure that the land is maintained and enhanced for the benefit of future generations, these will be included in various management plans and secured by condition. The use of solar generated power assists in reducing the impacts of climate change and therefore assists in ensuring the health of future generations is protected.

3 Conservation of biological diversity and ecological integrity

Conservation of biological diversity and ecological integrity should be a fundamental consideration.

The proposal would result in the loss of 0.475 hectares of vegetation, including six trees, together with an additional 8 isolated native paddock trees. The findings of the biodiversity assessment were that there was no significant impact to flora and fauna. Mitigation measures have been proposed and will be secured by condition that will assist to minimise the impacts on biodiversity during operation and construction and enhance vegetation and habitat through identified actions within a biodiversity management plan.

The proposed development will not result in any anticipated irreversible environmental damage. Accordingly the principles of ESD are considered to have been followed.

Section 4.15(1)(c) - The suitability of the site for the development

The land is appropriately zoned for the land use that is permissible under the provisions of SEPP Infrastructure and the Wagga Wagga LEP. The proposed land use does differ to the historical use of the land for agricultural purposes but is one that can be suitably located and managed on this land with an acceptable degree of impact.

The site has been selected for a solar farm due to its predominantly cleared, undulating nature within close proximity to existing electricity infrastructure and which is also easily accessible. The character of farmland throughout the country is transitioning to include solar energy

production as an alternative to traditional agricultural production where suitable infrastructure and locations exist, in order to support additional renewable energy sources and provide alternative sources of rural income.

The site is of a sufficient size to accommodate the use and is located away from densely populated areas. There are no site constraints that would render the site unsuitable for the proposed development.

Section 4.15(1)(d) - Any submissions made in accordance with this Act or the Regulations

Referrals

Department of Planning Industry & Environment - Biodiversity and Conservation Division

A review of the supporting documents has been completed and the following comments provided:-

Aboriginal cultural heritage

It is understood that 13 Aboriginal objects (sites) were located within the activity area. All of these sites comprised stone artefact sites. Of these, six sites are proposed for total harm and five sites for partial harm from the development and would be subject to an Aboriginal Heritage Impact Permit (AHIP) application. Two stone artefact sites will be avoided by the development through a five-metre buffer zone and conserved.

The sites proposed for total and partial harm are all stone artefact sites. These sites have been assessed as having cultural significance, low scientific significance, some aesthetic significance for landscape value and no historic value. The objects proposed for harm are to be subject to surface collection under an AHIP. The report recommends the collection and relocation of the artefacts should be undertaken by an archaeologist with representatives from the registered Aboriginal parties and be consistent with Requirement 26 of the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales. A site impact card will be submitted for each site salvaged and a new site card will need to be completed once the artefacts are buried to record their new location on the AHIMS database.

In addition, artefacts recovered from the subsurface testing program must be reburied by an archaeologist with representatives from the registered Aboriginal parties and be consistent with Requirement 26 of the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales. A new site card will need to be completed once the artefacts are reburied to record their new location on the AHIMS database.

We have reviewed the information provided and determined that we are able to issue an Aboriginal Cultural Heritage Impact Permit (AHIP) under section 90 of the National Parks and Wildlife Act 1974, subject to conditions. General Terms of Approval (GTA) have been provided and must be incorporated into any development consent granted for this proposal.

In addition recommendations were made regarding amendments that are required to the ACHA prior to the AHIP application being made and these have been provided to the applicant.

Biodiversity

As the subject land meets the definition of Category 1- Exempt regulated land according to the Local Land Services Act 2013, it is appropriate to disregard any clearing on that land from the biodiversity assessment of the DA.

The findings of the applicant's biodiversity assessment do identify harm to threatened species and it is recommended that this harm be mitigated by actions to be defined in a Biodiversity Management Plan (BMP). A BMP that aims to improve the habitat function of the locality is likely to mitigate the harm caused by the proposed development.

The comments from Department of Planning Industry & Environment - Biodiversity and Conservation Division are noted and a recommended condition of consent for a BMP has been included. The mitigation measures to be included in this plan are in response to the removal of native vegetation and impact to threatened species. The requirements are in addition to landscaping that is associated with screening and softening of the development.

Flooding

In assessing the development application, BCD has reviewed the flooding component of the proposal. The DA assessment shows no adverse flood impacts expected to neighbouring properties as a result of the proposal.

Natural Resources Access Regulator (NRAR)

General Terms of Approval were issued for a controlled activity - a Controlled Activity Approval will be required prior to works commencing on site and this will be the subject of a separate application to NRAR. GTAs are included as recommended conditions of approval.

Transgrid and Essential Energy have raised no objection to the development and standard conditions of consent are recommended with regard to working within the proximity of electrical infrastructure. No formal comments were received within the legislated time-period.

Notification and Advertising

In accordance with the Council's advertising and notification provisions outlined in Section 1.10 of the *Wagga Wagga Development Control Plan 2010* the application was notified and advertised between 9 March and 8 April 2020.

Public Submissions

Twenty-two submissions were received in response to the notification all of which were in objection to the development.

The grounds of objection can be summarised as follows:-

1. *Visual Impact - the solar farm together with others in close proximity create a huge blight on the countryside*

Comment: A visual amenity assessment prepared in support of the application has been discussed earlier in this report. The assessment concludes that whilst the solar farm does have an impact, due to the topography of the land, existing vegetation and the distance from which the installation is seen the overall impact is negligible to minor.

2. *The proposed solar farm is too close to residential properties and will destroy their existing lifestyles - living next door to an industrial power station has significant health and social impacts.*

Comment: The closest residential properties to the proposed development are those to the east on Windmill Road and to the south on Bavin Road. Short term disturbance to these properties will undoubtedly occur during the construction phase and standard construction hours will be included as a recommended condition of consent. There are no identified health impacts associated with living in proximity to a solar farm.

3. *Only minimal screening is proposed, it is critical that the correct species are planted at the correct time of the year to screen the development and not rely upon additional planting among existing trees. The proposed 10 metre width is not enough.*

Comment: The landscaping strategy has selected species suitable for the site and notes applicable planting seasons and maintenance periods. A mix of screen planting, native revegetation and supplementary planting is proposed and is considered suitable.

4. *Increased run-off from the site as a result of the hard surface of the panels; run-off from the Bomen solar farm site recently caused flooding to a neighbouring property. Further risk of flooding as increased water run-off enters the floodplain*

Comment: As noted earlier in the report the hydraulic assessment has concluded that there will be no increased run-off from the site as the ground remains permeable beneath the solar panels and run off from the panels will be directly into the ground as existing. Furthermore an assessment of flooding has identified minimal impact on site but no off-site impacts to neighbouring properties. The impacts associated with a recently constructed state significant development within the locality cannot be addressed as part of submissions associated with the subject application.

5. *The increased impact of water run-off, heat, dust and glare will negatively affect existing primary production within the valley including wine grapes.*

Comment: As previously referenced there is no increased run-off from the site. There is no evidence to suggest an increase in heat from the development and the assessment of glare has found that there is no anticipated glare impact during operation. Dust mitigation measures will be enforced during construction.

6. *Erosion from the trenches associated with the underground cables; water will settle in the trenches and create eroded gullies all the way down the site.*

Comment: The ground conditions across the site will remain as permeable, it is not anticipated that the trenches will result in increased erosion on or off the site. The required stormwater management plan will ensure that these issues are addressed.

7. *Loss of 17 mature trees with no effort to off set the loss. This results in the overall destruction of approximately 40 trees.*

Comment: The plans identify the clearing of 14 trees to allow for the proposed development. Eleven of the 14 trees are hollow bearing trees that will be relocated on site to maintain potential habitats. It is proposed to mitigate the clearing by the planting of 140 trees at a rate of 10 trees per tree removed. In addition, a biodiversity management plan is required to identify further mitigation works to enhance vegetation and habitat within the locality. The approved solar farm to the north required the clearing of 11 trees and Bomen solar farm (state significant) included the removal of 16 trees.

8. *The loss of trees will result in the loss of flora/fauna for endangered species.*

Comment: The findings of the biodiversity assessment are that the existing ground conditions, retained trees and relocated hollow bearing trees both on the subject site and on adjoining land will negate any detrimental impact on flora and fauna resulting from the development.

9. *Management of dust - during construction of the Bomen solar farm dust pollution was a major issue - the required control of dust especially over the summer will require significant amounts of water to be trucked into the site which is neither environmentally sustainable or effective.*

Comment: Dust mitigation measures including the wetting of all access roads and exposed dusty surfaces will form part of the required construction management plan and will be enforced during all stages of construction.

10. *Glare from the panels across the rural landscape as is apparent from the recently constructed solar farm. As the panels face East Bomen Road the risk to drivers is of concern.*

Comment: The panels will rotate to maximise solar gain from the sun throughout the day and will not be visible from East Bomen Road. The assessment of glare has found that there is no anticipated glare impact during operation.

11. *Contamination from toxic solar equipment has not been acknowledged, it should not be sited within close proximity to prime agricultural land.*

Comment: The site will be decommissioned at the end of the project life that is estimated to be 25-30 years. At this time the panels will be removed from site and the land returned to agricultural use. There is no anticipated contamination risk from the panels.

12. *Has the correct Aboriginal consultation occurred, it was not at Stage 1.*

Comment: All appropriate steps have been taken with regard to consultation and are fully detailed in the Aboriginal Cultural Heritage Assessment. Consultation with Aboriginal stakeholders was undertaken and two groups and one individual registered their interest in the proposal. The fieldwork was organised, and two of the registered parties were asked to participate in the survey and subsurface testing fieldwork. A copy of the draft report was provided to all the registered parties for comment. No comments were received on the draft report.

13. *The first stage was refused by the Southern Region Planning Panel and then allowed by the Land and Environment Court following a rushed process over Christmas and New Year with no argument or defence from the Planning Panel - this is a cost borne by all ratepayers and there is concern the same thing could happen again.*

Comment: The appeal process is governed by the Land and Environment Court, the Planning Panel were a joint party in the proceedings.

14. *The land has been prime agricultural land for over 100 years and should be retained as such.*

Comment: The land remains as rural zoned land and has the potential to be returned to agricultural use following the decommissioning of the solar farm. The land has predominantly been used for grazing purposes and this can also continue within and around the solar panels.

15. *Building large scale solar farms results in increased impacts on the environment and is subsequently used to justify further expansion of such impacts resulting in increased use of materials and scarce water supplies.*

Comment: Each of the solar farms within the locality are/have been the subject of individual development applications and each are assessed on their individual merit against applicable controls and policies. The presence of one solar farm is not relied upon as justification for another under planning legislation.

16. This DA should not be looked at in isolation, the cumulative impact of the first stage as well as Bomen solar farm need to be looked at as a whole. Approximately 500,000 solar panels on the edge of the Eunony Valley is an oppressive invasion upon our rural landscape.

Comment: The assessments prepared for the subject application including both visual impact and noise impact have included cumulative impacts of both developments. The results of the cumulative analysis found the developments to be acceptable and suitable.

17. Just because the applicants have engaged with the community does not mean that we are in support of the development, we generally oppose it. Also the time given to respond to engagement replies was unrealistic over Christmas and New Year.

Comment: The applicants chose to engage with the local community prior to the development application being lodged to answer questions and seek feedback. Whilst this process may assist the applicant in the preparation of their application, the process has no bearing on the assessment of the application and the recommendations made in this report.

18. When the application for Stage 1 was being assessed the land that is the subject of this application was referred to as unsuitable but now it is being considered - what has changed?

Comment: The costs associated with developing this part of the site are greater than the first stage (to the north) because of the sloped nature of the site. Commercial decisions as to whether the costs can be borne by the developer are not a matter to be challenged or questioned as part of the assessment process.

19. The land has recently been cultivated, if it had not been cultivated it could not be developed for solar and is therefore in contravention of the Native Vegetation Act.

Comment: The legislation referenced in this submission has been repealed and replaced with the *Biodiversity Conservation Act 2016*. An assessment of the proposed clearing of vegetation against the requirements of the Act has been included in the report and found to be acceptable.

20. Risk of fire and inability of fire trucks to access the site - without being able to access the site the fire spreads quicker and further presenting a huge risk for rural fire service personnel.

Comment: An analysis of ambient temperatures within proximity of an existing solar farm showed that there is no significant impact on temperatures in the local area. It is therefore unlikely that heat radiating from the proposed solar farm will impact temperatures or have any subsequent impact upon bush fire risks. A condition of consent will require the preparation of an emergency bushfire management plan and this will address any access concerns. The access paths are wide enough to allow fire trucks in and through the site.

21. Suitable solar sites are flat with minimal vegetation and limited agricultural use. The site does not meet these criteria.

Comment: Whilst these criteria are listed as requirements for state significant developments this is not a state significant site and these criteria do not have to be met. Notwithstanding the site must be assessed as to its suitability and the report has concluded that the proposed development on this site is suitable.

Section 4.15(1)(e) - The public interest

The public interest is best served by the consistent application of the requirements of the relevant planning controls and by Council ensuring that any adverse effects on the surrounding area and the environment are avoided.

The proposed development contributes to federal, state and local goals of promoting the development of renewable energy and reduces the reliance on other forms of electricity generation that are reliant on the burning of fossil fuels. The proposed development is considered to be in the public interest as it offers an opportunity for productive and sustainable economic activity within the area and provides significant employment opportunities during the construction phase.

It is also in the public interest to consider the development in the context of strategic planning documents that may not be legislative but provide relevance and significance to the determination of the application. One such document is the *Riverina Murray Regional Plan 2036* that lists one of the 'Priority Growth Areas' as Renewable Energy and Mining. Under Direction 11 of this document it refers to the region's significant potential for renewable energy industries and one of the key actions is to 'promote appropriate smaller-scale renewable energy projects using bioenergy, solar, wind, small-scale hydro, geothermal or other innovative storage technologies.'

Taking into account the full range of matters for consideration under Section 4.15(1) of the Environmental Planning and Assessment 1979 (as discussed within this report) it is considered that approval of the application is in the public interest.

Other Legislative Requirements

Biodiversity Conservation Act 2016 - Part 7 Biodiversity assessment and approvals under Planning Act

The Biodiversity Conservation Act 2016 (BC Act) establishes a framework to avoid, minimise and offset the impacts of proposed development and land use change on biodiversity. The primary requirement under the BC Act, is to determine whether the development is likely to significantly affect threatened species

According to clause 7.7(2) of the BC Act, if the proposed development is likely to significantly affect threatened species, the development application is to be accompanied by a biodiversity development assessment report (BDAR). In order to determine if the development is likely to significantly affect threatened species three key tests are required as follows:-

1. Is the subject site identified as an area of outstanding biodiversity value on the biodiversity values map?

The site is not identified on the map.

2. Does the amount of native vegetation being removed exceed the biodiversity offsets scheme threshold.

The threshold area is determined by the minimum lot size associated with the property, the minimum lot size of the property is 200ha, the site is 269ha. For lots that are greater than 40ha and less than 1000ha the threshold for clearing, above which the offsets scheme will apply is 1ha. The area of vegetation to be cleared is 0.475ha and therefore

falls below the threshold.

The biodiversity assessment does not need to include category 1 exempt land as defined in the Local Land Services Act 2013. As the mapping of category 1 land is not publicly available the applicants submitted their assessment of category 1 land to the Biodiversity Conservation Division of DPIE who concurred with the assessment provided.

3. Test of Significance - the test to determine whether the proposed development or activity is likely to significantly affect threatened species or ecological communities, or their habitats.

There are potential impacts to a range of threatened species, ecological communities and populations due to impacts on potential habitat including foraging, roosting and nesting habitat. An assessments of significance was carried out for ground/under-storey birds, aerial birds, hollow-dependent species, endangered ecological communities and populations and amphibians; the findings are detailed below.

Flora/Fauna	Findings of Assessment	Conclusion
Threatened Ground or Understory Birds	Similar quality habitat is widespread in the locality; Important habitat for these species would be retained; The vegetation removed is of low quality and lacks understory cover; Once operational, the proposed solar farm would be likely to provide similar groundcover foraging habitat from beneath the panels.	unlikely to be a significant impact
Threatened Aerial Birds	The habitat quality is poor in the proposal area; The species are highly mobile and would utilise surrounding habitat of similar quality; Twenty-three hollow-bearing trees would be retained in the proposal area; Habitat is heavily fragmented, with no woodland patches or watercourses within 2 km.	unlikely to be a significant impact
Threatened Hollow-dependent Species	Breeding resources would be retained in the study area (23 hollow-bearing trees) and similar habitats are widespread in the locality; A significant area of foraging resources would be retained within the study area (approximately 2.7ha of vegetation); These species are highly mobile and occupy a large range of habitat types over large areas, therefore would not be restricted to the habitats in the proposal area.	unlikely to be a significant impact
Endangered Ecological Communities and Populations	<u>Squirrel Glider</u> The Box-gum habitat in the proposal site is of low quality. It is dominated by exotic grasses, lacks any understory cover, and has been heavily disturbed by cropping activities; The amount of the EEC to be removed or disturbed by the proposal is relatively small (0.475 ha) in the local context; Twenty-three hollow-bearing trees would be retained in the study area and similar better-quality habitats are widespread in the locality; A significant area of the EEC would be retained within the study area (approximately 1 ha).	unlikely to be a significant impact
	<u>White Box Yellow Box Blakley's Red Gum Woodland</u> The small amount of area being cleared (0.475 ha); The local occurrence of this EEC to the south of this proposal, where it exists in more substantial and better condition stands; The cropping history in the proposal area causes a	unlikely to be a significant impact

	displaced seed bank, as such the understory vegetation, tree seeds, and ground layer species are unlikely to grow back.	
Amphibians	The nearest records of this species are located in Livingstone National Park (37 km from the proposal area); There is no suitable aquatic vegetation for this species in the farm dam of the proposal area.	unlikely to be a significant impact

Given the small scale of removal that is proposed in relation to the habitat available within the study area and locality and the absence of any recorded endangered flora or fauna on site the proposed development is not anticipated to significantly affect threatened species or ecological communities or their habitats.

Based on the above assessment the proposal does not trigger the BC Act thresholds. Therefore, a BDAR is not required to accompany the development application and the proposed development is not required to enter into the Biodiversity Offset Scheme (BOS).

As noted earlier in the report the relocation of cleared trees including hollow bearing trees within the subject site, proposed tree planting and landscaping will all contribute to biodiversity on site. A BMP will be required to address the harm caused by the development and may result in additional off-site mitigation measures. Conditions of consent will also ensure that any landscaping works are carried out at appropriate times of the year as well as complementing any other master planning landscaping works within the vicinity.

National Parks & Wildlife Act 1974

Under the Act it is illegal to harm Aboriginal objects and/or places without appropriate permission being in place. Individuals and corporations can be prosecuted for such harm if there is no defence in place. A person or corporation may have a defence against such prosecution if they have an Aboriginal Heritage Impact Permit (AHIP) authorising harm (section 87(1)) or can demonstrate that due diligence has established that Aboriginal objects will not be harmed (section 87(2)).

In terms of the subject application GTAs have been issued but an AHIP is required to be in place prior to any works commencing on site and this will be secured by condition.

In accordance with section 80 of the National Parks and Wildlife Regulations consultation with Aboriginal stakeholders has been undertaken during the process of the heritage assessment. The consultation included a notification period seeking interested parties, a period of information gathering, field inspections and review of findings.

The findings of the report and the impacts associated with the development have been discussed in greater detail earlier in this report.

Water Management Act 2000

The development includes the carrying out of work on waterfront land and as such requires a controlled activity approval under s91 of the *Water Management Act 2000*. The application sought integrated approval from NRAR and GTAs have been issued in accordance with the regulations.

Section 733 of the Local Government Act 1993

Section 733 of the Local Government Act 1993 provides that Councils will not incur liability for decisions or omissions concerning flood liable land or land subject to the risk of bushfire. Where required, a risk assessment has been completed and Council will be able to demonstrate that it has acted appropriately in its decision making when defending claims in liability or in circumstances where administrative decisions are challenged.

Flooding Risk Assessment

The development has been considered against the relevant provisions of the WWLEP2010 and DCP2010. The risk of flood to the development site is not assessed as significant as the area of land identified as flood prone is not affected by the proposed solar farm.

Bush Fire Risk Assessment

The development has been considered against the relevant provisions of the WWLEP2010 and DCP2010. Although the subject site is not mapped as being on Bushfire Prone Land the risks associated with the type of development necessitate the need for bush fire protection measures to be considered. The preparation of a plan will be secured by condition.

Council Policies

Not applicable.

Contributions

Section 7.11/7.12 of the Environmental Planning and Assessment Act 1979 and the Wagga Wagga Local Infrastructure Contributions Plan 2019-2034 enable Council to levy contributions, where anticipated development will or is likely to increase the demand for public facilities. A Section 7.12 contribution applies and will be put towards the provision high quality and diverse public facilities to meet the expectations of the residents of the city

The Section 7.12 contribution is calculated as 1% of the development cost. The cost of development is \$26,800,000 equating to a contribution of \$268,000.

In accordance with the *Environmental Planning and Assessment (Local Infrastructure Contributions - Timing of Payments) Direction 2020* the payment of s7.12 contributions will be linked to the occupation certificate.

Section 64 of the Local Government Act 1993, Section 306 of the Water Management Act 2000 as well as the City of Wagga Wagga's Development Servicing Plan for Stormwater 2007 and/or City of Wagga Wagga Development Servicing Plan for Sewerage 2013 enable Council to levy developer charges based on the increased demands that new development will have on sewer and/or stormwater.

No Section 64 contribution is payable for this development as the development does not require connection or have any impact on Council sewer or stormwater networks.

Conclusion

An assessment of the application has resulted in this application being supported based on the following grounds:

- ☐ The application is for a use which is permitted with consent in the RU1- Primary Production zone and under the provisions of SEPP Infrastructure.
 - ☐ The development is consistent with the controls contained in the WWDGP 2010 as outlined in this assessment report.
 - ☐ Whilst the solar farm will have an impact on the landscape it is one that is becoming more common and appropriate within a rural landscape and one that has an acceptable degree of impact when balanced against other factors associated with the importance of renewable energy targets.
 - ☐ There are no site constraints that would render the site unsuitable for the proposed development.
 - ☐ The proposed development can be managed through the proposed conditions of consent in a way to reduce potential environmental impacts.
 - ☐ The solar farm will contribute to a reduction in greenhouse gas emissions and a move toward cleaner electricity generation, thereby serving the public interest.
 - ☐ The development will contribute towards achieving the targets set down in the NSW Government's Net Zero Plan Stage 1: 2020-2030 to fast-track emissions reduction over the next decade.
 - ☐ The development complies with the requirements of the Environmental Planning and Assessment Act 1979.
-

RECOMMENDATION

It is recommended that application number DA20/0016 for Electricity Generating Works (Solar Farm) – Integrated Development be approved, subject to the following conditions:-

CONDITIONS OF CONSENT FOR APPLICATION NO.

Right click & select OR delete if NO deferred commencement consents

A. SCHEDULE A – Reasons for Conditions

The conditions of this consent have been imposed for the following reasons:

- A.1 To ensure compliance with the terms of the Environmental Planning and Assessment Act 1979 and Regulation 2000.
- A.2 Having regard to Council's duties of consideration under Section 4.15 and 4.17 of the Act.
- A.3 To ensure an appropriate level of provision of amenities and services occurs within the City and to occupants of sites.
- A.4 To improve the amenity, safety and environmental quality of the locality.
- A.5 Having regard to environmental quality, the circumstances of the case and the public interest.
- A.6 Having regard to the Wagga Wagga Development Control Plan 2010.
- A.7 To help retain and enhance streetscape quality.
- A.8 Ensure compatibility with adjoining and neighbouring land uses and built form.
- A.9 To protect public interest, the environment and existing amenity of the locality.
- A.10 To minimise health risk to neighbouring residents and workers.

B. SCHEDULE B – Deferred Commencement Conditions

N/A

C. SCHEDULE C – Conditions

Approved Plans and Documentation

- C.1 The development must be carried out in accordance with the approved plans and specifications as follows.

Plan/Doc No.	Plan/Doc Title	Prepared by	Issue	Date
	Statement of Environmental Effects	Premise	D	14.1.2020
	Written Correspondence	Premise		26.2.2020
02F	Site Concept Layout	Premise	F	24.2.2020
TP01	Site Analysis Plan	Premise		9.1.2020
C001	Concept Bulk Earthworks Plan	Premise	A	6.11.2019

C002	Concept Slope Analysis Plan	Premise	A	6.11.2019
C003	Typical Sections	Premise	A	6.11.2019
	Access Drawings x3	applicant		no date
	Visual Amenity Assessment	IRIS Visual Planning & Design		January 2020
8-2	Landscape Strategy & Landscape Notes	IRIS Visual Planning & Design	2	January 2020
8-3	Landscape Plan	IRIS Visual Planning & Design	2	January 2020
8-4	Existing Trees with Supplementary Planting	IRIS Visual Planning & Design	2	January 2020
8-5	Native Revegetation Areas	IRIS Visual Planning & Design	2	January 2020
8-6	Native Screen Planting	IRIS Visual Planning & Design	2	January 2020
19-088	Aboriginal Cultural Heritage Assessment - Wagga Wagga Solar Farm South	NGH		16.12.2019
19-088	Biodiversity Assessment	NGH		14.11. 2019
19-088	Biodiversity Assessment - written correspondence	NGH		15.4.2020
1903277	Hydraulic Impact Assessment	Premise	01	26.11.2019
	Noise & Vibration Impact Assessment	Assured Environmental (AE)		21.2.2020
	Temperature Monitoring Overview	amg		3.7.2018

The Development Application has been determined by the granting of consent subject to and as amended by the conditions of development consent specified below.

NOTE: Any modifications to the proposal shall be the subject of an application under Section 4.55 of the Environmental Planning and Assessment Act, 1979.

C.2 Approval is granted for the use of the site as a solar farm, within the Wagga Wagga LEP 2010 definition of 'electricity generating works' and will include the following works/components:

- Construction of an 18.7MW solar system consisting of single axis trackers fitted to galvanised support posts, above and underground electrical conduits and cabling and inverter stations.
- Internal access driveway.
- Security fencing and gate of 2.4metres in height.
- Landscaping buffers and tree removal.
- Decommissioning of the solar farm.

Requirements before a Construction Certificate can be issued

- C.3 Prior to the issue of a Construction Certificate a detailed stormwater management plan and report for the subject site shall be provided to the satisfaction of Council. The plan shall incorporate stormwater drainage designed to limit post development flows from the site to pre-developed flows for all storms up to and including the 100 Year ARI event. Full plan details of any proposed On-Site Detention (OSD) system and supporting calculations shall be provided. The report shall certify that the designed stormwater system will achieve discharge at pre-developed rates from the site.
- C.4 Prior to the issue of a Construction Certificate, a detailed landscape management plan must be submitted to and approved by the General Manager or delegate. The plan must be in accordance with the Landscape strategy and Landscape notes referenced Figure 8-2 (rev 2), prepared by IRIS Visual Planning & Design and dated January 2020. The plan must include a detailed planting schedule that identifies plant species, spacings and numbers consistent with the locations nominated on Landscape Plan, Figure 8-3 (rev 2) prepared by Iris Visual Planning and Design dated January 2020.
- C.5 Prior to the issue of a Construction Certificate a biodiversity management plan must be prepared to the satisfaction of the General Manager or delegate. The plan must detail proposed replacement tree planting, revegetation works, nesting boxes and any other recommended actions on or within the vicinity of the subject site that mitigates against the loss of native vegetation and associated habitat. The plan must be consistent with any adopted strategies or revegetation plans applicable to the locality.

Requirements before the commencement of any works

- C.6 Prior to works commencing on site, toilet facilities must be provided, at or in the vicinity of the work site on which work involved in the erection or demolition of a building is being carried out, at the rate of one toilet for every 20 persons or part of 20 persons employed at the site. Each toilet provided must be:
- a) a standard flushing toilet connected to a public sewer, or
 - b) if that is not practicable, an accredited sewage management facility approved by Council, or
 - c) if that is not practicable, any other sewage management facility approved by Council.
- NOTE 1: The provision of toilet facilities in accordance with this condition must be completed before any other work is commenced and the toilet facility must not be removed without the prior written approval of Council.
- NOTE 2: "Vicinity" in this condition is defined to mean within 50 metres of the subject building site.
- NOTE 3: The toilet facilities are to comply with all WORK COVER NSW requirements.
- C.7 A CONSTRUCTION CERTIFICATE must be obtained pursuant to Section 6.7 of the Environmental Planning and Assessment Act 1979, as amended from either Council or an accredited certifying authority certifying that the proposed works are in accordance with the Building Code of Australia PRIOR to any works commencing.

NOTE 1: No building, engineering, excavation work or food premises fitout must be carried out in relation to this development until the necessary Construction Certificate has been obtained.

NOTE 2: YOU MUST NOT COMMENCE WORK UNTIL YOU HAVE RECEIVED THE CONSTRUCTION CERTIFICATE, even if you made an application for a Construction Certificate at the same time as you lodged this Development Application.

NOTE 3: It is the responsibility of the applicant to ensure that the development complies with the provision of the Building Code of Australia in the case of building work and the applicable Council Engineering Standards in the case of subdivision works. This may entail alterations to the proposal so that it complies with these standards.

C.8 Prior to works commencing a container must be erected on site for the enclosure of all building rubbish and debris, including that which can be wind blown. The enclosure shall be approved by Council and be retained on site at all times prior to the disposal of rubbish at a licenced Waste Management Centre.

Materials and sheds or machinery to be used in association with the construction of the building must not be stored or stacked on Council's footpath, nature strip, reserve or roadway.

NOTE 1: No building rubbish or debris must be placed, or be permitted to be placed on any adjoining public reserve, footway, road or private land.

NOTE 2: Weighbridge certificates, receipts or dockets that clearly identify where waste has been deposited must be retained. Documentation must include quantities and nature of the waste. This documentation must be provided to Council prior to application for an Occupation Certificate for the development.

NOTE 3: The suitable container for the storage of rubbish must be retained on site until an Occupation Certificate is issued for the development.

C.9 Prior to the commencement of works erosion and sediment control measures are to be established and maintained to prevent silt and sediment escaping the site or producing erosion. This work must be carried out and maintained in accordance with Council's:-

- a) Development Control Plan 2010 (Section 2.6 and Appendix 2)
- b) Erosion and Sediment Control Guidelines for Building Sites; and
- c) Soils and Construction Volume 1, Managing Urban Stormwater

Prior to commencement of works, a plan illustrating these measures shall be submitted to, and approved by, Council.

NOTE: All erosion and sediment control measures must be in place prior to earthworks commencing.

- C.10 Prior to any works commencing a copy of the required Aboriginal Heritage Impact Permit must be provided to Council.

NOTE 1: The attached General Terms of Approval (GTA) do not form the required permit. Application must be made for the relevant approval after consent has been issued by Council and before the commencement of any work or activity on the land.

NOTE2: Application forms for the Aboriginal Heritage Impact Permit are available from the Heritage NSW website.

- C.11 Prior to any works commencing a copy of the required Controlled Activity Approval must be provided to Council.

NOTE 1: The attached General Terms of Approval (GTA) do not form the required approval. Application must be made for the relevant approval after consent has been issued by Council and before the commencement of any work or activity on the land.

NOTE 2: Finalisation of a controlled activity approval can take up to 8 weeks from the date that Natural Resource Access Regulator (NRAR) receives all documentation (to its satisfaction.) Application forms for the controlled activity approval are available from NRAR's website.

- C.12 Prior to any works commencing on site, a Construction Management Plan shall be prepared and submitted for approval by the General Manager or delegate. The approved plan shall be implemented during construction of the solar farm. The plan shall include a range of management controls as outlined in the approved SEE and other conditions listed in this consent. The plan shall include, but not be limited to:

- ☐ Construction Traffic Management including required access routes to and from the subject site, access and egress arrangements for all construction related vehicles to and from the site, deliveries of materials and parking arrangements for contractors.
- ☐ Details of, and vehicular movement diagrams for, the largest vehicle to access the site to show that such vehicles can enter and leave the site in a forward direction and details of the frequency and timing of vehicle movements to and from site.
- ☐ Timing for construction of the works across the site demonstrating any proposed staging of works across the site and including operational hours.
- ☐ Site layout during construction - including storage of materials, plant and equipment, site office and amenities, hoardings and any proposed traffic control devices.
- ☐ Waste management plan including the type and location of waste storage containers onsite, proposed method of removal and disposal of all waste types and treatment of packaging material.
- ☐ Tree Protection, habitat and species protection and methodology for vegetation removal including mitigation measures. (see conditions C15 and C22)
- ☐ Noise Management - including requirements from condition C24
- ☐ Aboriginal Heritage Management
- ☐ Bush Fire Management
- ☐ Dust Management, including control of dust from stockpiled sites.
- ☐ Soil and Water Management including any required earthworks, stabilising batters where required and protection of waterways.
- ☐ Integrated Site Restoration
- ☐ Details of what method will be used to ensure that the plan is adhered to

- including appropriate signage and fencing.
 - ☐ Security Management including details of relevant project manager and/or site foreman contact details.
- C.13 Prior to any works commencing on site, a Bush Fire Protection Plan indicating compliance with the provisions of Planning for Bush Fire Protection 2019, must be prepared in consultation with Rural Fire Services and submitted to Council for approval by the General Manager or delegate. The proposed 10 metres wide asset protection zone that extends around the solar farm and is wholly within the subject property must be maintained at all times as part of the Operational Management Plan for the site (refer to condition C30).
- C.14 Prior to any works commencing on site, the recommendations contained in Section 9 of the Aboriginal Cultural Heritage Assessment dated 16 December 2019 shall be implemented and completed to the satisfaction of the General Manager or delegate.
- C.15 Prior to any works commencing on site, the recommended mitigation measures within Section 6 of the Biodiversity Assessment dated November 2019 must be implemented in consultation with a suitably qualified ecologist. Evidence of compliance with this condition shall be provided to the satisfaction of the General Manager or delegate.
- C.16 The existing trees and vegetated areas to be retained situated within the property of the proposed development shall be protected from all construction works.

All care must be taken to protect existing trees to be retained from damage, including trees located adjacent to the proposed development. The developer must identify all trees to be retained prior to commencement of any site or construction works.

A Tree Protection Zone (TPZ) must be constructed for all existing trees to be retained within the development in accordance with Australian Standards - AS 4970-2009 Protection of Trees on Development Sites.

Construction of Tree Protection Zone's, shall be completed and inspected by Council's Supervisor of Tree Planning and Management, prior to the commencement of any site works. Contact can be made by phoning 1300 292442 during normal business hours.

Removal, relocation or disruption of the Tree Protection Zone fencing will be considered as a breach of this consent. TPZ fences shall remain in place until the end of construction.

If damage of any sort should occur to any protected trees / vegetation within the development, contact shall be made with Council's Supervisor of Tree Planning and Management to determine what remedial action should be taken. Throughout the construction period regular inspections of protected trees shall be carried out to ensure trees retained are of good health and vigour.

- C.17 A soil and water management plan for the site shall be submitted in accordance with Wagga Wagga City Council's Engineering Guidelines for Subdivision and Developments. No building, engineering, or excavation work, or topsoil stripping or vegetation removal, is to be carried out in relation to this development until such time as the plan has been provided to the satisfaction of the General Manager or delegate.

Requirements during construction or site works

- C.18 All weather access and manoeuvring areas shall be provided and maintained within the site at all times.

- C.19 The permitted construction hours are Monday to Friday 7.00am to 6.00pm and Saturday 7.00am to 5.00pm, excepting public holidays. All reasonable steps must be taken to minimise dust generation during the demolition and/or construction process. Demolition and construction noise is to be managed in accordance with the Office of Environment and Heritage Guidelines.
- C.20 Construction traffic is only to enter the site via the access point from East Bomen Road shown on the plans prepared by the applicant. Construction traffic is to access the site via Byrnes Road or Merino Road and East Bomen Road.
- C.21 During all site works reasonable steps must be taken to suppress dust by regular watering until such time as the soil is stabilised to prevent airborne dust transport. Dust suppression measures must include the control of dust from stockpiled sites. Where excessive dust generation is occurring due to high winds and/or dry conditions it may be necessary to temporarily cease operations.
- C.22 During works the following mitigation measures as outlined in the Biodiversity Assessment prepared by NGH dated November 2019 must be implemented at all times:-
- Declared priority weeds shall be managed according to the requirements stipulated by the Biosecurity Act, and recommendations made by the local control authority (Riverina LLS) and the Noxious and Environmental Weed Handbook (DPI, 2015), which contains details as to the management of specific noxious weeds.
 - All herbicides shall be used in accordance with the requirements on the label. Any person undertaking pesticide (including herbicide) application should be trained to do so and have the proper certificate of completion/competency or statement of attainment issued by a registered training organisation.
 - Construction vehicles must be washed down prior to entering the proposal area.
 - Clearing of hollow-bearing trees must be undertaken in accordance with the hollow-bearing tree clearing protocol outlined in Appendix E of the Biodiversity Assessment.
 - No stockpiling or storage to occur within the Endangered Ecological Community (EEC) (Box-Gum Woodland).
- C.23 All construction works must be undertaken in accordance with the latest industry guideline currently known as ISSC 20 Guideline for the Management of Activities within Electricity Easements and Close to Electricity Infrastructure as well as understanding safety responsibilities when working around powerlines as per SafeWork NSW.
- C.24 During construction works the following noise mitigation measures as outlined in Section 7 of the Noise and Vibration Impact Assessment prepared by Assured Environmental dated 21/02/2020 shall be implemented:-
- i) Limiting noise generating construction activities to standard construction hours except where an acceptable acoustic solution can be identified to minimise adverse amenity impacts on Receptors R1, R2 and R7;
 - ii) To manage noise levels from the mulching machine, it is recommended that the mulcher is located as far away from receptors as possible and shielded by a temporary noise barrier if practical.
 - iii) Prior to piling activities consultation with the residents at R5 should be undertaken; If possible, procure piling rigs with a maximum SWL of 107 dB(A), however if this is not possible and consultation with receptor R5 (which is

- associated with the Project) confirms unacceptable noise levels, piling activities should be managed such that when piling within 500 m of the boundary, only one rig is operational at any one time and piling must not occur for more than three (3) hours at any one time, with a minimum of one (1) hour break during standard construction hours.
- iv) Consultation with landholders throughout the construction process to inform them on the duration and timing of potentially noisy activities;
 - v) Using broad-band reversing alarms on all mobile plant and equipment;
 - vi) Examine different types of machines that perform the same function and compare the noise level data to select the least noisy machine;
 - vii) Select quieter items of plant and equipment where feasible and reasonable.;
 - viii) Operating plant in a quiet and efficient manner;
 - ix) Reduce throttle setting and turn off equipment when not being used; and
 - x) Regularly inspect and maintain equipment to ensure it is in good working order. Also check the condition of mufflers.
- C.25 The developer is to maintain all adjoining public roads to the site in a clean and tidy state, free of excavated "spoil" material.
- C.26 All activities including, loading and unloading associated with this development are to take place within the subject development site to remove interference with vehicles and pedestrian movement on public roads. Appropriate loading/unloading facilities and required storage areas for materials are to be provided on site particularly during construction and in accordance with the details approved in the Construction Management Plan (Condition C12).
- C.27 If any Aboriginal object is discovered and/or harmed in, on or under the land, all work must cease immediately and the area secured so as to avoid further harm to the Aboriginal object. Heritage NSW shall be notified as soon as practicable providing any details of the Aboriginal object and its location, and no work shall recommence at the particular location unless authorised in writing by Heritage NSW.
- C.28 Trees indicated on the submitted plans for removal, shall be either retained as habitat (HBTs) or removed from the site in accordance with the proposed development. Consent under Council's Tree Preservation Order is not required for removal of the subject trees.

The approved works shall be executed so as to comply with the NSW Work Cover Code of Practice - amenity tree industry 1998 No. 034. Any works associated with tree removal shall be carried out in Accordance with Australian Standards - AS 4373-2007, Pruning of Amenity Trees.

The clearing of hollow-bearing trees (HBTs) is to be carried out in accordance with the protocols outlined in Appendix E of the Biodiversity Assessment prepared by NGH dated November 2019.

All tree stumps shall be removed below ground level and the surface area reinstated to prevent potential injury.

Any waste material from the subject tree/s shall be removed from site in conjunction with clearing.

Requirements prior to issue of an Occupation Certificate or prior to operation

- C.29 Pursuant to s7.12 of the Environmental Planning and Assessment Act 1979 and the Wagga Wagga Local Infrastructure Contributions Plan 2019-2034, a monetary contribution of \$268,000 must be paid to Council, prior to issue of an Occupation Certificate. The monetary contribution payable under this condition will be indexed in accordance with Clause 3.2 of the Wagga Wagga Local Infrastructure Contributions Plan 2019-2034 from the endorsed date of this Development Consent until the date of payment.

NOTE 1: Clause 3.2 of the Wagga Wagga Local Infrastructure Contributions Plan 2019-2034 provides for Section 7.12 contributions to be indexed in accordance with annual movements in the March quarter Consumer Price Index (CPI) (All Groups Index) for Sydney as published by the Australian Bureau of Statistics.

NOTE 2: The monetary contribution identified above remains applicable if paid within the same financial year as the date of determination. If payment is to be made outside this period, you are advised to contact Council prior to payment being made to determine if CPI increases/decreases have occurred since the date of this consent. The CPI at the time of the consent is 117.4.

NOTE 3: A copy of the Wagga Wagga Local Infrastructure Contributions Plan 2019-2034, is available for inspection at Council Chambers, corner Baylis and Morrow Streets, Wagga Wagga, or on Council's website.

- C.30 Prior to the use of the solar farm an Operational Management Plan shall be prepared and submitted for approval by the General Manager or delegate. The plan shall be prepared in consultation with nearby landowners and the approved plan shall be implemented for the lifetime of the development on the subject site and must include a range of measures which include, but are not limited to:

- a) General maintenance and operation of the site e.g. contact details of the site manager/maintenance staff; emergency protocols, safety and security measures
- b) Addressing complaints relating to the operation of the premise;
- c) Access arrangements to the site including parking and maintenance of access roads;
- d) Bushfire management including annual inspection of the site prior to the bushfire danger period;
- e) Management of water run-off and erosion
- f) Maintenance and inspection of groundcover
- g) Dust mitigation measures
- h) Weed management (including specific measures for priority weeds)
- i) Groundcover management plan (including measures to facilitate the grazing of sheep)
- j) Waste management
- k) Future site decommissioning (refer condition C31)
- l) Reviews, amendments and updates to the plan.

- C.31 The solar energy system shall be decommissioned within 12 months of terminating operations. Prior to operation of the approved solar farm, a Decommissioning Plan shall be prepared and submitted for approval by the General Manager or delegate.

The plan shall include, but not be limited to expected timeline for the rehabilitation program, decommissioning of all solar panels, above and below the ground infrastructure, inverter stations, fencing and any other structures or infrastructure relating to the approved development and a programme of site restoration to return the land back into agricultural production.

All works shall follow the same management principles outlined in the Construction Management Plan (refer to condition C12)

- C.32 Prior to operation of the approved development the landscaped areas and tree planting shall be established on site in accordance with the detailed landscape plan referenced under condition C4.

The ongoing maintenance of all landscaping proposed is the responsibility of the developer and must be to the satisfaction of the General Manager or delegate.

- C.33 An Occupation Certificate, must be obtained pursuant to Section 6.9 of the Environmental Planning and Assessment Act 1979, from either Council or an accredited certifying authority, prior to occupation of the building.

In order to obtain this, the "Final Occupation Certificate" form must be completed and submitted to Council with all required attachments - failure to submit the completed Occupation Certificate Application form will result in an inability for Council to book and subsequently undertake Occupation Certificate inspection.

NOTE: The issuing of an Occupation Certificate does not necessarily indicate that all conditions of development consent have been complied with. The applicant is responsible for ensuring that all conditions of development consent are complied with.

General requirements

- C.34 The solar energy system shall be decommissioned within 12 months of terminating operations in accordance with the details approved under Condition C31.
- C.35 The works must be undertaken in accordance with the attached General Terms of Approval issued by both Department of Planning, Industry and Environment (Biodiversity and Conservation Division) and Natural Resource Access Regulator.

D. SCHEDULE D – Activity Approval Conditions (Section 68)

N/A

E. SCHEDULE E – Prescribed Conditions

Conditions under this schedule are prescribed conditions for the purposes of section 4.17 (11) of the Environmental Planning and assessment Act 1979.

- E.1 Fulfilment of BASIX commitments (clause 97A EP&A Reg 2000)

The commitments listed in any relevant BASIX Certificate for this development must be fulfilled in accordance with the BASIX Certificate Report, Development Consent and the approved plans and specifications.

E.2 Compliance with Building Code of Australia and insurance requirements under the Home Building Act 1989 (clause 98 EP&A Reg 2000)

- (1) For development that involves any building work, the work must be carried out in accordance with the requirements of the Building Code of Australia.
- (2) In the case of residential building work for which the Home Building Act 1989 requires there to be a contract of insurance in force in accordance with Part 6 of that Act, such a contract of insurance shall be in force before any building work authorised to be carried out by the consent commences.
- (3) For a temporary structure that is used as an entertainment venue, the temporary structure must comply with Part B1 and NSW Part H102 of Volume One of the Building Code of Australia.

NOTE 1: This condition does not apply:

- (a) to the extent to which an exemption is in force under clause 187 or 188 of the Environmental Planning and Assessment Regulation 2000 (the Regulation), subject to the terms of any condition or requirement referred to in clause 187(6) or 188(4) of the Regulation, or
- (b) to the erection of a temporary building, other than a temporary structure to which part (3) of this condition applies.

NOTE 2: In this condition, a reference to the Building Code of Australia is a reference to that Code as in force on the date the application is made for the relevant:

- (a) development consent, in the case of a temporary structure that is an entertainment venue, or
- (b) construction certificate, in every other case.

NOTE 3: There are no relevant provisions in the Building Code of Australia in respect of temporary structures that are not entertainment venues.

E.3 Erection of signs (clause 98A EP&A Reg 2000)

For development that involves any building work, subdivision work or demolition work, a sign must be erected in a prominent position on any site on which building work, subdivision work or demolition work is being carried out:

- (a) showing the name, address and telephone number of the principal certifying authority for the work, and
- (b) showing the name of the principal contractor (if any) for any building work and a telephone number on which that person may be contacted outside working hours, and
- (c) stating that unauthorised entry to the work site is prohibited.

Any such sign is to be maintained while the building work, subdivision work or demolition work is being carried out, but must be removed when the work has been completed.

- NOTE 1: This condition does not apply in relation to building work, subdivision work or demolition work that is carried out inside an existing building that does not affect the external walls of the building.
- NOTE 2: This condition does not apply in relation to Crown building work that is certified, in accordance with section 6.28 of the Environmental Planning and Assessment Act 1979, to comply with the technical provisions of the State's building laws.
- NOTE 3: Principal certifying authorities and principal contractors must also ensure that signs required by this clause are erected and maintained.

E.4 Notification of Home Building Act 1989 requirements (clause 98B EP&A Reg 2000)

Residential building work within the meaning of the Home Building Act 1989 must not be carried out unless the principal certifying authority for the development to which the work relates (not being the council) has given the council written notice of the following information:

- (a) in the case of work for which a principal contractor is required to be appointed:
 - i) the name and licence number of the principal contractor, and
 - ii) the name of the insurer by which the work is insured under Part 6 of that Act,
- (b) in the case of work to be done by an owner-builder:
 - i) the name of the owner-builder, and
 - ii) if the owner-builder is required to hold an owner-builder permit under that Act, the number of the owner-builder permit.

If arrangements for doing the residential building work are changed while the work is in progress so that the information notified under this condition becomes out of date, further work must not be carried out unless the principal certifying authority for the development to which the work relates (not being the council) has given the council written notice of the updated information.

- NOTE: This condition does not apply in relation to Crown building work that is certified, in accordance with section 6.28 of the Environmental Planning and Assessment Act 1979, to comply with the technical provisions of the State's building laws.

E.5 Entertainment venues (clause 98C EP&A Reg 2000)

If the development involves the use of a building as an entertainment venue, the development shall comply with the requirements set out in Schedule 3A of the Environmental Planning and Assessment regulation 2000.

E.6 Maximum capacity signage (clause 98D EP&A Reg 2000)

For the following uses of a building: a sign must be displayed in a prominent position in the building stating the maximum number of persons permitted in the building if the

development consent for the use contains a condition specifying the maximum number of persons permitted in the building:

- (a) entertainment venue,
- (b) function centre,
- (c) pub,
- (d) registered club,
- (e) restaurant.

NOTE: Words and expressions used in this condition have the same meanings as they have in the Standard Instrument.

E.7 Shoring and adequacy of adjoining property (clause 98E EP&A Reg 2000)

If the development involves an excavation that extends below the level of the base of the footings of a building, structure or work (including any structure or work within a road or rail corridor) on adjoining land, the person having the benefit of the development consent must, at the person's own expense:

- (a) protect and support the building, structure or work from possible damage from the excavation, and
- (b) where necessary, underpin the building, structure or work to prevent any such damage.

NOTE: This condition does not apply if the person having the benefit of the development consent owns the adjoining land or the owner of the adjoining land has given consent in writing to that condition not applying.

F. SCHEDULE F – General Terms of Approval (Integrated Development)

General Terms of Approval for the proposed Wagga Wagga Solar Farm - South (DA20/0016)

Administrative conditions

Information supplied to OEH

Except as expressly provided by these general terms of approval (GTA), works and activities must be carried out in accordance with the proposal contained in:

- ☐ The integrated development application DA20/0016 submitted via the NSW Planning Portal on 17 January 2020.
- ☐ The Aboriginal Cultural Heritage Assessment Report prepared by ngh Environmental and titled "Aboriginal Cultural Heritage Assessment Wagga Wagga Solar Farm South - Final." Dated 16 December 2020, Report Number 19-088.
- ☐ Wagga Wagga Solar Farm South, Statement of Environmental Effects. Report No: 220188 Rev: D, 14 January 2020, Premise/Metka EGN.

General Terms of Approval for Aboriginal cultural heritage

- ☐ No harm can occur to any Aboriginal objects within the development area unless an Aboriginal Heritage Impact Permit (AHIP) has been issued by the Department.
- ☐ The applicant must comply with the conditions of any AHIP that is issued by Department.
- ☐ The applicant must ensure that all persons involved in actions or works covered by an AHIP (whether employees, contractors, sub-contractors, agents and invitees) are made aware of, and comply with, the conditions of any AHIP.
- ☐ Where an Aboriginal object/site will be avoided by the proposed works then the boundary of the site must be fenced, with a qualified archaeologist present, and marked as a 'no-harm area' to ensure they are not inadvertently impacted during development activities.
- ☐ No human remains in, on or under the land may be harmed. If any human remains are discovered and/or harmed in, on or under the land, the proponent or AHIP holder must:
 - a) not further harm these remains
 - b) immediately cease all work at the particular location
 - c) secure the area so as to avoid further harm to the remains
 - d) notify the local police and the Department of Planning, Industry and Environment's Environment Line as soon as practical on 131 555, providing any details of the remains and their location
 - e) not recommence any work at the particular location unless authorised in writing by the Department of Planning, Industry and Environment.

In addition to standard GTA, there would be the following requirements (these will be conditions of the AHIP) specific to this project and based on the information provided to BCD:

- ☐ Salvaged artefacts must be managed in accordance with Requirement 26 of the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (OEH 2010)
- ☐ As with other AHIPs there will be mandatory post AHIP activity report.

General Terms of Approval for proposed development requiring approval under s89, 90 or 91 of the Water Management Act 2000

Reference Number:	IDAS1122740
Issue date of GTA:	20 May 2020
Type of Approval:	Controlled Activity
Description:	Electricity Generating Works (solar farm)
Location of work/activity:	157 Windmill Road BOMEN
DA Number:	DA20/0016
LGA:	Wagga Wagga City Council
Water Sharing Plan Area:	Murrumbidgee Unregulated and Alluvial Water Sources

The GTA issued by NRAR do not constitute an approval under the Water Management Act 2000. The development consent holder must apply to NRAR for the relevant approval after development consent has been issued by Council and before the commencement of any work or activity.

Condition Number	Details
Design of works and structures	
GT0009-00010	Before commencing any proposed controlled activity on waterfront land, an application must be submitted to Natural Resources Access Regulator, and obtained, for a controlled activity approval under the Water Management Act 2000.
GT0013-00001	A. Any proposed controlled activity carried out under a controlled activity approval must be directly supervised by a suitably qualified person. B. A copy of this approval must be: i) kept at the site where the controlled activity is taking place, and ii) provided to all personnel working on the controlled activity
GT0019-00003	Any proposed excavation on waterfront land must be undertaken in accordance with a plan submitted as part of a controlled activity approval, to be approved by Natural Resources Access Regulator.
Erosion and sediment controls	
GT0014-00007	A. The consent holder must ensure that any proposed materials or cleared vegetation, which may: i. obstruct water flow, or ii. wash into the water body, or iii. cause damage to river banks, are not stored on waterfront land, unless in accordance with a plan held by Natural Resources Access Regulator as part of a controlled activity approval. B. When the carrying out of the controlled activity has been completed, surplus materials must be removed from waterfront land.
Plans, standards and guidelines	
GT0003-00073	The application for a controlled activity approval must include the following document(s): - site plan, map and/or surveys; Works Schedule; structural design and specifications; Soil and Water Management Plan; monitoring plan.
GT0005-00136	A. The application for a controlled activity approval must include the following plan(s): - Laying pipes and cables,

	Riparian Corridors, Vegetation Management Plans and Watercourse crossings. B. The plan(s) must be prepared in accordance with DPI Water's guidelines located on the website < http://www.water.nsw.gov.au/water-licensing/approvals/controlled-activity >.
GT0010-00006	All documents submitted to Natural Resources Access Regulator as part of an application for a controlled activity approval must be prepared by a suitably qualified person.
GT0012-00004	Any proposed controlled activity must be carried out in accordance with plans submitted as part of a controlled activity approval application, and approved by Natural Resources Access Regulator.
GT0038-00007	A. This General Terms of Approval (GTA) only applies to the proposed controlled activity described in the plans and associated documents found in Schedule 1, relating to Development Application DA20/0016 provided by Council to Natural Resources Access Regulator. B. Any amendments or modifications to the proposed controlled activity may render the GTA invalid. If the proposed controlled activity is amended or modified, Natural Resources Access Regulator, Parramatta Office, must be notified in writing to determine if any variations to the GTA will be required.
Rehabilitation and maintenance	
GT0011-00001	A rehabilitation plan for the waterfront land must be provided as part of a controlled activity approval application.
Reporting requirements	
GT0016-00003	The consent holder must inform Natural Resources Access Regulator in writing when any proposed controlled activity carried out under a controlled activity approval has been completed.

SCHEDULE 1

The plans and associated documentation listed in this schedule are referred to in general terms of approval (GTA) issued by NRAR for integrated development associated with DA20/0016 as provided by Council:

- ☐ DA Application Form
- ☐ Statement of Environmental Effects
- ☐ Wagga Wagga South Solar Farm Site Concept Layout
- ☐ Typical Riparian Zone Section
- ☐ Hydraulic Impact Assessment
- ☐ Concept Bulk Earthworks Plan
- ☐ Proposed Access and internal roads for Wagga Wagga solar farm South." Delete entire row and add N/A if no conditions are added"