JOINT REGIONAL PLANNING PANEL
(Southern Region)

JRPP No	**2016STH013**
DA Number	**DA16/0135**
Local Government Area	**Wagga Wagga City Council**
Proposed Development	**Electricity Generating Works (Solar Energy System) and 3 Lot Torrens Title subdivision and 260 Lot Community Lot subdivision**
Street Address	**Nil**
Applicant/Owner	**Applicant and Landowner : Southern Cross Energy Pty Ltd**
Number of Submissions	**Nil**
Regional Development Criteria (Schedule 4A of the Act)	**Clause 6 - Private Infrastructure and Community Facilities over $5 million**
List of All Relevant s79C(1)(a) Matters	**Wagga Wagga Local Environmental Plan 2010** **Wagga Wagga Development Control Plan 2010** **State Environmental Planning Policy (State and Regional Development) 2011** **State Environmental Planning Policy (Infrastructure) 2007** **State Environmental Planning Policy No 55-Remediation of Land (SEPP 55)** **State Environmental Planning Policy No 44- Protecting Koala Habitat (SEPP 44)**
List all documents submitted with this report for the panel's consideration	**Statement of Environmental Effects, by Geolyse, dated February 2016.** **Additional information in response to Council's information request, 23 March 2016**
Recommendation	**Approval subject to conditions**
Report by	**Adriaan Stander, Senior Town Planner**
Report date	**22 April 2016**

DESCRIPTION OF DEVELOPMENT

The development application consists of the following components:

- Subdivision of the subject land (Lot 108, Lot 109, Lot 110 DP 751405 and Lot 174 DP590756, Lot 1 DP771340) into 3 Torrens Title Lots with Lot 1 being 66ha in size, Lot 2 of 47.5ha in size and Lot 3 of 74ha in size. Proposed Lot 1 being the site of the former wool combing factory that features a range of industrial buildings together with various artificial water bodies. Proposed Lot 2 for the proposed solar energy system. Lot 3 will continue to be used for farming.

- Land use change to accommodate a 26 Megawatt (MW) solar energy system including electrical substation on proposed Lot 2.
- 260 Lot Community Title Subdivision within Lot 2. Each lot will be approximately 1,000 square metres and host a 100kilowatt (kW) solar array.

No permanent buildings (aside from the substation) are proposed. A temporary site compound including site buildings will be constructed for the duration of the construction stage and removed at completion.

The proposed solar panels have individual dimensions of 998mm by 1960mm and each module will consist of 330 panels each generating 300W. Subject to detailed design, the array within each module will be installed at a zero degree north azimuth with a fixed tilt from horizontal to 25 degrees. The panels will be mounted on fixed steel post structures. Racking would be installed on the steel posts that would hold the panels. Cabling beneath the modules will connect underground with a junction box which in turn will be connected to a substation. The substation will step the system voltage up from 22kV or 33kV to 66kv. A transmission line will be constructed to connect from the proposed substation to the existing 66kV overhead electricity transmission line which crosses proposed Lot 1, for connection to the state power grid. The current 66kV line is to be replaced by a 132kV line in future although the precise timing is unknown.

Other necessary components will include an unsealed/all-weather internal access to allow for site maintenance, perimeter security fencing and landscaping. The proposed fencing around the facility will have a minimum height of 2 metres and a maximum of 2.4 metres depending on final design and would feature galvanised pipe supports including top and bottom rails and three barbed wires along the top.

The solar energy system (including substation) will be located within proposed Lot 2 with only a short section of the proposed transmission line to be located with proposed Lot 1 for which an easement is required. The access to the proposed solar energy system will be provided off Byrnes Road via an access easement arrangement over Proposed Lot 1. Lot 3 will be able to obtain direct access off Trahairs Road.

The construction stage for the development will be approximately 20 weeks and the estimated life span for the facility is 25 years. It is likely at that the solar energy system will be decommissioned after 25 years and the land will be rehabilitated to be used for industrial purposes in accordance with the zoning.

The development is not considered Designated Development under Section 77A of the *Environmental Planning and Assessment Act 1979* read with Schedule 3 of the *Environmental Planning and Assessment Regulations* on the basis that the development does not constitute an electricity generating station with a capacity to produce more than 30 megawatts of electrical power. Electricity generating stations that supply more than 30 megawatts of electrical power from other energy sources (including coal, gas, wind, bio-material or solar powered generators, hydroelectric stations on existing dams or co-generation) would be considered Designated Development. The Statement of Environmental Effects submitted with the application is therefore sufficient to support the development application and an Environmental Impact Statement is not required.

SITE AND LOCALITY

The subject land consists of Lot 108, Lot 109, Lot 110 DP 751405 and Lot 174 DP590756, Lot 1 DP771340 and is located on the south-western corner of Byrnes Road and Trahairs Road, Bomen. Lot 108, 109, 110 and 174 are currently in use for primary production purposes. Lot 1 was the former site of a wool combing factory and features a range of industrial buildings together with various artificial water bodies. The remainder of the site has historically been used for agricultural purposes, being limited to grazing on natural and improved pastures. A 10m wide easement for a gas pipeline runs diagonally through Lot 108, 110 and 174 from north east to south-east.

The overall site is gently undulating with a north-easterly aspect.

Lot 174 contains an approximate 9 hectare fenced off stand of vegetation at the northern end, adjacent to Trahairs Road. The remainder of the subject site has historically been cleared for grazing purposes with some scattered trees, mainly regrowth along the existing fence lines. To the east of Lot 1 is the Main Southern Railway and Byrnes Road, a local road from which the lot obtains access. Trahairs Road provides the primary road address for Lot 108, 110 and 174. Lot 109 currently is land locked.

The locality to the east, west and north is generally characterised by broad acre farming enterprises with scattered residential dwellings. The locality to the south and south-west is characterised by industrial land uses, including the Renewed Metal Technologies and Buckman Laboratories Administration and Technical Centre. Riverina Oils and a Bio Energy facility is located north opposite Trahairs Road.

MATTERS FOR CONSIDERATION UNDER THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

The following documents were submitted and have been considered as part of the assessment of the development application.

- Statement of Environmental Effects, by Geolyse, dated February 2016.
- Additional information in response to Council's information request, 23 March 2016.

It should be noted that the above documentation includes reference to a 12 Lot Subdivision. The original application was for a 12 Lot Torrens Title Subdivision with a solar energy system and Community Title Subdivision on one of the proposed lots. The proposed subdivision was considered out of sequence and not essential to the main purpose of the subdivision which is to establish a lot to accommodate the solar energy system on the subject land and to improve the management regime of the land. The application was subsequently amended to reflect the current proposal for a 3 Lot Torrens Title Subdivision with a solar energy system and Community Title Subdivision on proposed Lot 2.

For the purpose of reviewing this determination, the following matters pursuant to the provisions of *Section 79(C)1 of the Environmental Planning and Assessment Act 1979*, have been taken into consideration.

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

Wagga Wagga Local Environmental Plan 2010 (LEP)

Part 2 Permitted or prohibited development

2.3 Zone objectives and Land Use Table

Under the provisions of the Wagga Wagga Local Environmental Plan 2010 (LEP), the

subject site is within the General Industrial (IN1) zone and the development is described as '*electricity generating works'*. The proposal includes a 3 Lot Torrens Title Subdivision and 260 Lot Community Title Subdivision. The proposed land use and subdivisions are permitted with consent in the IN1 Zone on the basis that they are not listed as either permitted without consent or prohibited. The objectives of this zone are:

- *To provide a wide range of industrial and warehouse land uses.*
- *To encourage employment opportunities.*
- *To minimise any adverse effect of industry on other land uses.*
- *To support and protect industrial land for industrial uses.*

Although proposed development does explicitly meet above objectives, the development is of a nature that is compatible with the long term vision of Bomen and the Bomen Master Plan that has a strong focus on enabling renewable energy in the locality. The proposed subdivision and solar energy system would not inhibit the future potential of the land to be developed for industrial purposes in accordance with zone objectives. The proposed solar energy system will be a relatively innocuous use with very low levels of ongoing impact to amenity. The project lifespan for the facility is approximately 25 years after which the facility may be upgraded with new technology or will be decommissioned and the land be made available for another land use consistent with the industrial zoning of the land.

The proposed development has the potential to conflict with other land uses however, an assessment of this application has concluded that the facility can be managed and operated in a manner to reduce the impacts on existing and potential future land uses in the locality.

2.6 Subdivision - consent requirements

Clause 2.6 establishes that consent is required for subdivision. The application includes the following subdivision proposals.

- The proposed Torrens Subdivision will reconfigure 5 existing lots (Lot 108, Lot 109, Lot 110 DP 751405 and Lot 174 DP590756, Lot 1 DP771340) into 3 lots (Lot 1 of 66ha, Lot 2 of 47.5ha and Lot 3 of 74ha). Lot 1 being the site of the former wool combing factory that features a range of industrial buildings together with various artificial water bodies. Lot 1 will contain an access easement in favour of Lot 2 as well as an easement for a transmission line from the proposed substation on Lot 2 to the 66 kilovolt (kV) electricity transmission line that traverses the lot. Lot 3 will continue to be used for farming.
- The Community Title Subdivision within Lot 2 will create 260 x 1,000 square metre lots. Each lot will host a 100kilowatt (kW) solar array. The common area within the community title scheme is the area surrounding the panels that will be used as a buffer zone and include landscaping. The individual community title lots will be sold to investors, who will in turn share in the profits from the sale of energy to the grid. A draft community title management statement has been submitted with the application setting out the management measures for the scheme including the method of dissolution.

The proposed subdivision has taken into account future road alignments of the Bomen Master Plan and as such provides for two easements consistent with the indicative future road layout. As identified on the submitted plans, it is the applicant's intention to construct and dedicate these roads as public roads when future road infrastructure reaches the site.

The proposed subdivision is supported as it will assist in the management regime of the land without creating land locked parcels or result the stagnation land for future industrial use.

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

5.9 Preservation of trees or vegetation

The objective of this clause is to preserve the amenity of the area, including biodiversity values, through the preservation of trees and other vegetation. The proposal includes one tree removal in the location of proposed Lot 2 to accommodate the proposed solar energy system. The proposed tree to be removed is a Eucalypt Tree and is the process of dying. Council's Tree Manager has supported the removal of the tree. Offset planting over and above the DCP rate is proposed as part of the landscape buffers. The plantings will also be secured vie recommended conditions of consent.

A further area of existing vegetation located within the south eastern corner of the site will be retained within the common property of the subdivision and will be maintained though ongoing management of this land.

5.10 Heritage conservation

Although the site is not mapped by Council as a site containing known significant cultural and/or heritage values or items, two aboriginal heritage assessments have been undertaken previously on the site due to development within and proximal to the proposed development site, in particular the nearby development of the Integrated Oilseed Processing Plant (on Lot 12 DP 1130519, north of the subject site opposite Trahairs Road) and the APA Looping Pipe line between Young and Wagga Wagga which traverses Lot 1 DP771340 (the former wool combing factory site and proposed Lot 1 under the current application).

- The proposed development site was part of the Oilseed Processing Plant heritage assessment in 2007 and no Aboriginal site was identified during the assessment or on-site investigation.
- The heritage assessment for the APA pipeline identified a stone artefact within Lot 174 DP751405 (Proposed Lot 2). The artefact is located approximately 10m west of the eastern boundary of the site. The artefact is a reddish brown mudstone flake measuring 23mm x 25mm x 8mm with a flaked platform, feather termination with multiple dorsal scars. Although the artefact is located within the development site, it located outside the zone of impact of the proposed solar energy system and associated works.

It is a condition of consent that a 'no harm zone' be established around site in consultation with the local Aboriginal community and measures to protect the site must be incorporated into a Construction Management Plan.

Conditions of consent also require that if any other Aboriginal object is discovered and/or harmed in, on or under the land, the proponent must not further harm the Aboriginal object, immediately cease all work at the particular location, secure the area so as to avoid further harm to the Aboriginal object, notify the Office of Environment and Heritage, providing any

details of the Aboriginal object and its location, and not recommence any work at the particular location unless authorised in writing by the Office of Environment and Heritage.

5.11 Bush fire hazard reduction

Although the site is not mapped as being prone to bushfire, a bush risk exists as result of potential ignition and combustion inherent with certain infrastructure (such as transmissions lines and substations). The application addressed the bushfire risk as follows:

"The site is relatively flat and largely cleared of over storey vegetation within the area of the proposed solar energy system. The site has been cropped (currently with canola) and understorey fuel load varies but are considered relatively low. The southern and eastern boundaries contain tree lines which will be retained and augmented via the proposed landscaping plan. These corridors are currently narrow and sparse and would remain relatively so. Within the proposed residue allotment (proposed Lot 3) a stand vegetation exists in the north-western corner adjacent to Trahairs Road. There would be no physical impact to this vegetation via this application. Proposed landscaping around the solar energy system would not connect with any stands of substantial timber. Unmanaged grasslands in adjacent lands pose a minor risk from ignition.

At a local level (within 5 kilometres), the tree corridors are considered to have low levels of connectivity to other treed areas and would have low potential to spread a bush fire. The proposed transmission line would have only a short length connecting the proposed substation to the existing 66kV electricity transmission line that runs parallel to the western boundary of proposed Lots 2 and 3. It would not affect any vegetation.

The local bush fire season generally occurs between October and March; the local area experiences warm to hot dry simmers and cool winters, with autumn/winter predominant rainfall. North to westerly winds are common with high daytime temperatures and low relative humidity, which increases bush fire risk. Dry summer storms have the potential to produce lightning.

Historically, the Riverina Bush Fire Management Committee (RBFMC) area has experienced 200 bush fires on average per year, including approximately two major fires per year. The RBFMC Bush Fire Risk Management Plan (RBRMP) (RBFMC 2010) identifies the main ignition sources as electrical storms, lightning, escapes from legal burning off, incendiarism and accidental ignition. The RBRMP, prepared in accordance with the Rural Fires Act 1997, sets out a five year strategic management plan to reduce bush fire risk on private and public land within several areas of southern NSW including the Wagga Wagga LGA.

The proposal area lies within the East bush fire management zone via the RBRMP and the Bomen area is identified as asset 71 (human settlement). The asset type nominated as a human settlement (residential). Likelihood of a bush fire igniting and spreading in this area is identified as low, the consequence of such an event is considered moderate and the overall risk is low. No specific treatment measures are identified for this site.

The proposal includes two infrastructure components, transmission lines and a substation, with a risk of exacerbating or causing fire.

The nearest Rural Fire Service station is located in the suburb of Ashmont at 208 Fernleigh Rd, Ashmont NSW 2650."

Although the applicant has nominated the bush fire risk as being low, Council is of the opinion that proposed use has the potential to increase the bushfire risk in the locality and it therefore recommended that a perimeter fire trail will be provided within a 20 metre Asset

Protection Zone around the solar energy system (wholly within the subject property) and that a Bushfire Management Plan be prepared in consultation with Rural Fire Services and implemented as part of the Operational Environmental Plan for the site.

Part 6 Urban release areas

6.1 - Arrangements for designated state public infrastructure

Clause 6.1 requires that the Director-General for the Department of Planning provides certification that satisfactory arrangements are in place for the provision of state public infrastructure prior to the issuing of any Development Application within an Urban Release Area. The Director-General has provided this certification.

6.2 - Public utility infrastructure

Clause 6.2 requires that development consent must not be granted for development on land in an Urban release area unless the Council is satisfied that any public utility infrastructure that is essential for the proposed development is available or that adequate arrangements have been made to make that infrastructure available when required. Infrastructure to service the development is in place. It is considered that with the imposition of suitable conditions, such as requiring the submission to Council prior to the release of the Construction Certificate of details of satisfactory arrangements between the developer and public utility authorities for the provision of services will satisfy this clause.

6.3 - Development Control Plan

Under the provisions of clause 6.3, a development control plan must be prepared for an urban release area before the subdivision of land within the urban release area can occur. Such a development control plan has been prepared and is in place (this is discussed in more detail in this report under the provisions Chapter 13 of the Wagga Wagga DCP).

Part 7 Additional Local Provisions

7.2 Flood Planning

The land is not identified as being flood affected.

7.3 Biodiversity

Small portions of land on the lot are mapped as being a *"Biodiversity"* area on which the impacts of the development on biodiversity should be considered. This area corresponds with the stand of existing vegetation located within the south eastern corner of the site which will be retained and managed as part of the development. The remainder of the site comprises land cleared for agricultural purposes (mainly grazing of livestock), introduced grassland and occasional paddock trees.

The application indicates that an ecological assessment of the site was completed in March 2014. *"The extensive history of agricultural land use has resulted in loss of native groundcover and mid-storey. In addition, established pasture, cropping and associated vegetation limits the potential for the rehabilitation of a native assemblage reminiscent of the original community. A single eucalypt tree exists within the study area; this tree is isolated and not connective to other woodland communities.*

There are no communities present within the study area that are representative of any of the listed threatened Ecological Communities listed under the TSC Act or the EPBC Act.

No threatened species were recorded during the field survey.

The single eucalypt tree within the study area may provide some threatened bird species (i.e. Superb Parrot) with opportunistic foraging but nesting habitat is not favourable. In

addition, the habitat quality of this tree is low due to high exposure and disturbance.

Isolated and large hollow bearing trees may provide sub-optimal refuge and roost habitat for bat species. However, the single tree at the study area does not provide preferred habitat due to high competition from Starling occupation, and existing high levels of exposure and disturbance from agricultural activities.

Surrounding agricultural lands do not present any unique or optimal habitat for threatened species or populations."

In addition to the above, the LEP has received biodiversity certification in which includes the subject land. Any Development Application located within the certified area is taken to be development that is not likely to significantly affect any threatened species, population or ecological community, or its habitat. Furthermore, the DCP requires that offset planting be made to offset any tree removal. A significant area of tree planting and other landscape works, as offset works, will assist in reinstating native vegetation lost during historic land clearing for rural cropping and grazing activities and it is therefore considered that the proposal complies with the outcomes sought under this clause of the LEP.

7.5 Riparian lands and waterways

The site is not situated within 40m of the bank or shore (measured horizontally from the top of the bank or shore), of a waterway. The proposed development would be offset from the waterway in the eastern extent of the site by not less than 40 metres. The waterway will be contained within the common property of the subdivision and will be maintained though ongoing management of this land.

7.6 Groundwater vulnerability

The site is not identified as a sensitive area on the Natural Resources Sensitivity Map - Water. Given the largely passive nature of operations, impacts to the local surface and groundwater environments in relation to ongoing operations are considered to be limited.

Construction impacts to groundwater are possible and would likely relate to spills of chemicals or fuels. It is anticipated that chemicals and fuels during construction would be limited to fuel for construction vehicles, petrol for hand held equipment and herbicides. There would also be a period during construction when the transformers are filled with transformer oil for the first time. The specifics of how these activities would be managed to minimise impact would be detailed in the construction management plan. Conditions of consent also require that all oil filled transformers shall be bunded. The extent of bunds shall be such that oil containment during possible spills, leaks and fires cannot propagate to adjoining transformers, structures, adjacent premises, soil and waterways.

Clearing of trees can impact groundwater via the rise of saline groundwater through the soil profile, however as only one tree is to be cleared it is not considered that this is likely for the subject site.

No water is proposed to be extracted from groundwater sources for construction purposes.

An erosion and sediment control plan would form part of any Construction Management Plan and would address practises around stockpiling and clearing measures.

State Environmental Planning Policies

State Environmental Planning Policy (State and Regional Development) 2011

Under Schedule 4a of the Environmental Planning and Assessment Act 1979, the Southern Joint Regional Planning Panel may exercise the consent authority functions of Council in the following instances:

- *Development with a Capital Investment Value over $20 million,*
- *Development with a Capital Investment Value over $5 million which is:*
- *Council related*
    - *Lodged by or on behalf of the Crown (State of NSW)*
    - *For private infrastructure and community facilities*
    - *Eco-tourist facilities*
    - *Extractive industries, waste facilities and marinas that are designated development,*
    - *Certain coastal subdivisions,*
- *Development with a Capital Investment Value between $10 million and $20 million which is referred to the regional panel by the applicant after 120 days from lodgement as undetermined, and*
- *Crown development applications (with a Capital Investment Value under $5 million) referred to the regional panel by the applicant or local council after 70 days from lodgement as undetermined, or where recommended conditions are in dispute, or local council recommends refusal.*

The development is regional development for which the Joint Regional Planning Panel must exercise the function of the consent authority, due to the development being a private infrastructure facility with a Capital Investment Value exceeding $5 million. The development has an estimated construction value of $1.5 million with a Capital Investment Value of $18 million.

State Environmental Planning Policy (Infrastructure) 2007

By virtue of Clause 34 of Division 4 of Part 3 of the SEPP the development of solar energy systems are permitted with consent on any land by any person.

A solar energy system is defined by the ISEPP as:

solar energy system means any of the following systems:

(a) a photovoltaic electricity generating system,

(b) a solar hot water system,

(c) a solar air heating system.

It is considered that the proposed development satisfies the above definition and is therefore permissible with the consent of the relevant consent authority, in this case the Joint Regional Planning Panel.

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. Given the proximity to the existing 66kV line, and the intention to connect the solar energy system to this line, it is considered that Clause 45 is applicable. The application was referred to Essential Energy for comment. Essential Energy provided a response which indicates its support of the proposal subject to conditions that also require further negotiation and contractual arrangements with the applicant for a HV connection/large embedded generator.

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

SEPP 55 prescribes a statutory process associated with the development of land that is contaminated and needs remediation. Clause 7 of the SEPP No. 55 states that a consent

authority must not consent to the carrying of development unless it has considered, among other things, whether the land is contaminated.

Lot 1 DP771340 is listed on Council's Land Contamination Register as it the site of a former wool combing operation. The site contains a large series of waste water ponds which were used to treat waste generated by the wool combing process. The proposed solar energy system will not make use of the former waste water ponds nor will the management regime of ponds change as a result of the proposed subdivision.

The Wagga Wagga Development Control Plan 2010 makes reference to the undertaking of an Environmental Site Assessment in respect of the Bomen Industrial Estate, of which the subject site forms a part. The study found some contamination resulting from wool processing, manufacturing, agricultural and other activities on two sites, described as:

- *The southern part of the site that lies to the east of Byrnes Road; and*
- *The area covering the land owned by Rivco Pty Ltd to the north of East Bomen Road.*

The above sites are, respectively, existing Lot 1 DP771340, part of the application site, and Lot 3 DP594679, land to the south-west of the subject site and not forming part of the application site. The study concludes that these sites can be remediated to enable industrial land uses.

The proposed development will not utilise nor interact in any way, beyond the transmission pole installation and access arrangement, with the land within Lot 1. It is not considered that any remediation is likely to be required for this very limited element of interaction. Specific controls would be implemented via the Construction Management Plan to ensure measures are in place to provide protection to construction workers.

The remainder of the lots forming part of this application have been historically used for broad acre primary production purposes. There is a risk that contamination associated with agricultural activities (e.g., pesticides) could be present on the site however, given no contaminated sites are recorded on or adjacent to the proposed development and that no evidence of contamination was observed during the site visit or mentioned during conversations with the land owner, it is considered highly unlikely that significant contamination exists in areas that would be affected by the proposal. Furthermore, the construction activities would not significantly disturb soil or groundwater at the site, given the proposed screw pier installation method proposed.

State Environmental Planning Policy No 44- Protecting Koala Habitat (SEPP 44)

SEPP 44 aims to "*encourage the proper conservation and management of areas of natural vegetation that provide habitat for Koalas, to ensure permanent free-living populations over their present range and to reverse the current trend of population decline...*"

Core koala habitat is defined as:

...an area of land with a resident population of Koalas, evidenced by attributes such as breeding females and recent sightings of and historical records of a Koala population...

If the area does not support 'core koala habitat', under clause 8 of the policy, the consent authority may determine the development application. If the site is determined to support 'core koala habitat', then a plan of management must be prepared and approved prior to granting development consent. A flora assessment has been conducted by the application and it has been determined that the site does not support potential koala habitat.

(a)(ii) - The provisions of any draft environmental planning instrument

Draft local environmental plans

There are no draft local environmental plans relevant to this application.

Draft state environmental planning instruments

There are no draft state environmental planning instruments relevant to this application.

(a)(iii) - Any development control plan

Wagga Wagga Development Control Plan 2010 (DCP)

The following section of this report details the development with reference to the Guiding Principles, Objectives and Controls of the *Wagga Wagga Development Control Plan 2010.*

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 an advertisement was placed on the site and in the local newspaper. See later in this report under S79C(1)(d) for further discussion of this matter.

Section 2 - Controls that apply to all development

2.1 Vehicle access and movements

This section contains controls to ensure the safe and efficient operation of roads within the local government area of Wagga Wagga. The subject site has frontage to Byrnes Road to the west, Trahairs Road to the north as well a vehicle track (M190) to the east of the subject site. The access to the proposed solar energy system on Proposed Lot 2 will be provided off Byrnes Road via an access easement over Proposed 1 in favour of Lot 2. Lot 3 will be able to obtain direct access off Trahairs Road. Traffic impacts would be limited to the construction and decommissioning periods, with peak periods being morning and afternoons as the construction workforce arrive and depart. Construction is anticipated to occur in one shift only between standard working hours, 7am to 6pm Monday to Friday, 7am to 1pm Saturday. No work would occur on Sundays or public holidays. The decommissioning program is proposed to follow the same general arrangement. Conditions of consent require a construction traffic management plan to be incorporated as part of the Construction Management Plan.

Traffic generation associated with the ongoing operation of the solar energy system is considered to be negligible as it would be for maintenance purposes only.

2.2 Off-street parking

This section requires developments to provide off-street parking to meet anticipated demands. The DCP has no specific parking requirements in relation to solar energy systems and the proposed solar energy system does not generate any ongoing parking demand as access would be limited to one maintenance vehicle that would be moving throughout the site. The recommended conditions of consent do not require on-site parking.

2.3 Landscaping

Landscaping is an important aspect of any development, and complements good design. Trees, shrubs and green spaces can “soften” the impact of a development and can screen it from surrounding uses. A concept landscape plan has been submitted with the application, which indicates a sympathetic introduction of vegetation to the existing landscape. The site will undergo considerable visual changes because of the physical works required in establishing the solar energy system. Landscaping including tree

planting is proposed around the solar energy system and once the proposed landscaping works are completed, they will provide appropriate native vegetation plantings to provide visual screening and to provide a buffer to adjoining land uses. A condition of consent will require a more detailed landscape plan in accordance with the provisions of this clause and Council's Landscape Guidelines.

2.4 Signage

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

2.5 Safety and Security

The development is designed to optimise property security by way of clear definition of the secure compound area. The site will be externally fenced including locked gates to limit access. The site will also be regularly inspected and maintained to ensure that any degradation of facilities is corrected in a timely fashion. 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 energy system will be managed via an Operational Management Plan that will include site safety and security measures. This would ensure that operational impacts are appropriately managed and that avenues are provided for site management and the like.

The applicant is required to apply to connect to the electricity network through Essential Energy. Essential Energy's approval would subject to the implementation of various safety measures during the construction, ongoing operation and decommission phase.

2.6 Changing the land form - cut and fill

Only minor works are proposed to provide a clear construction area for the solar energy system. No physical amendment of the site is proposed. Any excavation or filling will be required to comply with the requirements of the relevant controls and conditions of consent.

2.7 Erosion and Sediment Control Principles

Temporary sediment and erosion control measures will be implemented during construction. Conditions of consent are imposed in this regard. The conditions will also require erosion and sediment management which must be implemented as part of the Construction Management Plan.

Section 3 - Heritage Conservation

Matters regarding heritage conservation have been discussed elsewhere in the report under the LEP provisions. An Aboriginal artefact exists on the site and is located approximately 10m west of the eastern boundary of the subject site. The proposed solar farm and associated works are clear of this area. It is a condition of consent that a 'no harm zone' be established around site in consultation with the local Aboriginal community and measures to protect the site must be incorporated into a Construction Management Plan.

Conditions of consent also require that if any other Aboriginal object is discovered and/or harmed in, on or under the land, the proponent must not further harm the Aboriginal object, immediately cease all work at the particular location, secure the area so as to avoid further harm to the Aboriginal object, notify the Office of Environmental Heritage, providing any details of the Aboriginal object and its location, and not recommence any work at the particular location unless authorised in writing by Office of Environmental Heritage.

Section 4 - Environmental Hazard and Management

The site is not affected by flooding. As mentioned elsewhere in the report, although the site is not mapped as being bushfire prone, a bush risk exists as result of potential ignition and combustion inherent with the solar energy system. It is recommended that a Bushfire Management Plan be prepared in consultation with Rural Fire Services and implemented as part of the Operational Management Plan for the site.

Section 5 - Natural Resources and Landscape Management

The application has sufficiently demonstrated that development would have no significant impact to existing landscaping on Byrnes Road or along creek lines. Only one isolated paddock tree would be removed as a result of the development. The loss of this tree would be offset by extensive landscaping. A ridgeline traverses the site on a north-south axis, with a typical fall to the east. An assessment of potential impact to visual amenity has been completed to determine the extent, if any, of visual impact associated with the proposed development. The assessment concludes that the development would not lead to any unreasonable visual impacts to the public domain or nearby receptors. No permanent roads are proposed. Extensive buffer zones with native vegetation plantings are proposed to protect the rural landscape, provide visual screening and to provide a buffer to adjoining land uses.

Section 13 - Bomen Urban Release Area

This Section establishes preferred land use patterns in Bomen to ensure access to transport infrastructure and also sets out a hierarchy of possible direct and legible routes through and within Bomen. The DCP provides a framework of infrastructure corridors to provide the basis for and to facilitate a logical roll out of staged development. The objectives include efficient use of land, and existing and new infrastructure, water collection and reuse, preservation of native vegetation, and improvement of existing vegetated and creek line areas. The proposed development is considered to comply with the overall objectives under Section 13 of the DCP and to meet the outcomes sought for the Bomen Industrial Area in accordance with the Bomen Structure Plan.

13.4 Site Topography and Landscape Character

The locality and surrounding area identifies a number of significant landscape features including a major ridge line on the subject site. The following controls apply:

C1 Retain existing vegetation along the Olympic Highway and Byrnes Road and along creek lines and all other treed locations indicated on the Bomen Site Topography and landscape character plan.

The proposal does not include tree removal along Olympic Highway or Byrnes Road. Only one tree is to be removed on site as a result of the proposal. The tree removal is supported.

C2 Protect ridgelines as visual features of Bomen. Ridgelines at all times are to remain visible above the topmost ridge of all new buildings, when viewed from any point along the eastern boundary of the Bomen Urban Release Area.

A ridgeline traverses Proposed Lot 1 on a north-south axis, with a typical fall to the east. The proposed solar panel structures will have a height above ground level of approximately 2.5 metres and would be orientated to the north. An assessment of potential impact to visual amenity has been completed to determine the extent of visual impact associated with the proposed development. The assessment concludes that the development will not lead to any unreasonable visual impacts to the public domain or nearby receptors. Additional screen planting is required under conditions of consent.

C3 Roads and pathways should generally run along the contours of the land and generally perpendicular to the contour where the land is steeper.

Although no roads are proposed as part of the development proposal, conditions of consent require easements over the proposed road corridors for future public road construction and associated infrastructure. These roads are in accordance with the road network plan contained within this section of the DCP and are located along the contours of the site.

C4 Development Applications shall include management and mitigation information for land identified in the LEP as environmentally sensitive.

Only small area identified in south eastern corner of site. Development remote from this area and will form part of common property and will be contained as a buffer around the development which will be maintained through Operational Management Plan.

C5 Development with large building footprints should be sited on flatter land to avoid excess cut and fill. 3D modelling including view corridors will be required for development applications for sloping land with a gradient of over 10 percent.

The proposed development will not require cut and fill.

13.5 Distribution of Land Uses

The Bomen Precinct Plan shows the preferred distribution of land uses within Bomen. This is based upon the LEP Urban Release Area Zone, topography, natural features, location of railway line, major roads and existing industrial development, and proximity to adjacent existing residential development. The following controls apply:

C1 Development Applications shall respond to the distribution of uses proposed in the Bomen Precinct Plan.

C2 It is preferred that the eastern side of Byrnes Road will contain larger lots (> 5Ha) (see Subdivision Design Principles Diagram. Figure 12) and that "cleaner" developments locate in that area.

C3 It is preferred that heavier industry locates on the land west of Byrnes Road, which can accommodate a variety of lot sizes.

The proposed development is in accordance with the precinct plan and is consistent with the above controls. The nature of the proposed use means that once decommissioned, the potential use of the site for future industrial uses and subdivision remains.

13.6 Major Infrastructure Planning

This section of the DCP provides detail of existing and planned road infrastructure to service the future industrial growth of Bomen. This includes major infrastructure corridors (electricity, gas, water, sewer and telecommunication), major internal roads, major external linkages, and rail services.

C1 Maintain existing easements for infrastructure, as shown in the Bomen Precinct Plan Map.

The development will maintain the APA and power grid easement through the property.

Although no roads are being proposed as part of the development proposal, conditions of consent require easements over the proposed road corridors for future public road construction and associated infrastructure.

C2 New infrastructure shall be located in major road corridors except for Trahairs Road

No new external infrastructure is required to service the development. Easements within Lot 1 will be created to allow access and connection with the electricity grid.

C3 Subdivision can only be considered where there are appropriate arrangements for servicing (electricity, gas, water, sewer and communications).

Only an electrical connection is required for the development.

C4 The developer shall be responsible for providing reticulated mains sewer supply to allotments, including associated pump stations, to the satisfaction of Council.

No sewer is required for the development.

C5 Developers should discuss expected water usage with Riverina Water County Council at an early stage of project planning, as there may be restrictions of supply due to existing infrastructure capacity or topography. Development is not permitted over the utility corridor that accommodates the water supply main.

There is no water demand associated with the development.

C6 Developers should refer to the Precinct Plan Map for sewer servicing planning. Detailed sewer design plans for each stage of subdivision must be submitted with the development application for that stage of subdivision.

There is no sewer demand associated with the development.

C7 Developers should consult with Telstra to determine telecommunications requirements. Costs for providing communications infrastructure will be shared between Telstra and the developer.

There is no telecommunications demand for the development.

C8 Gas supply depends on the type of industry that establishes in Bomen. Developers should consult with Country Energy Gas in relation to gas supply.

There is no gas demand associated with the development.

C9 Developers shall supply load applications to Country Energy to determine specific electrical requirements. Where sites are serviced by existing overhead 11kV electrical mains the proponent should consult with Country Energy to determine the opportunity for these lines to be placed underground. Developers are encouraged to discuss timing of placement of underground cables in order to reduce costs.

Essential Energy has granted consent for the connection to the power grid, subject to further negotiations and contractual arrangements.

C10 Use existing available land for the purposes of a corridor to provide services and service road (refer to Proposed Road Location and Hierarchy diagram Figure 6)

There will be no water, sewer or gas demand due to the nature the development. The development will be connected to the state power grid. Essential Energy has indicated support of the development to be connected to the power grid.

13.8 Location of Principal Internal Movement Linkages

Access to the proposed solar energy system will be provided off Byrnes Road via an access easement over proposed Lot 1 in favour of Lot 2. Lot 3 will have access off Trahairs Road. The access arrangement for the proposed development and lots created as a result of the subdivision are considered sufficient.

It is the applicant's intention to provide future public road linkages through the site in accordance with the "Proposed Road Location and Hierarchy diagram" contained in this

section of the DCP. The road hierarchy plan identifies two 36 metre wide road running north to south through proposed Lot 2. The applicant has maintained appropriate corridors within the development to accommodate this infrastructure.

Obviously, the proposed road infrastructure cannot be developed until such time that road infrastructure has been extended to the boundaries of Lot 2. The availability of this infrastructure may take many years and will be subject to innumerable future planning decisions surrounding the development of surrounding land within Bomen. When the infrastructure is available at the boundary of Lot 2, the applicant intends to construct the roads through the site and to provide them for public access. This will then enable the continued orderly development of the Bomen industrial area in accordance with the adopted hierarchy plan.

It is recommended that a condition of any consent require that the corridors be secured by covenants and these covenants require the construction and dedication of the roads (and associated infrastructure) when public road access becomes available at the boundary of the site. The road construction will be subject to the submission of and approval of a further development application by Council.

13.9 Land Release and Subdivision Staging

Staging the release of land within the Bomen Industrial Area is crucial to achieving efficient provision of services and infrastructure to all land within the urban release area.

The stages are based on encouraging development to expand from the sites of existing development within Bomen. This allows for the continued use and upgrading of existing and currently proposed infrastructure and services, as well as the planned efficient provision of new infrastructure and services. Staging also seeks to avoid inefficient leapfrogging of development. The proposed development is located within the existing and Stage 1 release areas. The proposed development is not anticipated to have any significant impact on services other than providing sustainable energy that is anticipated will encourage industrial development in the locality consistent with the Bomen Master Plan. Other potential impacts associated with the use including odour, noise etc. are discussed elsewhere in this report. The proposed subdivision is supported as it will assist in the management regime of the land without creating land locked parcels or resulting in the stagnation of land for future industrial use.

The proposed development is therefore considered appropriate for the locality and meets all relevant outcomes sought under this section of the DCP.

(a)(iiia) - any planning agreement that has been entered into under section 93F, or any draft planning agreement that a developer has offered to enter into under section 93F, and

There are no planning agreements in place for this proposal.

(a)(iv) - any matters prescribed by the regulations

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

(b) - The likely impacts of the development

Context and setting

The site is located within an industrial area, with developed industrial sites to the south and south-west. The surrounding area to the east, west and north is zoned for industrial purposes but characterised by broad acre farming enterprises, including cropping and grazing with regular use of machinery. Existing structures within the vicinity include an

Oilseed Processing and Biodiesel Plant towards the north western end of the site, large industrial sheds on the south western portion of the property and a laboratory facility to the south. The site is bounded by Byrnes Road and the Main Southern Railway to the west. Bomen Industrial Estate is located approximately 3km south of the site.

The site has historically been used for grazing and cropping, irrigated by treated wastewater from the Wool Combing Facility which is on the south eastern portion of the site. The development is assessed as being integrated with the physical attributes of the site, including appropriate provision of access, landscaping, buffer zone etc. The site development plan submitted with the application sufficiently indicates the site constraints in terms of land form, orientation and accessibility. The natural contours of the site results in a natural drainage pattern and will not be altered as a result of the proposed development. Consideration of the effect of the proposed development on the site has been undertaken, and it is considered that the proposal will be able to be managed in a way to minimise impacts on the environment.

The use of the site as a solar energy system would not lead to any ongoing impacts that would detrimentally impact on the way of life or operations of nearby properties. The use of the site as a solar energy system would have a lower ongoing level of impact to surrounding residential receivers than would be expected with a cropping land use. It is considered that from a long term sense the proposal will be entirely consistent with the character of the area and entirely compatible with adjacent land uses.

However, during transition from a rural area to an industrial area there will be some potential for conflict and inconsistencies in character. These short term effects are unavoidable during these transitional stages, however, a strategic decision has been made for the conversion of the locality to industrial uses, and therefore considered acceptable. Impacts to adjacent land uses would be primarily related to the construction period. Impacts associated with this would be controlled and managed through the implementation of a Construction Management Plan. Subject to the implementation of the management plan, it is considered that the development would not detrimentally impact adjacent properties. Due to the nature of the use, on-going operations are unlikely to lead to any detrimental impacts. On project completion, the site would be decommissioned and would be available for use for industrial purposes, with no on-going limitations.

Access, transport and traffic

The subject land is bound by Byrnes and Trahairs Road. Byrnes Road provides a north-east/south-west route between Wagga Wagga and Junee. The speed limit along this portion of Byrnes Road is 100 km/hour reducing to 80km/hour south of the subject site.

Lot 1 DP771340 currently obtains access off Byrnes Road and Trahairs Road provides the primary street address for Lot 108 and Lot 110 DP 751405 as well as Lot 175 DP590756. Lot 109 DP 751405 is currently land locked. The access to the proposed solar energy system on Proposed Lot 2 will be provided off the existing via an access easement arrangement over Proposed 1. Lot 3 will be able to obtain direct access off Trahairs Road.

Lot 1 is currently accessed by a formal access capable of accommodating vehicles up to B-double size. This existing access is capable of accommodating all construction traffic and would ensure adequate sight lines (minimum 300 metres).

Traffic generation associated with the solar energy system is considered be negligible as it would be for maintenance purposes only. The total site area for the solar energy system element is approximately 30 hectares. There is sufficient capacity on the site to accommodate a construction compound and parking for construction staff and plant.

Visual amenity and glare

An assessment of potential impact to visual amenity and glare of the proposed development has been provided with the application and is contained in the submitted Statement of Environmental Effects. The assessment of potential impact to visual amenity consists of a baseline study and an assessment of visual impact. The baseline study assesses the existing visual character of the area to be impacted, with reviews of the way in which views are experienced in the places from where the development will be visible.

The locality is a rural landscape. The locality and surrounding area includes a number of significant landscape features including a major ridge line on the subject site aligned parallel with the adjacent railway line and Byrnes Road. The ridgeline traverses Proposed Lot 1 on a north-south axis, with a typical fall to the east.

The proposed solar energy system will be partially visible from a number of rural residences in the surrounding area, with these receptors deemed to have the highest sensitivity due to the perceived value of landscape character and the duration of views. The proposed project will impact the sustained view of a number of residences in the locality, although many will be obscured by foreground vegetation. The properties lying directly to the east or west of the site will have a side view of the solar panel structures, southern properties will have a rear view and northern properties will have a front view with the greatest landscape contrast. While the project site takes up a notable portion of the horizontal view pane, the impact of the proposed development will be minimal relative to the existing Oilseed Processing and Biodiesel Plant and Industrial Sheds.

The proposed development will be visible from Byrnes Road which borders the west of the site, as does the Main Southern Railway, which runs parallel to Byrnes Road. The Main Southern Railway runs immediately parallel to Byrnes Road. There are two daily commercial train services (the Southern XPT) running between Wagga Wagga and Junee, with one of these services occurring at night and as such would not be impacted by the development. Freight trains make up the balance of traffic along the rail line. Views from the railway line would be similar to those observed from Byrnes Road.

The Olympic Highway runs further to the west of the project site. Although heavy traffic flow occurs, views are largely obscured by trees and undulating terrain. Site views from the major relevant transport corridors (Byrnes Road, the Main Southern Railway and the Olympic Highway) will be transient, being interrupted by existing vegetation. Extensive screen plantings are conditioned to improve visual amenity issues, either real or perceived, from the proposed solar energy system.

The application also includes a Glare Assessment. The amount of light reflected by a solar panel depends on the amount of light hitting the surface and the surface reflectivity. The amount of light hitting the surface of the panel will vary during different times of the year and is affected by cloud cover. In a fixed solar array the angle of incidence varies as the sun moves. The angle of incidence is at its lowest when the sun is directly overhead i.e. noon, and increases early and late in the day. The percentage of sunlight reflected by solar panels is similar to that of water and less than most other surrounding materials. The low reflectivity design of the panels maximises the absorption of solar energy and therefore minimises the extent of solar energy reflected. Based on the modelling results of the glare assessment submitted with the application, the proposed solar farm will generate low intensity and short duration potential glare hazards to some nearby road users and residents. Potential impacts for temporary glare hazards to surrounding viewpoints will be alleviated by the extensive plantings as per the conditions of consent.

The glare assessment also included an analysis of the impacts on air traffic. Wagga

Wagga Airport is located approximately 12 kilometres south of the solar farm site. An eastbound and westbound flight path solar glare hazard analysis was conducted. Glare was not detected from the eastbound or westbound flight paths from the Wagga Wagga airport.

The assessment of the potential impacts to visual amenity and glare concludes that the proposed development and the changes to landscape character will be generally insignificant for major transport corridors, with transient, interrupted views of the project site. Residential receptors are expected to experience low to medium visual impact. This is based on the proportion of the landscape to be affected, vegetative screening, undulating terrain and the insignificance of the height of the proposed structures relative to existing industrial structures.

Noise and vibration

The development site is surrounding by industrial zoned land. To the south west is the established Bomen Industrial Estate which is home to a number of varying industrial and commercial operations, including scheduled premises. To the north is Riverina Oils and Bio Energy Pty Ltd's integrated oilseed processing and biodiesel plant, and to the south is Buckman Laboratories, licenced for pesticides and related products production and dangerous goods production. All of the above have the potential to impact on noise and vibration.

Beyond the industrially zoned land surrounding the development site the dominant land use is agricultural. Within two kilometres of the solar energy system development there are a total of 18 dwellings that have the potential to be affected by construction noise and 12 industrial land uses. Dwellings are considered to be potentially affected receivers for the purposes of this assessment. Industrial land uses are not considered to be sensitive receivers. The activities undertaken on industrial properties are often inherently noisy with noise impacts often audible beyond the property boundary. Despite this, the noise is not usually considered offensive to neighbouring or nearby industrial land uses. It would therefore be unreasonable to consider these industrial receivers in the same way as residential receivers, as this could have the effect of sterilising the land for its intended use (i.e. industrial).

The closest of the potentially sensitive residential receivers is located approximately 470 metres from the site.

In terms of operational noise, the solar energy system proposed is comprised of static arrays of panels with no moving parts. There will be no mechanical noise source from drive systems. Sources of noise associated with the operation of the solar farm would be restricted to the substation, specifically the transformers. The substation is to be located with an offset of 1000 m to the nearest residential receptor. The transformers would be housed within a masonry structure. Audible off-site noise is not anticipated. Ongoing maintenance requirements would be negligible and is likely to require no more than one or two technicians in a light utility occasionally using hand tools.

The construction period is expected to last approximately 20 weeks. From a noise perspective the construction program would essentially comprise three phases, Stage 1 that will include minor site works, Stage 2 that will include deliveries and assembly and Stage 3 that will be the Grid connection. The construction proposed avoids the need for piling or hydraulic hammering of array posts. Impulsive noise from this activity will be avoided. Rather, the array support posts would be installed by screw drill augers. All associated construction activity would be restricted to standard day time hours as per the conditions of consent. Potentially impacted receptors would be notified in advance of

construction commencing and be provided with contact details for reporting any noise related issue.

The array support posts would be installed by a purpose built screw drill auger that would install six posts at a time, significantly reducing installation time and noise and vibration generation levels.

In the event that a complaint is received the source would be immediately investigated and measures implemented to avoid recurrence. Any complaint received would be documented. As part of a general induction all employees and contractors would be informed of noise management measures, construction hours, the location of sensitive receptors, and the protocol for handling any complaints.

The above is to be contained in a Noise Management Plan which is to form part of the Construction Environmental Management Plan.

Flora and fauna

This has been discussed elsewhere in the report. The subject land is generally clear of vegetation with scattered paddock trees. In addition the LEP has been bio-certified for the urban area and as such any Development Application located within the certified area is taken to be development that is not likely to significantly affect any threatened species, population or ecological community, or its habitat.

A single tree will be removed from the site to facilitate the solar energy system development and offset planting is required under the conditions of consent. A significant area of tree planting and other landscape works, as offset works, will assist in reinstating native vegetation lost during historic land clearing for rural cropping and grazing activities.

Natural Hazards

The site is not considered bush fire prone or flood prone. As mentioned elsewhere in the report, although the site is not mapped as being bushfire prone, a bush risk exists as result of potential ignition and combustion inherent with the solar energy system. It is recommended that a perimeter fire trail will be provided within a 20 metre Asset Protection Zone around the solar energy system (wholly within the subject property) and that a Bushfire Management Plan be prepared in consultation with Rural Fire Services and implemented as part of the Operational Environmental Management Plan for the site.

Man Made Hazards

Lot 1 DP771340 is listed on Council's Land Contamination Register as it the site of a former wool combing operation. The site contains a large series of waste water ponds which were used to treat waste generated by the wool combing process. An Environmental Site Assessment in respect of the Bomen Industrial Estate, of which the subject site forms part of, concludes that the site can be remediated to enable industrial land uses.

The proposed development will not utilise nor interact in any way, beyond transmission pole installation and access arrangement, with the land within Lot 1. It is not considered that any remediation is likely to be required for this very limited element of interaction. The remainder of the lots forming part of this application has been historically used for broad acre primary production purposes. There is a risk that contamination associated with agricultural activities (e.g. pesticides) could be present on the site however, given no contaminated sites are recorded on or adjacent to the proposed development and that no evidence of contamination was observed during the site visit or mentioned during conversations with the land owner, it is considered highly unlikely that significant contamination exists in areas that would be affected by the proposal. Furthermore, the construction activities would not significantly disturb soil or groundwater at the site, given

the proposed screw pier installation method proposed.

Risks to the environment in respect of the use of solar technologies are considered to be very low. Materials used in the construction of solar modules can be recycled including the recovery of key components such as cadmium and tellurium.

Heritage

An Aboriginal artefact exists on the site and is located approximately 10m west of the eastern boundary of the subject site. The proposed solar farm and associated works are clear of this area. It is a condition of consent that a 'no harm zone' be established around site in consultation with the local Aboriginal community and measures to protect the site must be incorporated into a Construction Management Plan.

Conditions of consent also require that if any other Aboriginal object is discovered and/or harmed in, on or under the land, the proponent must not further harm the Aboriginal object, immediately cease all work at the particular location, secure the area so as to avoid further harm to the Aboriginal object, notify the Office of Environment and Heritage, providing any details of the Aboriginal object and its location, and not recommence any work at the particular location unless authorised in writing by Office of Environment and Heritage.

Stormwater and drainage management

The site is sloping with an easterly aspect. A marked waterway traverses the site with water flows during the rainfall only. Water entering this waterway makes its way southwards where it discharges into the Murrumbidgee River.

As the site is currently used for grazing purposes only, rainfall is largely absorbed within the site with any excess flows leaving the site as surface waters, either via the waterway or through sheeting in heavier rainfall events. The proposed subdivisions involve only very minor physical works (such as provision of access, electrical connections etc). The proposed solar energy system, to be contained within proposed Lot 2. The infrastructure would be pole mounted solar arrays and as such the overall additional impermeable areas would be negligible and would not be likely to lead to any increase in off-site flows. Conditions of consent require stormwater drainage shall be 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. If on site detention is required full plan details of any proposed On-Site Detention (OSD) system and supporting calculations shall be provided for approval. However, shall onsite detention not be required and stormwater runoff from the site is not increased supporting documentation shall also be provided to Council prior to the release of the Subdivision Certificate or issue of the Construction Certificate whichever comes first.

Services

The proposed development is not anticipated to have any significant impact on services other than providing sustainable energy that is anticipated encourage industrial development in the locality consistent with the Bomen Master Plan. The applicant has been referred to Essential Energy for comment who indicated its support of the proposal, subject to further negotiations and contract agreements with the applicant.

A gas pipeline easement diagonally bisects Lots 108, 110 and 174 and the portion of the easement affected by the development contains two gas pipelines. Additional offsets to the easement have been adopted via the proposed plans.

Waste

Waste generated through the construction phase would 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. The operation of the solar energy system is not expected to create waste.

Effluent disposal

Effluent disposal would be limited to provision of short term services to service the construction workforce. Transportable services would be provided and emptied by suitable contractors. These would be removed at the completion of the construction period.

Dust

Dust will be generated during the construction phase, but the operation of the facility is not anticipated to create any dust pollution. A Dust Management Plan is required under the recommended conditions of consent which must be implemented as part of the Construction Management Plan.

Socio - Economic Impact

The applicant has provided the following information to demonstrate the socio -economic impacts of the proposed development:

The potential social impacts of the development have been considered in terms of the social characteristics of the area based on available statistical data, and qualitative assessment of how many people may be impacted by the development.

Of the 18 potentially sensitive residential receivers within 2km of the subject site, the sites located closest are approximately 460 and 630 metres from the site; all other sites are ≥ 1km from the site.

Potential adverse social impacts to nearby residential receptors during construction are likely to be associated with change to amenity resulting from increased traffic and noise. Adverse social impacts during operation of the solar energy system are also likely to be associated with a change to amenity, such as the possible visual and glare impacts associated with the reflective solar panels.

Economic benefits associated with the development would be the generally positive through encouraging industrial development in the locality.

The adoption of solar technologies in favour of traditional carbon energy generating has long term environmental benefits in combatting climate change. The energy sector is estimated to produce around 37% of Australia's total greenhouse gas emissions. Reduction greenhouse gas emissions is likely to reduce the rate and scale of climate change. Adoption of energy producing technologies with low carbon emission rates, such as solar, are an important step towards achieving that goal. Emissions are still produced through the development, production, transport, use and disposal of solar technology however it is lower than traditional energy sources by a significant order of magnitude.

The rationale for investments like the proposed solar energy system is their contribution to achieving broader public objectives around job creation, social cohesion, liveability, and investment attraction place branding.

This project provides potential for diversification of the local economy and the building of local skills, consistent with city's long term economic growth strategy. However, the extent of the economic and social benefits in Wagga Wagga and the wider region as result of this capital investment will depend on the ability to supply labour and goods and materials to the project.

At a broader level, this project will provide significant skills and expertise in the

construction of large scale solar thereby providing a foundation to support the development of future large scale solar projects in NSW. Skills will be developed in a range of areas including metals fabrication, electrical installation of large solar energy projects, construction, project design, project management and financing.

Construction and decommissioning

The construction phase for the development will be approximately 20 weeks and the estimated life span for the facility is 25 years.

Construction is anticipated to occur in one shift only between standard working hours, 7am to 6pm Monday to Friday, 7am to 1pm Saturday. No work would occur on Sundays or public holidays. The decommissioning program is proposed to follow the same general arrangement.

Construction activities associated with the proposed development are not perceived to have any adverse impact on the environmental quality of the land by way of land degradation, soil quality or natural water bodies. Site gradients are extremely low which reduces the risks of soil erosion problems. With normal construction and operational safeguards the project is not seen to bring unreasonable risks associated with soil erosion, stormwater or groundwater. In turn, there is a requirement to commit to sound soil and water management planning during the site construction and decommission works. Other negative externalities such as noise, traffic and material impacts on adjoining land are not likely given the low numbers of adjacent sensitive land uses.

Conditions of consent require a Construction Management Plan which must include a range of management controls as outlined in the SEE submitted with the application. This shall include but not limited to Aboriginal Heritage Management, Construction Traffic Management, Bush Fire Management, Waste Management, Erosion and Sediment Control, Noise Management, Dust Management, Soil and Water Management, Integrated Site Restoration and Operation hours.

It is likely at that the solar energy system will be decommissioned after 25 years and the land will be rehabilitated to be used for industrial purposes in accordance with the zoning. In terms of decommissioning the intent would be to minimise any potential adverse legacy issues and facilitate the “make-good” process with any project decommissioning. This particular project for the most part comprises smaller infrastructure components, and only a limited number of “oversized” semitrailer movements for the larger scale equipment. Decommissioning would be expected to comprise dismantling of the solar modules and all associated electrical infrastructure and site buildings. The community title subdivision will have to be extinguished as part of any future land use change on the site.

The construction and decommission stages of the solar energy system will also be managed via a Construction Management Plan that would, include but not be limited to, all relevant measures outlined within this report and the recommended conditions of consent. There will be a requirement for site restoration works at the completion of construction decommission works, including revegetation of disturbed ground, weed management and control of any erosion and sedimentation. An Integrated Site Restoration Plan will be incorporated into the Construction Environmental Management. This would ensure that construction impacts are appropriately managed and that avenues are provided for complaint handling and the like.

Operational and land management

The ongoing use of the solar energy system would be managed via an Operational

Management Plan that as a minimum include general maintenance and operation of the site e.g. inspection times, contact details of the site manager/maintenance staff, addressing complaints relating to the operation of the premise, access arrangements to the site, emergency and safety and security. This would ensure that operational impacts are appropriately highlighted and that avenues are provided for site management and the like.

The principles of Ecological Sustainable Development

The proposal is considered to comply with the four principles of Ecologically Sustainable Development such as inter-generational equality and conservation of biological diversity and ecological integrity. The application has identified the likely residual impacts on the environment in following the application of mitigation measures to allow greater certainty of the likely impacts of the development. Consultation with stakeholders and the community was also undertaken and provided opportunities for concerns to be raised. No risks of serious environmental damage have been identified or are considered likely as a result of the development. Issues that have potential long term implications have been identified and considered and where possible, mitigation measures are conditioned to reduce these impacts. The development includes the identification and minimisation of biodiversity impacts and specifically, vegetation clearing. This has resulted in a design that minimise the development footprint in areas of ecological value and as well meet all required safety and design standards.

(c) - The suitability of the site for the development

The proposed use and the subdivision is permitted in the zone and the impacts on the existing environment are dependent on a range of factors, which is not limited to the matters that have been covered in this report. These issues can be addressed under the provisions of the consent which requires the applicant to undertake a range of actions to reduce the impacts of the development on the existing landscape. The site is of a sufficient size to accommodate the use and to provide appropriate buffer areas to reduce the impact of the development on adjacent properties and the landscape. The suitability of the use being located away from densely populated areas or sensitive developments is considered appropriate and there are no site constraints that would render the site unsuitable for the proposed development.

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

Referrals

Standard internal referrals of the application occurred as well as external referrals to Office of Environment and Heritage, Essential Energy, APA, Rural Fire Services.

At the time of the completion of this assessment report only the APA Group and Essential Energy responded and indicated support of the application, subject to further negotiations and contractual agreements.

The Office of Environment and Heritage have an opportunity to provide a response before or on 11/05/16. Standard conditions of consent in relation to heritage conservation and in specific the protection of the aboriginal object on proposed lot 2 have been imposed.

Standard bushfire management conditions have been imposed.

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 04/04/16 and 18/04/16.

Public Submissions

During the display period, no public submissions were received.

(e) - The public interest

The public interest is a broad consideration relating to many matters and is not limited to the issues raised by the submissions. This application has been considered in respect to the benefits of the community and the matters discussed in this report are all reflections of the public interest and community expectations. Taking into account the full range of matters for consideration under Section 79C of the Environmental Planning and Assessment 1979 (as discussed within this report) it is considered that approval of the application is the public interest.

Section 5A ("Seven Part Test" - Threatened Species) and Section 79B(3)

An assessment of the likely significance of impacts of the development concluded that the development is unlikely to have a significant impact on threatened species with the safeguard and management measures included in the recommended conditions of consent.

Council Policies

Not applicable.

Comments by Council's Officers and/or Development Assessment Team

Council's other relevant officers have reviewed the application in accordance with Council's processing procedures and are in support of the application, subject to conditions.

Contributions

Section 94/94A of the Environmental Planning and Assessment Act 1979 and the City of Wagga Wagga's Section 94 Contributions Plan 2006-2019 / Levy Contributions Plan 2006 enables Council to levy contributions, where anticipated development will or is likely to increase the demand for public facilities. A Section 94 contribution applies to this development that will be put towards the provision of high quality and diverse public facilities to meet the expectations of the residents of the city.

$1.5mil (development cost) x 1% = $15,000.00

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 2006 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 in the IN1- General Industrial Zone.
- The assessment of the application has concluded there are minimal environmental impacts associated with the proposal.
- The site is of a sufficient size to accommodate the use and to provide

appropriate buffer zones to reduce the impact of the development on adjacent properties and the existing landscape.

- The suitability of the use being located away from densely populated areas or sensitive developments is considered appropriate and 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 development complies with the requirements of the Environmental Planning and Assessment Act 1979 and will not compromise the outcomes sought for the Wagga Wagga Local Environmental Plan 2010 and Wagga Wagga Development Control Plan 2010.

RECOMMENDATION

It is recommended that DA16/0135 for Electricity Generating Works (Solar Energy System) and 3 Lot Torrens Title Subdivision including a 260 Lot Community Title Subdivision be approved, subject to the following conditions:-

CONDITIONS

Approved Plans and Documentation

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	**Geolyse**	**Final**	**01/02/16**
	Response to Council's information request	**Geolyse**		**23/03/16**
05F_TP03	**Torrens Title Subdivision Plan**	**Geolyse**	**F**	**22/04/16**
	Community Title Subdivision Plan	**Geolyse**	**F**	**22/04/16**
05_TP04	**Elevations**	**Geolyse**	**F**	**22/04/16**
05_TP05	**Landscape Plan**	**Geolyse**	**F**	**22/04/16**
05_TP06	**Fencing Plan and Detail**	**Geolyse**	**F**	**22/04/16**

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 96 of the Environmental Planning and Assessment Act, 1979.

REASON: It is in the public interest that work is carried out in accordance with the approved plans. Section 79C(1)(e) of the Environmental Planning and Assessment Act 1979, as amended.

2. Development consent is granted for the following:

- **Subdivision of the subject land (Lot 108, Lot 109, Lot 110 DP 751405, Lot 174 DP590756 and Lot 1 DP771340) into 3 Torrens Title land parcels, being Lot 1 of 66ha, Lot 2 of 47.5ha and Lot 3 of 74ha. This includes the creation of all access and service easements as per the approved plans and documentation (refer to condition 1).**
- **260 Lot Community Title Subdivision within Lot 2.**
- **Land use change to accommodate a solar energy system on proposed Lot 2. Approval is granted for the use of the site as a solar energy system, within the Wagga Wagga LEP 2010 definition of '*electricity generating works'* and will include the following works/components:**
  - **Generation of no more than 26 Megawatt power**
  - **Construction of a maximum of 330 Photovoltaic (PV) solar panels, each generating 300W**
  - **Junction boxes and substation**
  - **Above and underground electrical conduits and cabling**
  - **Internal access driveway**
  - **Security Fencing**
  - **Landscaping and removal of one Eucalypt Tree within Lot 2.**
  - **Decommissioning of the solar energy system**

REASON: It is in public interest that proposed development be limited to the works/uses listed as above. Section 79C(1)(b) and (e) of the *Environmental Planning and Assessment Act 1979*, as amended.

Prior to release of Construction Certificate

3. Prior to the issue of the Construction Certificate, a Construction Management Plan shall be prepared and submitted for approval by Council. The approved plan shall be implemented during construction of the solar electricity system. 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 limited to:

- **Aboriginal Heritage Management**
- **Construction Traffic Management**
- **Bush Fire Management**
- **Waste Management**
- **Erosion and Sediment Control**
- **Noise Management**
- **Dust Management**
- **Soil and Water Management**
- **Integrated Site Restoration**
- **Operation hours**
- **Security Management**
- **Requirements and conditions of the APA Group (refer to condition 38 of this Consent)**
- **Requirements and conditions of Essential Energy to connect to the state power grid (refer to condition 39 under of this consent).**

REASON: To ensure development does not reduce the amenity of the area during

construction. Section 79C(1)(b) of the Environmental Planning and Assessment Act 1979, as amended.

4. **Prior to the issue of the Construction Certificate the applicant shall submit detailed landscape plans generally in accordance with the approved concept landscape plan (refer to condition 1) for approval by Council. The plan shall form part and be implemented as part of the Construction Management Plan. The plans shall include the following:**

    - **A vegetated buffer area of at least 10 metres wide and planted with a variety of endemic species.**
    - **A Plant Schedule indicating all plant species, pot sizes, spacings and numbers to be planted within the development. Plant species are to be identified by full botanical name. All plants proposed are to be detailed in the plant schedule.**
    - **Clearly indicate the tree on Lot 2 that is to be removed.**
    - **The detailed landscape plans shall be in accordance with Council's Landscape Guidelines and Landscape Application Checklist.**
    - **Areas of existing vegetation to managed as part of the common property within the community subdivision of proposed Lot 2**

    REASON: To ensure that landscaping will be provided on the subject land. Section 79C(1)(b) of the Environmental Planning and Assessment Act 1979, as amended.

5. **Prior to the issue of the Construction Certificate details of all structural concrete and structural steelwork shall be submitted to the Principal Certifying Authority for approval, all such details shall be certified by a practising Structural Engineer.**

    REASON: It is in the public interest that all building elements are able to withstand the combination of loads and other actions to which it may be subjected. Section 79C(1)(b) and (e) of the Environmental Planning and Assessment Act 1979, as amended.

6. **Prior to the issue of the Construction Certificate a geo-technical report must be submitted to the Principal Certifying Authority that demonstrates that the foundation upon which a footing/slab is to be located is classified in accordance with Part 3.2.4 "Site Classification", of the Building Code of Australia and AS 2870.**

    This report must be carried out by an experienced geo-technical engineering consultant, with associated testing being conducted by a NATA registered laboratory. The report shall identify the type of "site classification" that exists on the subject site. Any footing/slab design is to be designed having regards to the identified site classification.

    REASON: It is in the public interest that all building elements are designed to be able to withstand the combination of loads and other actions to which they may be subjected. Section 79C(1)(b) and (e) of the Environmental Planning and Assessment Act 1979, as amended.

7. **Pursuant to s94A of the *Environmental Planning and Assessment Act 1979* and the *City of Wagga Wagga Section 94A Levy Contributions Plan 2006*, a levy in the amount of $15,000 must be paid to Council prior to the issuing of the Construction Certificate. This amount is to be adjusted in accordance with clause 25J(4) of the *Environmental Planning and Assessment Regulation 2000***

and clause 11 of the *City of Wagga Wagga Section 94A Levy Contributions Plan 2006*. A copy of the *City of Wagga Wagga Section 94A Levy Contributions Plan 2006*, is available for inspection at Council Chambers, corner Baylis and Morrow Streets, Wagga Wagga.

NOTE 1: Clause 11 of the City of Wagga Wagga Section 94A Levy Contributions Plan 2006 provides for Section 94 contributions to be indexed in accordance with the Consumer Price Index - All Groups (Sydney) published by the Australian Bureau of Statistics.

NOTE 2: The figures outlined in this consent are based on the applicable rate of CPI at the time of consent which is 108.7/95.6. Please be advised that CPI changes on a regular basis and you are advised to contact Council prior to payments being made, to ensure no further CPI increases/decreases have occurred since the date of this consent.

REASON: Section 94A of the *Environmental Planning and Assessment Act 1979* and the *City of Wagga Wagga Section 94A Levy Contributions Plan 2006*, authorises the imposition of this condition in relation to the development the subject of this consent.

8. **Prior to the issue of a Construction Certificate stormwater drainage shall be 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. If on site detention is required full plan details of any proposed On-Site Detention (OSD) system and supporting calculations shall be provided. However, shall onsite detention not be required and stormwater runoff from the site is not increased supporting documentation shall also be provided. The plan shall form part and be implemented as part of the Construction Management Plan.**

   REASON: The character of the development is such that it warrants storm water drainage of this type. Section 79C(1)(b) of the Environmental Planning and Assessment Act 1979, as amended.

9. **Prior to the issue of Construction Certificate, a Bush Fire Protection Plan indicating compliance with the provisions of Planning for Bush Fire Protection Manual 2006, must be prepared in consultation with Rural Fire Services and submitted to Council for approval. A perimeter fire trail shall be provided within a 20 metre Asset Protection Zone around the solar energy system (wholly within the subject property) and implemented and maintained as part of the Construction Management Plan and Operational Management Plan for the site (refer to condition 33).**

   REASON: It is in the public interest that the development be protected from bush fire. Section 79C (1)(e) of the *Environmental Planning and Assessment Act 1979*, as amended.

Prior to Commencement of Works

10. **The developer is responsible for all public utility adjustment/relocation works, necessitated by the proposed works and as required by the various public utility authorities and/or their agents.**

    Section 79C(1)(e) of the Environmental Planning and Assessment Act 1979, as amended.

11. 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.

REASON: To provide adequate sanitary facilities during the construction phase. Section 79C(1)(b) of the Environmental Planning and Assessment Act 1979, as amended.

12. A CONSTRUCTION CERTIFICATE pursuant to Section 109C 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 work 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.

REASON: To ensure the design of the proposed work may be assessed in detail before construction commences and because it is in the public interest that the development complies with the appropriate construction standards. Section 79C(1)(e) of the Environmental Planning and Assessment Act 1979, as amended.

13. 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 licensed 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.

REASON: To ensure that the building site and adjoining public places are maintained in a clean and tidy condition so as not to interfere with the amenity of the area. Section 79C (1)(b) and (e) of the Environmental Planning and Assessment Act 1979, as amended.

14. 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. The works shall be implemented as part of the Construction Management Plan.

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

REASON: To ensure the impact of the work on the environment in terms of soil erosion and sedimentation is minimised. Section 79C (1)(b) of the Environmental Planning and Assessment Act 1979, as amended.

15. The existing trees 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 street trees and trees located adjacent to the proposed development. The developer shall identify all trees to be retained prior to commencement of construction works.

A Tree Protection Zone (TPZ) shall 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 Tree Management Officer, 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 Tree Management Officer 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. The above requirements shall be implemented as part of the Construction Management Plan.

REASON: Because it is in the public interest that the subject trees are protected. Section 79C(1)(e) of the Environmental Planning and Assessment Act 1979, as amended.

16. **Prior to works commencing, a sign must be erected in a prominent position on any work site on which work involved in the erection or demolition of a building is being carried out:**

    a) **stating that unauthorised entry to the site is prohibited, and**

    b) **showing the name of the person in charge of the work site and a telephone number at which that person may be contacted outside work hours**

    c) **the development consent or complying development consent number, the name and contact details of the Principal Certifying Authority.**

    Any sign must be removed when the work has been completed.

    REASON: To ensure the development complies with the requirements imposed under Clause 98 of the Environmental Planning and Assessment Regulations 2000, as amended, and Section 80A(11) of the Environmental Planning and Assessment Act 1979, as amended.

17. **At least two (2) days prior to the commencement of any works, the attached 'Notice of Commencement of Building or Subdivision Works and Appointment of Principal Certifying Authority', must be submitted to Council.**

    REASON: Because it is in the public interest that Council receive notification in accordance with the provision of the Environmental Planning and Assessment Act 1979, as amended. Section 79C(1)(e) of the Environmental Planning and Assessment Act 1979, as amended.

18. **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. The plan shall form part and be implemented as part of the Construction Management Plan. 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 a compliance certificate pursuant to Section 109C of the Environmental Planning and Assessment Act 1979, as amended has been issued by Council or an accredited certifying authority confirming that the plan is in accordance with Council's Engineering Guidelines for Subdivision and Developments and Soils and Construction Volume 1, Managing Urban Stormwater. Once approved, the measures in the Soil and Water Management Plan are to be implemented during the course of**

the development.

REASON: To minimise the risk of soil erosion and water pollution, and because of representations about these matters from the Soil Conservation Service and the Department of Environment and Conservation. Section 79C(1)(b) and (d) of the Environmental Planning and Assessment Act 1979, as amended.

19. No works are to take place to any services without prior written approval from the relevant authority.

Underground assets may exist in the area that is subject to your application. In the interests of health and safety and in order to protect damage to third party assets please contact Dial before you dig at www.1100.com.au <http://www.1100.com.au> or telephone on 1100 before excavating or erecting structures.

REASON: To ensure that the servicing requirements of public utility authorities have been met, to service the development. Section 79C(1)(b) of the *Environmental Planning and Assessment Act 1979*, as amended.

20. A 'no harm zone' must be established around the location of the identified Aboriginal artefact that is located on the site in consultation with the local Aboriginal community stakeholders. The Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW must be used by individuals or organisations who are contemplating undertaking activities which could harm Aboriginal objects and shall be implemented as part of the Construction Management Plan. This condition is to be read with condition 27 of this consent.

REASON: To ensure that Aboriginal sites are protected. Section 79C (1)(b) of the Environmental Planning and Assessment Act 1979, as amended.

During works

21. All oil filled transformers shall be bunded. The extent of bunds shall be such that oil containment during possible spills, leaks and fires cannot propagate to adjoining transformers, structures, adjacent premises, soil and waterways. Dangerous goods, as defined by the Australian Dangerous Goods Code, shall be stored and handled in accordance with all relevant Australian Standards including AS 1940: The Storage and handling of flammable and combustible liquids.

REASON: To ensure the development does not have any adverse effects on the environment or the amenity of the area and that it complies with Section 120 of the POEO Act 1997. Section 79C(b),(d) and (e) of the Environmental Planning and Assessment Act 1979, as amended.

22. In the event that any areas of potential site contamination are discovered during works (including but not limited to features such as underground storage tanks, pits, dumps, treatment sites or the like), work will immediately cease and the proponent shall contact the Council and any other relevant authority. A suitably qualified Site Contamination Auditor shall be engaged to investigate the likelihood and/or extent of site contamination, and a Contamination Report shall be prepared in accordance with the publication "Guidelines for Consultants Reporting on Contaminated Sites" by the NSW Office of Environment and Heritage).

Prior to works continuing, the Contamination Report shall be submitted for the consideration and approval to Council. Depending on the nature and extent of potential site contamination revealed in the report, Council may require the lodgement of a development application in order for site remediation works to be carried out at the premises. Continuation of works will then be contingent upon securing the necessary approval and completion of the required decontamination works. Otherwise, Council will require certification from a suitably qualified person that states the intended use of the site is fit for purpose and will not pose an unacceptable risk to human health or the ecology of the area site, prior to the continuation of works.

The above requirement shall be implemented as part of the Construction Management Plan.

REASON: To minimize the risk to human and environmental health, in accordance with the Contaminated Land Management Act 1997 and Section 79C(1)(b), (c) and (e) of the Environmental Planning and Assessment Act 1979, as amended.

23. All weather access, manoeuvring and parking areas shall be provided and maintained within the site during construction.

REASON: To adequately provide for the safe, all weather loading, unloading, manoeuvring and parking of vehicles within the development. Section 79C(1)(c) of the Environmental Planning and Assessment Act 1979, as amended.

24. If the Council is appointed as the Principal Certifying Authority the following inspections must be undertaken by Council and a satisfactory Inspection Report must be issued by Council for such works prior to any further works being undertaken in respect of the subject development. Inspection Stages for construction are listed in Column 1 and must be inspected by Council at the times specified in Column 2.

COLUMN 1	COLUMN 2
Site Inspection	Prior to any works commencing on the site.
Footings	When the footings have been excavated and all steel reinforcement has been placed in position.
Final	Required prior to operation

NOTE 1: A Final Occupation Certificate in relation to the structures cannot be issued by Council until all Inspection Reports required by this condition have been issued by Council. Prior to or at the time of the application for Occupation Certificate the application for "Occupation Certificate" form attached to the Council issued Construction Certificate 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 2: The above Inspection Reports are required whether or not the work has been inspected by a Structural Engineer, a lending authority or any other person. If the Inspection Reports are not issued Council may refuse to issue a Building Certificate under Section 149A of the Environmental Planning and Assessment Act 1979, as amended.

REASON: It is in the public interest that Compliance Certificates be issued for these components of the development, and Section 79C(1)(e) of the Environmental

Planning and Assessment Act 1979, as amended.

25. **The Builder must at all times maintain, on the job, a legible copy of the plan and specification approved with the Construction Certificate.**

    REASON: It is in the public interest that a copy of the Construction Certificate plans are available, and Section 79C(1)(e) of the Environmental Planning and Assessment Act 1979, as amended.

26. **The permitted construction hours are Monday to Friday 7.00am to 6.00pm and Saturday 7.00am to 1.00pm, excepting public holidays.**

    REASON: To ensure building works do not have adverse effects on the amenity of the area. Section 79C(1)(b) of the Environmental Planning and Assessment Act 1979, as amended.

27. **If any Aboriginal object is discovered and/or harmed in, on or under the land, the proponent must not further harm the Aboriginal object, immediately cease all work at the particular location, secure the area so as to avoid further harm to the Aboriginal object, notify the OEH as soon as practicable on 131 555, providing any details of the Aboriginal object and its location, and not recommence any work at the particular location unless authorised in writing by OEH.**

    NOTE: The Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW must be used by individuals or organisations who are contemplating undertaking activities which could harm Aboriginal objects. This code will provide a process whereby a reasonable determination can be made whether or not Aboriginal objects will be harmed by an activity, whether further investigation is warranted and whether the activity requires an Aboriginal Heritage Impact Permit. Due diligence may also be exercised by complying with industry-specific codes of practice that have been adopted under the National Parks and Wildlife Regulation 2009.

    REASON: To ensure that Aboriginal sites are protected. Section 79C (1)(b) of the Environmental Planning and Assessment Act 1979, as amended.

28. **All building work must be carried out in accordance with the requirements of the Building Code of Australia (as in force on the date the application for the relevant Construction Certificate or Complying Development Certificate was made).**

    REASON: To ensure the development complies with the requirements imposed under Clause 98 of the Environmental Planning and Assessment Regulations 2000, as amended, and Section 80A(11) of the Environmental Planning and Assessment Act 1979, as amended.

29. **Demolition undertaken in the decommissioning of the site must be carried out in accordance with the provisions of Australian Standard AS2601-2001: The Demolition of Structures.**

    Within fourteen (14) days of completion of demolition, the following information shall be submitted to Council for assessment and approval:

    a) an asbestos clearance certificate prepared by a competent person; and

b) a signed statement verifying that demolition work and the recycling of materials was undertaken in accordance with any Waste Management Plan approved with this consent. In reviewing such documentation Council will require the provision of actual weighbridge receipts for the recycling/disposal of all materials.

NOTE 1: Developers are reminded that WorkCover requires that all plant and equipment used in demolition work must comply with the relevant Australian Standards and manufacturer specifications.

NOTE 2: Demolition works involving the removal and disposal of asbestos cement must only be undertaken by contractors who hold a current WorkCover "Demolition Licence" and a current WorkCover "Class 2 (Restricted) Asbestos Licence".

NOTE 3: Competent Person (as defined under Safe Removal of asbestos 2nd Edition [NOHSC: 2002 (2005)] means a person possessing adequate qualifications, such as suitable training and sufficient knowledge, experience and skill, for the safe performance of the specific work.

NOTE 4: A licence may be required for some of the tasks described in the document entitled Safe Removal of Asbestos 2nd Edition as requiring a competent person.

REASON: It is in the public interest that the demolition be carried out in a safe manner and that the utilities be protected from damage. Section 79C(1)(a) & (e) of the *Environmental Planning and Assessment Act 1979*, as amended.

Prior to the issue of a Subdivision Certificate

30. A Subdivision Certificate, pursuant to Section 109C of the *Environmental Planning and Assessment Act 1979*, as amended must be obtained from Council, prior to its lodgement with the Lands Titles Office.

The Final Survey Plan (two paper copies and an electronic copy) must be submitted to Council along with the application for Subdivision Certificate and associated checklist.

NOTE: Council will only consider issuing a Subdivision Certificate in relation to this subdivision when it is satisfied that all conditions of development consent relating to the subdivision have been complied with and the appropriate fee paid.

REASON: It is in the public interest that the plan is certified in accordance with the provisions of the *Environmental Planning and Assessment Act 1979*, as amended. Section 79C(1)(e) of the *Environmental Planning and Assessment Act 1979*, as amended.

31. Submission of a signed instrument under Section 88B of the Conveyancing Act 1919 for the creation of easements and/or restrictions as to user intended to be created is required prior to the release of the survey plan for each stage of subdivision. Covenants shall be created, with Council empowered to uplift, to ensure that:

An easement over the proposed road corridors for future public road construction and associated infrastructure. The roads shall be constructed and dedicated to Council as public roads (as volunteered

by the applicant and indicated on the approved plans) within 18 months of public road access being provided at either the northern or southern boundaries of Lot 2 (identified as a "secondary local" road on the "Proposed Road Location and Hierarchy diagram" contained in Section 13.8 of the Wagga Wagga Development Control Plan 2010). The works shall be subject to the granting of development consent and shall be completed in accordance with the requirements of that consent. The owner of Lot 2 shall be responsible for the full cost of the extension of the public roads and associated infrastructure.

32. The final Survey Plan must show:

a) An easement over the proposed road corridors for future public road construction and associated infrastructure (refer to condition 31 above).

b) An easement to identify the existing gas pipeline of 20 meters wide within proposed Lots 2 and 3 and in favour of the public utility authority APA Gas. The easement shall be in accordance with all relevant easement conditions as per public utility authority standards and requirements.

c) An easement for the right of carriageway 10 meters wide burdening proposed Lot 1 and in favour of proposed Lot 2.

d) An easement created to identify the exact location of the electricity transmission line approximately 30.48m wide. The easement shall be in accordance with all relevant easement conditions as per public utility authority standards and requirements.

REASON: Those works referred to the subject land should be protected by an easement. Section 79C(1)(b) of the *Environmental Planning and Assessment Act 1979*, as amended.

Prior to release of Occupation Certificate / Prior to Operation

33. Prior to the commencement of the solar energy system an Operation Management Plan shall be prepared and submitted for approval by Council. The approved plan shall be implemented for the lifetime of the development on the subject site. The Plan must include a range of measures as outlined in the approved SEE which include, but are not limited to:

a) general maintenance and operation of the site e.g. inspection times, contact details of the site manager/maintenance staff;

b) addressing complaints relating to the operation of the premise;

c) access arrangements to the site;

d) emergency, safety and security;

e) bushfire management (refer to condition 8) ; and

g) reviews, amendments and updates to the plan.

REASON: To ensure development does not reduce the amenity of the area. Section 79C(1)(b) of the Environmental Planning and Assessment Act 1979, as amended.

34. The applicant must obtain an Occupation Certificate, pursuant to Section 109C

of the Environmental Planning and Assessment Act 1979, from either Council or an accredited certifying authority, prior to occupation of the building/commencement of the use.

REASON: It is in the public interest that an Occupation Certificate be issued prior to occupation of the building. Section 79C (1)(e) of the Environmental Planning and Assessment Act 1979, as amended.

35. **Prior to the commencement of the use an access driveway and internal all weather roadway shall be provided to the solar energy system on Proposed Lot 2.**

REASON: To ensure traffic related impacts associated with the development are minimised. Section 79C(1)(b) of the Environmental Planning and Assessment Act 1979, as amended.

(1)(e) of the Environmental Planning and Assessment Act 1979, as amended.

General

36. **All exterior lighting associated with the development must be designed and installed so that no obtrusive light will be cast onto any adjoining property.**

NOTE: Compliance with Australian Standard AS4282.1997 "Control of the Obtrusive Effects of Outdoor Lighting" will satisfy this condition.

REASON: To prevent the proposed development having a detrimental effect on the developments existing on adjoining land. Section 79C(1)(b) and (e) of the Environmental Planning and Assessment Act 1979, as amended.

37. **The solar energy system shall be decommissioned within 12 months of terminating operations or feeding into the power grid. Prior to the commencement of works associated with the decommissioning of the Solar Energy System, a Decommission Plan shall be prepared and submitted for approval by Council. 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 limited decommissioning of all solar arrays, above and below the ground infrastructure and electrical substation and any other structures or infrastructure relating to the solar energy works, upon cease of solar energy works. All works shall follow the same management principles outlined in the Construction Management Plan (refer to condition 3).**

REASON: To ensure development does not reduce the amenity of the area during decommissioning. Section 79C(1)(b) of the Environmental Planning and Assessment Act 1979, as amended.

38. **Buildings, structures, roadway, pavement, pipelines, cable, fence or other improvements upon or under the land within the gas easement must not be erected without the prior consent in writing of the APA Group. All relevant conditions and requirements of the APA group shall apply and be implemented as part of the Construction Management Plan (refer to condition 3). The consent letter and relevant requirements as such shall be attached to the Construction Management Plan.**

REASON: To ensure that the servicing requirements of public utility authorities have been met, to service the development. Section 79C(1)(b) of the Environmental Planning and Assessment Act 1979, as amended.

39. **Buildings, structures, roadway, pavement, pipelines, cable, fence or other**

improvements upon or under the land within the electricity easement must not be erected without the prior consent in writing of the Essential Energy. The solar power energy system shall not be connected to the power grid prior to consent in writing of Essential Energy. All relevant conditions and requirements of the Essential Energy shall apply and be implemented as part of the Construction Management Plan (refer to condition 3). The consent letter and relevant requirements as such should be attached to the Construction Management Plan.

REASON: To ensure that the servicing requirements of public utility authorities have been met, to service the development. Section 79C(1)(b) of the Environmental Planning and Assessment Act 1979, as amended.