Proposed	4.95MW Solar Facility
Application No.	40/21/DA/DM
Location/Address	Lot 126 Broughans Road, Finley Lot 126 DP752299
Zoning	RU1 Primary Production – *Berrigan Local Environmental Plan 2013* (LEP)
DCPs	*Berrigan Development Control Plan 2014* (DCP)
Assessment Officer	Matthew Miller
Date	9/04/2021

Proposal

Berrigan Shire has received an application for the construction of a solar renewable energy development with a capacity of up to 4.95 Megawatts ("MW") on approximately 17 hectares. The facility will include:

- 16,500 solar photovoltaic panels to be mounted in arrays on single axis trackers
- Cabling from solar arrays to panel inverters
- Substation and connection to local electricity network in the north west corner of the development area
- Unsealed perimeter and internal access tracks and parking
- laydown area for storage of equipment and machinery
- perimeter security fencing (2 metres height) comprising steel posts and transparent mesh
- internal drainage detention basin and outfall
- landscaping
- waste storage area

The proposal will utilise Broughans Road for vehicle access to the site and a new access will be created. The construction phase for the proposal is expected to be a maximum of 6-12 months. The proposal will operate for 30 years after which it will be subject to further operation or decommissioning and removal of all components.

The predicted workforce during the construction phase is 50-100 workers. During operational it will require two persons on-site operation and maintenance. On average the operation will require fourteen vehicles per week.

The proposal is supported with a Statement of Environmental Effects by Habitat Planning dated June 2020 Revised December 2020 and has the following attached appendices as requested in item 9 of the deferral:

- Title Information

- Overall Site Plan & Lease Area
- Proposed Development Plans
- Concept Civil Plans & Details
- Concept Stormwater Management Plan
- Traffic Impact Assessment
- Aboriginal Due Diligence Assessment
- Stormwater Management Plan
- Landscape Plan

The facility is intended to remain in operation for a period of up to 30 years in order the contribute to the sustainable electricity power supply to the state of NSW. This period of time represents the useable life of a solar facility. If the facility ceases operation at this point, all infrastructure would be removed from the site to be re-cultivated for agricultural purposes.

Figure 1 – aerial view of the subject site (red outline) and the development area (yellow outline)

Figure 2 – Aerial view of the proposed development area

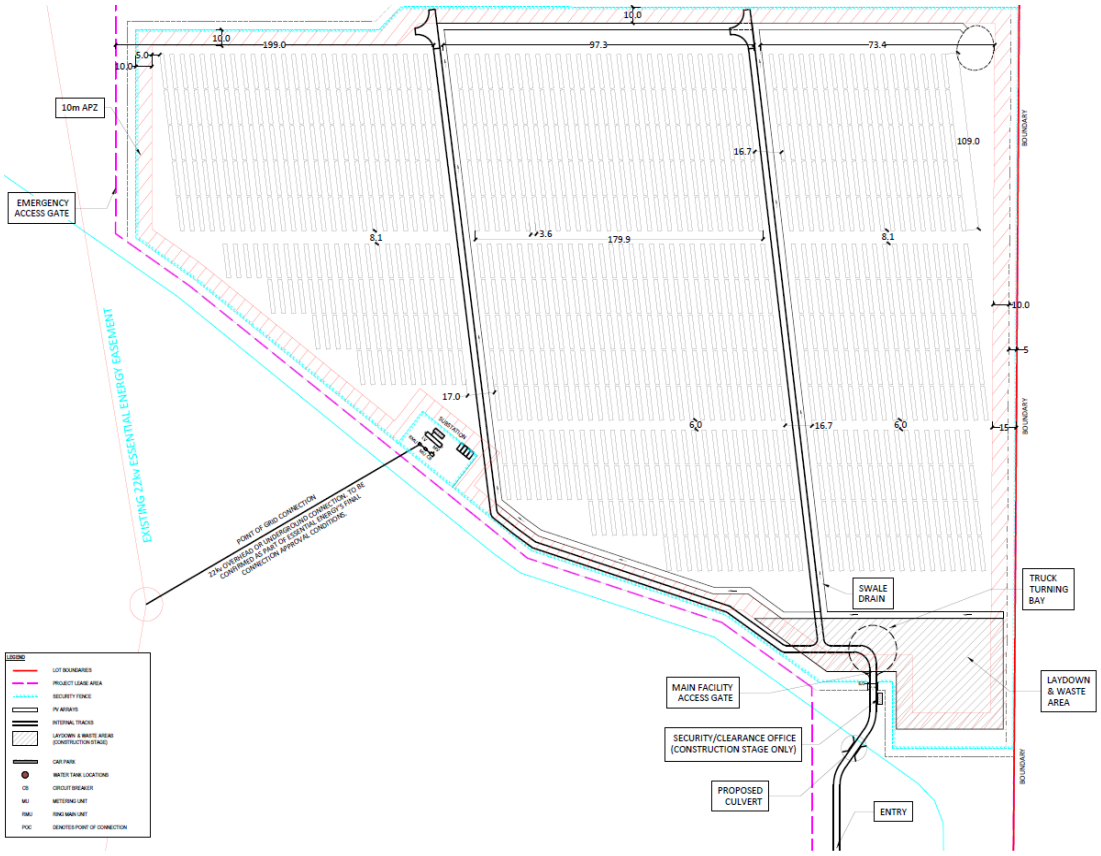

Figure 3 – Proposed Development Layout

Figure 4 – Proposed Development Layout

Subject site

The subject site has a total area of 190 hectares. The site is located approximately 4.5 km south west of Finley town centre. The site has vehicle access to Broughans Road. The site is located within a rural context and has historically been utilised for agricultural purposes, primarily irrigated cropping production and stock.

Figure 3 – aerial view of the subject site within context of neighbouring environment

Figure 3 – View east along Broughans Road from the proposed access. The subject site is located to the left

Figure xx – Existing channel at the south east corner of the site, with Broughans Road visible beyond.

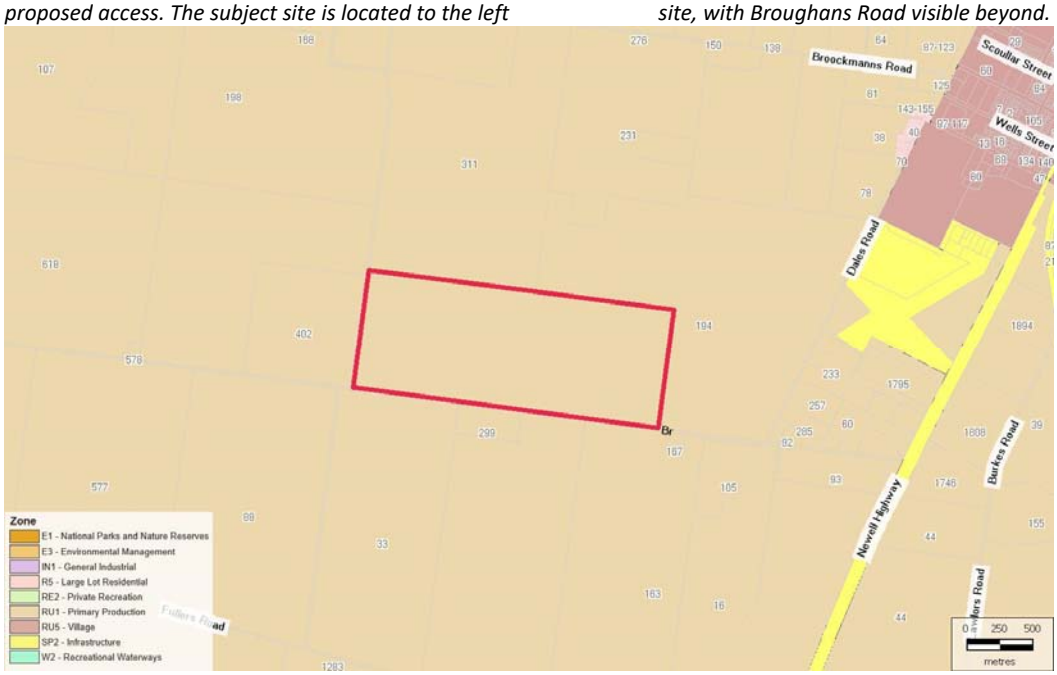

Figure 3 – land use zoning as per the Berrigan LEP

Within the neighbouring environment, properties immediately surrounding the property generally consist of large rural holdings which are used for agricultural purposes with associated dwellings. Two dwellings are located immediately south of the subject site along Broughans Road. Two further dwellings are located approximately 800 metres north of the

proposed development area and are access from Broockmans Road and Canalla Road. Land to the east represents a transition from rural to urban uses, with a concentration of dwellings located at the corner of Dales Road and Broughans Road, approximately 1 km from the site. This also represents the southern extent of the Finley urban area, with land further north of this area comprising the Finley Airport, Finley Sportsground and golf course. Land to the west consists of rural land. A previously constructed solar facility occupies a large portion of the land adjacent to the subject site and generally extends to the Ulupna Channel, Broughans Road, Canalla Road and Broockmanns Road.

The Finley electrical substation is located at the corner of Broockmanns Road and Canalla Road approximately 3 km north west of the site.

Executive Summary

The proposal is consistent with relevant legislation and Local and State Government strategic planning, such as the Riverina Murray Regional Plan, Berrigan Community Strategic Plan, Berrigan Land Use Plan and Berrigan Shire Local Strategic Planning Statement. The site is suitable for the proposal given the general rural context and minimal development in the immediate surrounds. The flat profile of the land will enable the facility to have minimal impacts on nearby dwellings and urban development. The site is generally free of development constraints and is accessible to heavy vehicles during construction and decommissioning phases and for ongoing maintenance.

The site has been selected for the proposal by the applicant due to the excelling solar exposure and access to the electrical transmission network. The site also has a low level of environmental impact, having been cleared and disturbed. The likely impacts of the development have been considered in this report and supporting documents, and have been found to be acceptable subject to appropriate mitigation measures.

The proposal will enhance the supply of renewable energy and given the site will be decommissioned once complete, it will enable future agricultural use of the site. The proposal will contribute to the economy of Finley through employment opportunities and business opportunities.

Assessment

An assessment of the proposal is set out as per Section 4.15 under the *Environmental Planning and Assessment Act 1979*.

THE PROVISIONS OF ANY ENVIRONMENTAL PLANNING INSTRUMENT

- ***Berrigan Local Environmental Plan 2013 (LEP)***

The subject site is zoned RU1 Primary Production under the Berrigan LEP. The objectives of the zoned are as follows:

- To encourage sustainable primary industry production by maintaining and enhancing the natural resources base.
- To encourage diversity in primary industry enterprises and systems appropriate for the area.
- To minimise the fragmentation and alienation of resource lands.
- To minimise conflict between land uses within this zone and land uses within adjoining zones.
- To permit development that enhances the agricultural and horticultural production potential of land in the locality.
- To permit low-key tourist and visitor accommodation that is compatible with the scenic amenity, and promotes the character, of the area.
- To enable function centres to be developed in conjunction with agricultural uses (function centre as per the dictionary means a building or place used for the holding of events, functions, conferences and the like).

The proposal has been identified as **electricity generating works** which means a building or place used for the purpose of making or generating electricity or electricity storage. Under the Berrigan LEP, electricity generating works are a prohibited land use.

As per discussions below, under *State Environmental Planning Policy (Infrastructure) 2007*, (SEPP Infrastructure) development for the purpose of **electricity generating works** including solar energy systems may be carried out by any person with consent on rural land (including land zoned RU1 Primary Production under the Berrigan LEP). As per Part 1 Clause 8 of the SEPP Infrastructure, if there is an inconsistency between this Policy and any other environmental planning instrument, whether made before or after the commencement of this Policy, this Policy prevails to the extent of the inconsistency.

Clause 5.10 Heritage Conservation

The site is not listed as a heritage item and it is not within a conservation zone as per the Berrigan LEP.

Clause 6.1 Earthworks

The objectives of the clause are:

a) To ensure that earthworks for which development consent is required will not have a detrimental impact on environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land
b) To allow earthworks of a minor nature without separate development consent

The site works proposed are assessed as being adequately address in this DA and are not significant enough to require a separate development consent. Matters of potential impact from site works and earthworks during construction and decommissioning are discussed below such as noise and dust are for a temporary period of six months and mitigation strategies will be implemented to ensure this will have a minimum impact on the residential amenity in the neighbouring environment.

Clause 6.2 Flood planning
The site is not mapped within a flood prone land area under the Berrigan LEP.

Clause 6.3 Terrestrial Biodiversity
There is a small strip of Terrestrial Biodiversity overlay in the middle of the allotment. The location of the proposal does not have this overlay over it.

State Environmental Planning Policy (SEPP)

The relevant SEPP that must be considered in the assessment of the proposal is detailed below.

- ***SEPP (State and Regional Development) 2011***

As per Part 5 Schedule 7 of the SEPP, the proposed development is identified as regionally significant development as it a private infrastructure proposal with a capital investment value greater than $5 million for an electricity generating works. Therefore, the Joint Regional Planning Panel was notified of the proposal via the Planning Portal. Reporting has been provided for the planning panel as per their required templates.

- ***State Environmental Planning Policy (Infrastructure) 2007***

The aim of the *State Environmental Planning Policy (Infrastructure) 2007* is to facilitate the effective delivery of infrastructure across the State by –

a) Improving regulatory certainty and efficiency through a consistent planning regime for infrastructure and the provision of services, and
b) Providing greater flexibility in the location of infrastructure and service facilities, and
c) Allowing for the efficient development, redevelopment or disposal of surplus government owned land, and
d) Identifying the environmental assessment category into which different type of infrastructure and services development fall
e) Identifying matters to be considered in the assessment of development adjacent to particular types of infrastructure development, and

f) Providing for consultation with relevant public authorities about certain development during the assessment process or prior to development commencing, and
g) Providing opportunities for infrastructure to demonstrate good design outcomes.

As per Division 4, the proposal is identified as an electricity generating works which means a building or place used for the purpose of making or generating electricity.

As per Part 3, Division 4, Clause 34 of the SEPP, development for the purpose of electricity generating works including solar energy systems may be carried out by any person with consent on rural land (RU1 Primary Production) which prevails over the Berrigan LEP.

Clause 45 of the SEPP refers to "Development likely to affect an electricity transmission or distribution network". This part applies to development that is carried out within proximity to or will affect an electricity transmission line. It is considered that this clause applies given the proposal to connect to the existing 22kV line which traverses the subject site. The proposal was referred to TransGrid via the Planning Portal. No response has been received on the proposal. TransGrid did provide preliminary advice via an email on 20 August 2020 including the TransGrid Easement Guidelines and TransGrid Fencing Guidelines.

As per Clause 104 of the SEPP, the proposal is not classed as a traffic-generating development under Schedule 3. Referral under this Clause to Transport for NSW is therefore not required.

- ***SEPP (Primary Production and Rural Development) 2019***

The aim of this Policy is to facilitate the orderly economic use and development of lands for primary production and to reduce land use conflict and sterilisation of rural land. The subject site is not identified as State significant agriculture land as per Schedule 1. It is not identified as regional agriculture significant land. The general are is identified in the Riverina Murray Regional Plan, as significant in the agriculture industry output. The proposal will occupy a portion of an allotment and the balance will maintain it's existing use for agricultural purposes. The proposal will provide a diversity in land use in the area and provide public benefit given that it will be producing solar energy to be fed into the electricity grid.

The proposal will have structures over the land and therefore has the capacity to be utilised for agricultural purposes such as livestock production. The proposal has a limited lifetime and will be decommissioned at the conclusion of the development to enable future development of the site to meet the objectives of the RU1 Primary Production zone.

- ***State Environmental Planning Policy No 55—Remediation of Land***

The subject site is not declared to contained contamination and therefore no remediation is required and this policy does not apply to the proposal.

- ***State Environmental Planning Policy (Koala Habitat Protection) 2019***

The proposed development will not directly impact an area identified by the Koala Development Application Map as per the *State Environmental Planning Policy (Koala Habitat Protection 2019* and will not involve the removal of preferred Koala feed tree species, as identified in the SEPP and therefore no further assessment is required.

- **Riverina Murray Regional Plan 2036**

The overall strategic plan for the region to which the Berrigan Shire LGA is located in the Riverina Murray Regional Plan 2036. The regional plan highlights the role of renewable energy in the growth of the Riverina Murray region. The proposed development will align with the goals of the regional plan as it will provide an appropriately sized renewable energy project in a ready access to the electrical network.

The Riverina Murray Regional Plan 2036 also facilitates the orderly economic use and development of lands for primary production and to reduce land use conflict and sterilisation of rural land. The subject site is not identified as State significant agriculture and it is not identified as regional significant agriculture land. The general region is identified in the Riverina Murray Regional Plan as collectively significant in the agriculture industry output. The proposal will occupy a portion of an allotment, the balance if the allotment will continue its use for agricultural purposes. The proposal will result in a public benefit given that it will be producing energy to be fed into the electricity grid. The proposal will have structures over the land and therefore has the capacity to be utilised for agricultural purposes such as livestock production. The proposal has a limited lifetime and will be decommissioned at the conclusion of the development to enable future development of the site to meet the objectives of the RU1 Primary Production zone.

- **Berrigan Shire Land Use Strategy 2018**

The aim of the strategy is to guide future development and land use within the Berrigan Shire LGA. The town of Finley's potential for renewable power generation is highlighted on key regional transmissions lines.

- **Berrigan Shire Local Strategic Planning Strategy 2020-2040 (LSPS)**

The Berrigan Shire LSPS 2020-2040 sets out the 20 year vision for land use planning in line with the Riverina Murray Regional Plan. The LSPS identifies the development opportunities in Berrigan Shire LGA given the vast amounts of land with environmental assets such as solar and the LGA is within close proximity to market sources in Victoria and the city of Melbourne. The proposal supports the vision of the LSPS and supports an action of the LSPS to facilitate appropriate smaller-scale renewable energy projects.

The LSPS also identifies the area as a key agricultural industry area and as discussed above, the proposal will utilise a small portion of an allotment and will be decommissioned once development is complete to ensure the land can be utilised for agricultural purposes.

Provisions of any proposed instrument that is or has been the subject of public consultation under the EP&A Act

There are no proposed instruments that is or has been the subject of public consultation that are to be considered for this proposal.

Provisions of any development control plan

- **Berrigan Development Control Plan 2014 (DCP)**

The proposal has been assessed under the provisions of the Berrigan DCP under chapter 3 Industrial development given this section best matches the proposal within the DCP.

3.1 Appearance

Objectives of the Berrigan DCP:

- Buildings and sites to make a positive contribution to the streetscape, make a positive contribution to the town entrances and outdoor areas screened.

The proposed solar arrays will have a sufficient setback from Broughans Road to ensure that it does not impact on the road way. The proposal also has a sufficient setback to neighbouring dwellings to ensure it will not impact on their residential amenity. Furthermore it will have a minimum of a 5 metre wide landscaping strip around the proposal to ensure that it will be screened and will add to the amenity of the local environment. Other amenities will be located closer to Broughans Road however they will be of a temporary nature only during the construction phase. A landscaping plan has been submitted amended SEE to now reflect the proposed landscaping, buffer zones, plant schedules that are to be planted.

3.2 Landscaping

Objectives of the Berrigan DCP

- The objectives of the landscaping section of the Berrigan DCP is to improve the visual quality and amenity of industrial development through the provisions of effective, low maintenance landscaping.
- That a landscaping buffer is to be provided between industrial developments and adjoining or nearby non industrial land uses.

The proposal will include landscaping around the perimeter of the proposal for a minimum width of 5 metres. The landscaping area will be protected from vehicle movements, will be native plant species that are drought tolerant and include a range of species of various heights to create interest. The landscaping will reduce visual impact from the proposal by providing a vegetation screening that will improve visual amenity and contribute to the visual amenity in the neighbouring environment.

3.4 Parking and access

- Objectives of the zone is to ensure sufficient on-site parking for employees and visitors and that there is safe movement of vehicles within a site. The objectives are also to ensure high standard of construction of areas associated with vehicle movement and parking.

Primary access to the site will be from Broughans Road. This access will utilise an existing farm gate access which is used by the landowner to access the rural property. The new access point is to be upgraded to an all-weather access rural standard crossover, capable of accommodating all vehicles to the site. This will include installing a compacted surface from the edge of the existing road carriageway to the subject land and internal access track as well as provision of 375mm diameter pipe culvert in the table drain with a minimum length of 4.88 metres and trafficable end walls. A design for the proposed culverts has been submitted as requested and has addressed item 7 form the reasons for deferral. Internal all-weather access tracks are to be constructed capable of accommodating heavy vehicles will allow for two-way movements and ensuring all vehicles to enter and exit the site in a forward direction. There will be a dedicated car parking area onsite to accommodate employees and visitors to the site.

3.5 Outdoor areas

- Objectives of the control is to ensure the visual amenity of industrial areas and screen outdoor storage and work areas as seen from public land and non industrial land uses. Outdoor storage and work areas must be suitably surfaced to prevent dust rising from vehicle movements or wind, should this be a potential impact dust suppression measures are to be employed.

A landscaping strip around the proposal will effectively screen the outdoor storage and facilities to provide amenity to the surrounding neighbouring environment. Strategies such as dust suppression are detailed further in this report will be implemented during construction works onsite. Once operational, the site will have grass covering to ensure prevent dust impacts on the neighbouring environment.

3.6 Amenity

- Objectives of the control is to locate industrial activities in locations that minimise detrimental offsite impacts and to minimise amenity impacts on residential and future residential areas. Outdoor areas must be treated and maintained to minimise the impacts of dust. All stormwater is to be appropriately managed onsite. Land uses potentially to have a detrimental impact on adjoining properties are to provide

information in respect to the likely impacts and proposed mitigation measures of these impacts. Land uses or development considered by Council to potentially have a detrimental impact on existing or future residential areas through noise and air emissions will be discouraged without the submission of a relevant Impact Statement by the applicant which will become a condition of consent.

The proposal is supported with an Statement of Environmental Effects and supporting documents and studies that consider the potential impacts from the proposal and various strategies to mitigate against these impacts. The construction and decommissioning phases will be temporary lasting for maximum of 6 months. The anticipated impacts from the proposal is discussed below and the mitigation strategies to reduce impacts. All stormwater will be appropriately managed onsite to ensure no impact on neighbouring allotments or on the roadway. This is detailed in the Stormwater Management Plan Prepared by SJE consulting Report Job Ref: 500090.

The proposal will be for a portion of an agriculture land that will continue to be utilised for agricultural purposes. The proposal will provide diversity in the primary industry enterprise that as per discussions in this report is appropriate for the area. The proposal will enhance the production in the region through the provision of energy. The site will be required to be decommissioned and rehabilitated once development is complete to ensure that the land can be utilised for land uses permissible and can meet the objectives of the RU1 Primary Production zone.

Provisions any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4.

There has been no planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4.

Provisions of the regulations (to the extent that they prescribe matters for the purpose of this paragraph)

There are no provisions of the regulations that need considering.

The likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality

- ***Biodiversity Conservation Act 2016*** **(BC Act)**

As per the Statement of Environment Effects for the Finley Solar Facility the subject site overall is cleared and has been disturbed and did not identify threatened species or threatened ecological communities within the development area. The assessment determines that the proposed works will have no significant impact and will not trigger the Biodiversity Offset Scheme. The proposed development is not expected to have a significant impact on a threatened species or ecological community.

The potential impacts from the development may have direct or indirect impacts on biodiversity within the site or adjacent areas during construction and operation, including increased weed encroachment, and other edge effects from development. Potential indirect impact on scattered native trees and habitat for native bird species within the site can be adequately mitigated through the design and operational stages. Vegetation located adjacent to the impact area will be protected and any threatened species observed during works will be appropriately managed to ensure no impact on the species.

- ***Environment Protection and Biodiversity Conservation Act 1999*** **(EP & A Act)**

An assessment for biodiversity was completed, including considerations of Matters of National Significance. Given the cleared and disturbed nature of the site and no threatened species or threatened ecological communities identified within the development area, it is consequentially considered that harm on Matters of National Significance is not likely. The EP &A Act also includes cultural heritage and provides protection of these items into schedules such as Local Environmental Plans (LEPs) or Regional Environmental Plans (REPs). No Aboriginal sites or places are identified under the Berrigan LEP and no places are identified within close proximity to the development area. The Aboriginal Due Diligence Assessment for Finley 5MW Solar Farm has assessed that the site has low potential for Aboriginal Cultural Heritage given that no natural watercourses are present and the landscape has been significantly modified from its pre-European state. The site may have been used in a transitory nature by Aboriginal people passing through the area when utilising the permanent resources of the Murray River and smaller nearby ephemeral creek lines. Therefore, approval from the Commonwealth Minister for the Environment is not required.

- ***National Parks and Wildlife Act 1974*** **(NPW Act)**

Part 6 of the NPW Act concerns Aboriginal objects and places and various sections describe the offences, defences and requirements to harm an Aboriginal object or place. As stated above, The Aboriginal Due Diligence Assessment for Finley 5MW Solar Farm has assessed that the site has low potential for Aboriginal Cultural Heritage given that no natural watercourses are present and the landscape has been significantly modified from its pre-European state. The site may have been used in a transitory nature by Aboriginal people passing through the area when

utilising the permanent resources of the Murray River and smaller nearby ephemeral creeklines. The proposed works can therefore proceed with caution and any items suspected of being Aboriginal in origin discovered during work must be managed appropriately including ceasing all works immediately and appropriate notification to authorities initiated.

- **Potential impacts on Murray Irrigation Limited (MIL) Irrigation Channel**

The proposal is adjacent to a Murray Irrigation Limited (MIL) Irrigation Channel. Given this is a man-made structure, the proposal does not require a controlled activity approval as per the *Water Management Act 2000* from NSW Natural Resources Access Regulator. As the water structure is owned by MIL, a referral was sent to MIL on 25 August 2020. There has been no response provided by MIL.

- **Potential Impacts from the development**

Potential Noise Impacts

The potential noise impacts from the site include heavy vehicle access to the site and earthworks for a short period of time during construction and decommissioning. The potential noise impacts have been anticipated based on the surrounding receptors, being nearby dwellings. The surrounds of the impact area are largely undeveloped consisting of large farming areas and low density housing development on farming or lifestyle blocks. Closest receptors are approximately between 700 to 1000 metres. During operation, the facility is expected to have minimal noise predominately sourced from maintenance works.

The applicant has submitted as requested by the Deferral item 1 an Acoustic report this identified possible impacts in relation to Nosie from the construction of the development and the operational of the solar arrays. It has recommenced hours of works and items that can be used during the construction to mitigate potential issue to surrounding developments.

The following strategies will be implemented to mitigate against potential noise impacts:

- limiting the construction works and vehicle movement to appropriate hours of operation and through a traffic management plan.
- Placement of signage at site entrance advising drivers to minimise noise both on and off site
- Utilise temporary fencing and other barriers to nullify construction noise between construction works and receptors where possible.
- Select and utilisation of quietest available machinery and minimise the total number of vehicles
- Where possible, avoid simultaneous use of machinery to avoid the accumulation of noise.

- Engage a community liaison officer to during the duration of works to mitigate and keep informed all effected residents of busier periods during works and provide a contact details for complaints and queries.
- Employ the use of broadband audible reversing alarms on all mobile plant ensure contractor are either retro fitting plant with these device s prior to commencement of works.

Potential Heavy Vehicle Traffic Impacts

The potential heavy vehicle traffic impacts from the development would be an increase traffic associated with the development accessing the site from the Newell Highway, along Broughans Road and then to the site mainly during construction and decommissioning that may impact on the road infrastructure and local traffic safety. This is through increased heavy vehicle traffic on the local road, wear on the road which may cause increased road damage and through clay being tracked from the site along the road. Broughans Road is a two-lane, two-way rural sealed road within a 20 metre wide road reserve. It is classified as a Residential Access Rural Sealed Road and is authorised for travel by vehicles up to and including B-Doubles. It is expected that on average during construction there will be sixteen (16) vehicles per day, a maximum of six days per week.

A supporting Traffic Impact Assessment has considered the suitability of the road and recommended improvement works as required. A road maintenance agreement will be required to be entered into with Council. There will be upgrades required to Broughans Road to adequately cater for increased heavy vehicles accessing the development site. The access will accommodate heavy vehicles to ensure they enter and exit the site in a forward direction and an access gate set back from the road to ensure access to the site without impacting the location road network.

The proponent proposes to utilise bus transport for workers to the property wherever possible to minimise traffic movements to and from the site. Appropriate treatments will be provided onsite during construction to prevent tracking or movement or soils or mud during construction works.

Internal all weather access tracks that will adequately cater for heavy vehicles will provide heavy vehicle access onsite and all vehicles will park onsite. Internal tracks will cater for two-way movements.

Potential Vibration Impacts

There are potential for impacts related to vibration during construction works on nearby dwellings. The construction activities will involve driving and screwing the posts into place to fix the panels in place. These works will be undertaken at reasonable distances from nearby residences and will be carried out in accordance with appropriate construction noise management protocols to minimise noise emissions.

Potential Dust Impacts

The use of the subject land is for agricultural purposes and the current condition of the land, has degraded much of the groundcover vegetation and left the ground exposed. The construction process has potential for dust generated by earthworks, excavation of footings, ancillary structure including the substation, establishment of internal roads and heavy vehicles utilising internal roads during the construction and decommissioning phases. The applicant proposes to utilise construction and dust suppression techniques during works on the property including:

- Minimise vehicle movements to defined paths and laydown areas
- Supress dust emissions using watering
- Pause works during dry and windy weather
- Minimise the driving of footings of the arrays through an appropriately designed layout
- Ensure stockpiles of excavation material is bunted and protected from wind and vehicle movements.

During operation:

- Revegetation and regeneration of site with appropriate ground cover species
- Ensure all plant, storage areas and equipment is contained within a designated graded area
- Grade and add gravel base to access ways and circulating roads, where appropriate.
- This will include pile driving of posts into the ground, grading and compacting of internal roads and use of water carts.

Potential Waste Impacts

Construction works will produce general packaging and construction waste, including plastics, recyclable cardboard, off-cut metals and steel, excess cable and the like. A dedicated waste collection point is to be established in the south-east corner of the site, and will be provided with all necessary receptacles for collection and disposal off-site. A detailed Waste Management Plan will be prepared and endorsed prior to works commencing on site.

Potential Visual and Glare Impacts

Glint and glare from PV panels can have potential safety or amenity impacts to surrounding sensitive receivers, including potential to impair observers through inducing an after image. An

assessment of the potential impact of the proposal has been undertaken in accordance with the US Federal Aviation Administration (FAA) glare guidelines.

Generally, solar panels will not create significant glare with other commonly existing surfaces. PV panels are designed to collect sunlight to convert to energy and therefore absorb the majority of light received. The panels are designed using anti-reflective coatings during manufacture to reduce reflection and will typically absorb 80-90% of the light received. PV are generally less reflective than other naturally occurring elements such as soils and crops. A tracking system will allow the proposal to follow the sun through the day and can have the angle of incidence reduced. It is also possible to 'back track' panels at certain periods of the day to reduce potential impacts.

The arrays are to be setback approximately 200 metres from the southern boundary (Broughans Road), 370 metres from the northern boundary, 1.7 kilometres to the western boundary (Canalla Road) and 2 km from the Finley Aerodrome. The panels are to be established along the eastern boundary. There is one existing dwelling within 500 metre to the east of the proposal and one to the south approximately 600 metres from the proposal. There are two existing dwellings to the west within approximately 600 metres from the proposal. There are a number of existing dwellings along Dales Road to the east of the proposal on Large Lot Residential zoned land under the Berrigan LEP.

As the proposal is in close proximity to the Finley Aerodrome, Berrigan Shire Council referred the proposal to CASA. A submission was received by Civil Aviation Safety Authority (CASA). They had no objections to the proposal. CASA acknowledges that modern solar panels are designed to absorb light and not to reflect light. The US Federal Aviation Administration (FAA) is relatively advanced in terms of solar farm glare evaluation and acknowledges a glare assessment for the proposal for potential glare along the final approach paths to the airport to ensure pilot vision is not impacted during the critical last phases of a flight, in accordance to these guidelines. The proposal effectively comply with FAA requirements. An assessment on the proposal has been submitted by the applicant that is in accordance with the FAA guidelines. The proposal will ensure mitigation strategies recognised in the Statement of Environmental Effects are implemented including notifying the Finley Aerodrome management and commercial operators of the proposal and forming landscaping in areas identified in the assessment report as soon as practical. Berrigan Shire Council also referred the proposal to the local commercial business that utilise the Finley Aerodrome. No response was received.

The assessment determines that the glare generated by the proposal is acceptable and can be adequately mitigated through landscaping screening around the perimeter of the proposal. The impact of the proposal on the adjacent flight paths is considered acceptable with mitigation

strategy of landscaping screening to reduce the potential glare impacts. This landscaping should be established on site as soon as possible.

- **Workforce and Accommodation**

The construction works are expected to generate a workforce of up to 100 persons over the 9 month works period (with an average of approximately 30 persons at any one time as works will be conducted over a number of phases). This has the potential to place pressure on local housing market, accommodation providers and other businesses and industries in the local area. The applicant intends to mitigate potential pressures by utilising local workforce for the majority of the construction work which will reduce the demand of workers seeking temporary accommodation. There are a number of accommodation options available in Finley and in neighbouring townships such as Berrigan and Tocumwal. The proposal overall is assessed as generally having a positive impact on the local economy and will not lead to an unreasonable impact on the local housing and accommodation providers. The applicant has a number of mitigation strategies including:

- Preparation of a detailed Construction Schedule for discussion with local community, service providers and accommodation providers.
- Engage the majority of construction workforce from the local area, including both specialised contractors and other workers.
- Through tender and procurement processes, the applicant will give higher weighting to these individuals and companies that employ staff from the local area.
- Undertake initial and ongoing engagement with local housing and accommodation providers to determine availability of accommodation ahead of time and ensure that peak periods of those providers are not detrimentally affected.

- **Stormwater**

To adequately collect runoff from the site, the development will include new swale drainage along the internal access roads and a detention basin capable of accommodating peak flows and discharging to pre-development rates. A Stormwater Management Plan has been prepared and sets out the design requirements for stormwater catchment. The swales will have a capacity for 0.037 m^3/sec of runoff and will discharge to the basin with a surface area of approximately 500metres^2. The basin is intended to comprise a shallow basin with a small bank, enabling a more natural basin design. Proposed outfall from the basin will be provided with rock beaching to allow runoff at pre-developed levels to be made without increasing erosion risk. Internal swales and the basin will comprise appropriate surface treatments, including grass and other landscaping as required to prevent erosion and assist with treatment.

- **Security**

The proposal will include new post and wire fencing along the western side of the proposed facility to enclose the access track up to the substation. A perimeter security fence will be constructed to the area containing the proposed panel arrays. A site office will be installed for administrative functions and management of access and egress from the property during construction.

- **Social and economic**

The social and economic impacts were anticipated based on the existing value of the land, and the anticipated social and economic effects which the facility will have. These impacts may result from the construction, operation and decommissioning of the facility.

The anticipated potential impacts are as follows:

- Loss of productive agricultural land
- Alteration of rural landscape character and visual amenity, noise levels and air quality
- Increase in traffic on roads from construction and delivery vehicles
- Increased employment opportunities and ongoing benefits to local businesses and suppliers.
- The community also flagged that there are potential impacts from presentation of workers during the construction phase when visiting local businesses.

Given the scale of the facility and the minimal grounds disturbance, the loss of agricultural value will be minimal and temporary. The nature of the array will leave the majority of the impact area undisturbed. The proposed facility will generate employment opportunities and local business opportunities. Land around the arrays can be utilised for livestock grazing. The decommissioning of the facility will restore the land to enable agricultural use. Resources and labour will be sourced locally from within the Berrigan Local Government Area as much as possible. All contractors engaged in the process will be required to maintain high levels of staff management.

The suitability of the site for the development

The site is suitable for the proposal given the general rural context and minimal development in the immediate surrounds. The flat profile of the land will enable the facility to have minimal impacts on nearby dwellings and urban development. The site is generally free of development constraints and is accessible to heavy vehicles during construction and decommissioning phases and for ongoing maintenance.

The site has been selected for the proposal by the applicant due to the excelling solar exposure and access to the electrical transmission network. The site also has a low level of environmental impact, having been cleared and disturbed. The likely impacts of the development have been considered in this report and supporting documents, and have been found to be acceptable subject to appropriate mitigation measures. The site will be decommissioned once complete which will enable future agricultural use of the site.

Any submissions made in accordance with this Act or the regulations

- **Public Consultation**

Council has engaged in public consultation for the proposal as per the Community Engagement Framework & Community Participation Plan (adopted 20 November 2019) as pursuant to Section 7 of the *Local Government Act 1993*. The proposal was advertised in the local newspaper Southern Riverina News on 19 August 2020. The proposal and all the attached plans were also placed on the Berrigan Shire Council website from 19 August – 9 September 2020 and were available at Council's offices.

The proposal was referred internally at the Berrigan Shire Council to ensure that staff with particular interest in the proposal provided input into the proposal and ensure that the conditions of consent addressed the Council requirements.

Neighbour Notification

Council also sent a letter to the neighbouring allotments on 18 August 2020, for land owners that would be directly adjacent to the proposal. The closing date for submissions was 8 September 2020.

- **Submissions on the proposal**

No.	Summary of Submission	Comment on Submission
1	The submitter is pro-development in Berrigan Shire in particular for renewable energy. The submitter is concerned about the visual impacts on their property, that there is no visual impact assessment to analysis potential impacts and that no landscaping is planned for the site to mitigate against potential visual impacts. Given the proximity of the development to other properties the submitter is concerned that there is no stormwater management plan and no noise assessment as they would expect to hear some level of noise during the construction phase and would like to know what	Landscaping will be provided around the permitter of the proposal to effectively mitigate the potential visual impacts from the proposal and to add to the amenity of the neighbouring environment. A stormwater plan is provided with the proposal to ensure that stormwater will be contained onsite. In regards to noise there are a number of mitigation strategies included in the Statement of Environmental Effects that will affectively mitigate noise impacts and the duration for construction works is for a maximum duration of 9 months

	mitigation strategies that are planning for this potential impact.	without prior approval from Council.
2	A submission was received by Civil Aviation Safety Authority (CASA). They had no objections to the proposal. CASA acknowledges that modern solar panels are designed to absorb light and not to reflect light. The US Federal Aviation Administration (FAA) is relatively advanced in terms of solar farm glare evaluation and acknowledges a glare assessment for the proposal for potential glare along the final approach paths to the airport to ensure pilot vision is not impacted during the critical last phases of a flight, in accordance to these guidelines. The proposal effectively comply with FAA requirements.	An assessment on the proposal has been submitted in accordance with the FAA guidelines. The proposal will ensure mitigation strategies recognised in the Statement of Environmental Effects are implemented including notifying the Finley Aerodrome management and commercial operators of the proposal and forming landscaping in areas identified in the assessment report as soon as practical.

Further community consultation was provided by the applicant which included the distribution of a project information sheet to all landowners within a 3 kilometre radius of the development area. The applicant also met with several of the closest landowners during 2019 to introduce the project and discuss any concerns or feedback. Due to impact of COVD-19, further direct meetings were not undertaken, however interested parties were encouraged to contact the project team by phone or email. The applicant is committed to carrying out construction and operation of the facility in a co-operative manner with the surrounding community and welcomes further contact and engagement with the community.

The applicant will ensure that information on the project will remain on the dedicated project's website. The website includes an overview of the project, key timeframes and will allow interested stakeholders the opportunity to review information and contact the project team. The proponent will continue to liaise and work with surrounding landowners during the construction phase to ensure that no further issues arise. Relevant information and detail will continue to be posted on the project website as it is made available.

- ***The public interest***

As discussed above, the social and economic impacts of the development on the neighbouring environment and generally given the scale of the facility and that the facility will generate employment opportunities and local business opportunities the proposal was assessed as having a minor impact. In regards to agriculture, the balance of the land will continue to be utilised for agricultural purposes, the proposal is a small portion of the land and the land

around the arrays can be utilised for livestock grazing and the site will be decommissioning once development is complete to restore the land to enable agricultural use. Resources and labour will be sourced locally from within the Berrigan Local Government Area as much as possible.

Overall, the development will assist towards goals to producing renewable energy and reducing emissions nationwide relating to climate change. It will also assist towards supplying land within the LGA with electricity, further contributing to its capacity and electrical infrastructure.

The proposal is consistent with the regulatory and business development frameworks including state government legislation and strategic documents such as the Riverina Murray Regional Plan, Berrigan Community Strategic Plan and Berrigan Shire Local Strategic Planning Statement.

Conclusion / Legislation

In assessing this development application, the relevant parts of Section 4.15 of the *Environmental Planning and Assessment Act 1979* have been taken into account. As demonstrated by the detailed assessment, the proposal satisfies the intent of the provisions of the applicable EPIs and will result in a positive development outcome in terms of social, environmental and economic impacts.

Recommendation

That development application 40/21/DA/DM be approved subject to the following draft conditions:

1. Approved Plans

The development shall be implemented substantially in accordance with the details set out on the Approved Plans 'Statement of Environmental Effects' (SEE) by Habitat Planning June 2020 revised December 2020, Habitat Planning REV S1/DA1- S9/DA1 ,'Traffic Impact Assessment' by Spotto Consulting April 2020, 'Aboriginal Due Diligence Assessment' by NGH June 2020, and Stormwater Management Plan by SJE Consulting July 2020 , SJE Consulting Drawing NO: 500090-CO1 Harwood Acoustics Report Reference : 2022011E-R, FSLA Finley Solar Farm DWG NO: 20032 LO1,LO2 and other appendices listed in the SEE, on the application form, and on any supporting information received with the application except as amended by the conditions specified hereunder.

Reason: To ensure works are carried out in accordance with approved plans.

2. Disturbed Area

The total disturbed area of the solar array is not to exceed the area marked on Approved Plans (approximately 17 hectares). This is to ensure the orderly development with the aim of minimising the environmental impacts.

3. Construction Certificate

No work is to commence until the person granted development consent has had the detailed plans and specifications endorsed by the Council or other accredited certifier and has received a "Construction Certificate" [Section 81A EP&A Act 1979].

Reason: to ensure compliance with legislative requirements.

4. Appointment of PCA and Notice of Commencement

No work is to commence until the person granted development consent has:

a) Obtained a Construction Certificate for each structure
b) Appointed a PRINCIPAL CERTIFYING AUTHORITY
c) Notified the Council of the appointment
d) Appointed a principal contractor for the building work who must be the holder of a contractor licence if any residential building work is involved.
e) Given the Council at least 2 days' notice of the intention to commence erection of the building. (Section 81A EP&A Act 1979)

Reason: to ensure compliance with legislative requirements.

5. Compliance with Building Code of Australia

All building work must be carried out in accordance with the provisions of the Building Code of Australia.

Reason: to ensure compliance with legislative requirements.

6. Hours of Operation – Civil Works

The hours of operation for civil works, earthworks, construction, operation and decommissioning on-site shall be limited to the between 7:00am and 6:00pm Monday to Friday inclusive, 8:00am and 1:00pm Saturdays and no work shall be carried out on Sundays and Public Holidays without the prior consent of the Council. Minor maintenance work is permitted outside of these hours when work is carried out with hand tools.

Reason: To ensure hours of operation for the development does not impact on the residential amenity of neighbouring environment.

7. Duration of Civil Works

Construction and decommissioning works are permitted for a maximum period of 9 months from the date of commencement of construction works until commissioning or from the date of commencement of decommissioning works until site is vacant from the development. Any further works outside this period will require prior approval from Council.

Reason: To Limit the impact of construction and decommissioning works on the locality.

8. Traffic Management Plan

Prior to the issue of the construction certificate and any road upgrades required under this consent, the Applicant must prepare a Traffic Management Plan for the development in consultation with Council. This plan must include, but not limited to:

a) Details on number of vehicles accessing the site for construction and decommissioning phases;
b) Details of the entire transport route to be utilised for development-related traffic;
c) Dilapidation surveys for the construction and decommissioning phases. Surveys must be conducted prior to works commencing, during works and following completion of works. A survey must report on the condition of local roads on the transport route/s to identify the required upgrades to ensure the road is maintained as per predevelopment standard and adequately caters for heavy vehicle turning movement accessing the site and as per Council Engineering Guidelines (newest version);
d) A protocol for the repair of any road upgrades as identified as identified in the approved dilapidation surveys;
e) Details of the measures that would be implemented to minimise traffic safety issues and disruption to local users of the transport route/s during construction and decommissioning works including, but not limited to:
    i. Temporary traffic controls, including detours or signage,
    ii. Notifying the local community about project-related traffic impacts,
    iii. Procedures for receiving and addressing complaints from the community about development related traffic,
    iv. Minimising potential for conflict with school buses or other motorists as far as practicable,
    v. scheduling of haulage vehicle movements to minimise convoy length or platoons,
    vi. responding to local climate conditions that may affect road safety such as fog, dust, wet weather,
    vii. responding to any emergency repair or maintenance requirements and
    viii. a traffic management system for managing over-dimensional vehicles;

f) A heavy vehicle driver's code of conduct that addresses:
    i. travelling speeds,
    ii. driver fatigue,
    iii. procedures to ensure that drivers adhere to the designated transport routes and
    iv. procedures to ensure that drivers implement safe driving practices.

A copy of the Traffic Management Plan must be submitted to Council for approval prior to the issue of the construction certificate.

Reason: to ensure effective transport infrastructure is established for the development and that the transport requirements for the development does not impact on the local traffic requirements for the area.

9. Broughans Road and Site Access

Prior to the issue of the construction certificate for the Construction Phase:

a) Dilapidation surveys for the prior to construction stage must be submitted to Council for approval;
b) Road upgrades must be made to Broughans Road as identified dilapidation surveys;
c) A culvert must be constructed in the Broughans Road Reserve to ensure water drainage along the road reserve.
d) A sealed access driveway must be constructed from the property boundary to Broughans Road to allow turning movement of heavy vehicles to the satisfaction of Council engineering.

During and upon completion of works during the Construction and Decommissioning phases,

a) Dilapidation surveys must be submitted to Council for approval;
b) Road upgrades must be made to Broughans Road as identified in dilapidation surveys.

All road works must be to the satisfaction of Council and in accordance with the *Austroads Guide to Road Design* (as amended by Transport for NSW supplements). A record by the applicant of any road upgrades made to Broughans Road as per the dilapidation surveys;

Reason: This is to ensure effective transport infrastructure is established for the development and that the transport requirements for the site does not impact on the local traffic requirements for the area.

10. Works in Road Reserve

No work is to be carried out beyond the property boundary on any road reserve, naturestrip, footpath, concrete kerb, paved area, and building or supply service without the prior written

consent of the Council, in order to protect community assets and eliminate potential hazards to the community in the "public place".

An "Application for Works, Structures and Activities on a Council Road" must be submitted to Council, along with relevant plans and the determined fee. Consent must be obtained, before commencement of any work.

Reason: To ensure compliance with legislative requirements.

11. Vehicle Restrictions

The following vehicle restrictions apply to the development:

a) All vehicles traffic associated with the development must travel to and from the project site via the Newell Highway, Broughans Road and the approved site entry point.
a) Length of any vehicles used for the development does not exceed 19 metres unless Council agrees otherwise.
b) Heavy Vehicle movements on local roads identified are limited to Monday to Friday 7:00 am to 6:00 pm, Saturday 8am to 1pm and no movements on Sundays or public holidays will be permitted. No heavy vehicles will be permitted to travel during school drop off and pick up times between 7:30-9:00 am and 3:00-4:30pm on Gazetted School Days.
c) Noise prevention strategies for heavy vehicles are to be implemented where appropriate
d) All vehicles must enter and exit the site in a forward direction.
e) All vehicles must load and unload within the approved lease area as shown on the approved plans
f) Vehicles leaving the site must be in clean condition and do not result in dirt being tracked onto the public road network.
g) Dust prevention strategies are to be implemented for vehicle movement's onsite.
h) No vehicle associated with the operation are to park on the adjoining public roads.

The Applicant must keep accurate records to identify compliance with above.

Reason: to ensure effective transport infrastructure is established for the development and that the transport requirements for the site do not impact on the local traffic requirements for the area.

12. Onsite Vehicle Access

An onsite vehicle access must include the following:

a) An all-weather access road to cater for heavy vehicle movement and to link the development to Broughans Road to the satisfaction of Council's engineering staff and incorporate stormwater drainage measures.
b) Must ensure that all heavy vehicles can enter and exit the site in a forward direction and can safety turn around onsite.
c) Any perimeter gate for the access driveway must be a minimum of 8 metres wide and setback a minimum of 20 metres from Broughans Road.

Reason: To ensure safe vehicle movements for the development onsite.

13. Onsite vehicle parking

A designated area must be provided onsite linking to the access driveway for all vehicles to park on-site. All access to vehicle parking areas must be an all weather surface.

Reason: To ensure safe vehicle movements for the development onsite and to ensure the development does not impact on the local road network.

14. Stormwater

All stormwater water from the development must be managed onsite. Prior to issue of the construction certificate:

a) a stormwater management plan must be prepared in consultation with Council and
b) submitted a copy of these plans for approval by Council.

Reason: To ensure that stormwater from the development does not impact on adjoining allotments or the road reserve.

15. Erosion and Sedimentation Control Plan

An Erosion and Sedimentation Control Plan (ESCP) must be submitted to Council and approved by Council prior to the issue of the construction certificate. Strategies identified in the plan must be progressively implemented during works. An ESCP must include, but is not limited to:

- minimise any soil erosion associated with the construction, upgrading or decommissioning of the development in accordance with the relevant requirements in the *Managing Urban Stormwater: Soils and Construction* (Landcom,2004 or latest version);
- ensure the solar panels and associated infrastructure are designed, constructed and maintained to avoid causing any tunnel erosion on site;

- implement appropriate flood management practices to ensure post-development flows from the site are limited to pre-development flows for all storms up to and including the 100-year Average Recurrence Interval event.

Reason: To ensure erosion and sedimentation does not affect neighbouring environment and or the local road network.

16. Water Pollution

The applicant must ensure that the development must not cause any water pollution, as defined under Section 120 of the *Protection of the Environment Operations Act 1997*.

Reason: To ensure compliance with legislative requirements.

17. Top Soil

Top soil removed for site works must to be distributed back onto the land where appropriate to encourage vegetation growth post construction and post decommissioning. Any stockpiling of top soil is to be stored to ensure it can be utilised for future uses including decommissioning of the site. Top soil collected is to be cleared of any noxious or highly invasive weed species.

Reason: to ensure the ongoing use of the land to meet the objectives of the RU1 Primary Production zone as per the *Berrigan Local Environmental Plan 2013.*

18. Waste Management Plan

A Waste Management Plan must be prepared in consultation with Council and be approved by Council prior to issue of the construction certificate. The plan must include, but is not limited to:

a) Waste minimisation and recycling strategies to minimise waste going to landfill;
b) A list all anticipated waste during construction and decommissioning the development and a classification of all waste generated on site in accordance with the EPA's *Waste Classification Guidelines 2014* (or its latest version);
c) Storage and handling of waste on site in accordance with its classification (including a site map of waste in accordance with its classification);
d) A list of where waste will be disposed of at a suitable reciprocal in accordance with its classification;
e) An appropriate location of waste stockpile onsite during construction and decommissioning to minimises impact on the residential amenity of the neighbouring neighbourhood.

Reason: To ensure waste from the development is minimisation and affectively managed to minimise the impacts on the residential amenity in the surrounding environment.

19. Stormwater

All stormwater water from the development must be managed onsite. A Stormwater Management Plan must be prepared in consultation with Council and be approved by Council prior to issue of the construction certificate.

Reason: To ensure that stormwater from the development does not impact on adjoining allotments or the road reserve.

20. Native Flora and Fauna

Vegetation is to be retained onsite as per Statement of Environmental Effects June 2020 and strategies must be implemented where required such as, but not limited to:

- Scattered trees located adjacent to the impact area and the electrical supply services traversing the site are to be protected by appropriate barriers, in accordance with AS4970 – Protection of trees on development sites.
- If threatened species are observed during works, works should cease immediately, and an appropriately qualified ecologist be contacted.

Reason: To minimise impact from development on vegetation onsite and on the surrounding environment.

21. Heritage

The recommendations in the Aboriginal Due Diligence Report for the Finley Solar Facility must be implemented where required including but not limited to:

a) All works must be constrained to the areas of existing disturbance and any activity proposed outside of the current assessment area should also be subject to an Aboriginal heritage assessment.
b) If any item suspected of being Aboriginal in origin are discovered during the work, all work in the immediate vicinity must stop and the appropriate authority notified (such as Berrigan Shire Council and the Department of Planning, Industry and Environment) and work must not recommence in the area until this is authorised by the relevant authority.

Reason: To ensure the protection of significant heritage objects and is as per the *NSW National Parks and Wildlife Act 1974.*

22. Dust Suppression

Dust suppression recommendations and strategies as per the Statement of Environmental Effects June 2020 Revised December 2020 are to be implemented where required to minimise dust off site. This is including, but not limited to:

During construction:

a) Minimise vehicle movements to defined paths and laydown areas
b) Supress dust emissions using watering
c) Pause works during dry and windy weather
d) Minimise the driving of footings of the arrays through an appropriately designed layout
e) Ensure stockpiles of excavation material is bunded and protected from wind and vehicle movements.
f) Use of water carts where required.

During operation:

g) Revegetation and regeneration of site with appropriate ground cover species
h) Ensure all plant, storage areas and equipment is contained within a designated graded area
i) Grade and add gravel base to accessways and circulating roads, where appropriate.

Reason: To ensure there are minimum dust impacts on the surrounding environment.

23. Noise Suppression

Noise suppression recommendations and strategies as per the Statement of Environmental Effects June 2020 Revised December 2020, as well as the additional Environmental Noise Impact assessment supplied by Harwood Acoustics Reference Number 2011011E-R are to be implemented where required to minimise noise off site. This is including, but not limited to:

a) limiting the construction works and vehicle movement to appropriate hours of operation and through a traffic management plan.
b) Placement of signage at site entrance advising drivers to minimise noise both on and off site
c) Utilise temporary fencing and other barriers to nullify construction noise between construction works and receptors where possible.
d) Select and utilisation of quietest available machinery and minimise the total number of vehicles
e) Where possible, avoid simultaneous use of machinery to avoid the accumulation of noise.
f) A community liaison officer to be appointed by the contractor prior to commencement of works, to engage with the surrounding residences to explain construction timeframes and potentially noisy periods that could be expected during the works.

Reason: To ensure there are minimum noise impacts on the surrounding environment.

24. Lighting

Any security lighting onsite must minimise the off-site lighting impacts of the development. This is to include, but not limited to, ensure that all external lighting associated with the development:

a) Is installed as low intensity lighting (except where required for safety or emergency purposes)
b) Does not shine above the horizontal line; and
c) Complies with *Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting*, or its latest version.

Reason: To ensure that any lighting for the proposal has minimal effect on residential amenity in the surrounding environment.

25. Landscaping

A landscaping plan must be submitted to Council and approved by Council prior to the issues of the construction certificate. A landscaping plan must include, but is not limited to:

a) A 5 metre wide mature vegetation buffer around the perimeter of the proposal including around storage areas and temporary office structures to the satisfaction of Council.
b) Landscaping is to consist of native species to the area and a number of mature native drought tolerant trees and shrubs.
c) Landscaping must be located so it is protected from vehicle movements.

Landscaping must effective screening the view of the solar panels and ancillary infrastructure on site from surrounding residences and within 3 years of the commencement of construction. Sufficient watering must be provided to ensure establishment of landscaping. The landscaping area must be kept free from weeds.

Reason: To enhance the visual amenity of the area.

26. Visual amenity

The applicant must implement strategies from the Statement of Environmental Effects where required, including but not limited to:

a) Use of anti-reflective coating.
b) Materials, textures and colour selection of infrastructure onsite relating to the palette of the surrounding environment, where possible.

c) Any situation where the tilting action of the solar array is disabled, panels should not be left horizontal, but be left tilted to the west, ideally at a tilt angle of at least 10^{o} to horizontal.
d) Not mount any advertising signs or logos on site, except where this is required for safety purposes.

For the Finley Aerodrome:

e) Notify Finley Aerodrome management and operators, including but not limited to, any management committee, local commercial operators from the aerodrome, at the commencement of works to provide notification of the placement of solar panels.
f) Implementing landscaping strategies to reduce glare for the Finley Aerodrome as soon as possible as identified in the supporting PV Glare Analysis.

Reason: To avoid the potential for adverse glare or reflection from the solar panels and enhance the visual amenity of the development area for the surrounding environment.

27. Emergency Response Plan

Prior to the commencement of operations, a site specific Emergency Response Plan (ERP) must be prepared in consultation with the relevant local emergency services agencies. This plan must identify, but is not limited to, procedures in the event of an emergency onsite or in the vicinity of the site and any fire safety measures. At least two copies of the plan must be kept on site in prominent positions such as adjacent to the site entry point and in general congregation areas at all times.

Reason: To ensure the safety of anyone accessing or working the site.

28. Site Safety Plan

A Site Safety Plan (SSP) covering all safety requirements of the development must be submitted to Council and be approved by Council prior to the issue of the construction certificate. A SSP is to include, but not limited to, any current COVID-19 safe workplace plans, traffic movements, signage and storage.

Reason: To ensure the safety of anyone accessing or working the site.

29. Mitigation of Potential Impacts

To minimise the potential impacts of the development on the surrounding area, a Construction Environmental Management Plan (CEMP) or similar is required to be provided where required and submitted to Council for approval prior to the issue of a construction certificate. This is to include, but not limited to:

- Aboriginal Heritage Management.
- Construction Traffic Management.
- Site Establishment.
- Bushfire Management (including the following where required)
    - Include an appropriate fire defendable space around the perimeter of the solar array area that permits unobstructed vehicle access;
    - Manage the defendable space and solar array area as an Asset Protection Zone;
    - Complies with the relevant asset protection requirements in the RFS's *Planning for Bushfire Protection 2006* (or equivalent) and *Standards for Asset Protection Zones*;
    - Is suitable equipped to respond to any fires on site
    - Assist the RFS and emergency services as much as practicable if there is a fire in the vicinity of the site; and
    - Notify the relevant local emergency management committee following construction of the development, and prior to the commencement of operations.
- Waste Management.
- Erosion and Sediment Control.
- Noise Management.
- Dust Management.
- Site Decommissioning.
- Operation Hours.
- Emergency, safety and security. And
- Weed Management and Biosecurity.

Reason: To ensure the minimisation of potential impacts from the development on the surrounding environment.

30. Control of weeds

The following must be implemented where required to ensure the control of weeds:

- All vehicles, equipment, footwear and clothing should be clean and free of weed propagules prior to entering the subject site;
- Any weeds that are removed during the proposed works should be disposed of appropriately.

Reason: To ensure the control of weeds from the site to surrounding environment.

31. Chemical containment

a) All chemicals must be kept in clearly marked bunded areas.

b) Regularly inspect vehicles and mechanical plant for leakage of fuel or oil.
c) No re-fuelling of vehicles, washing of vehicles or maintenance of vehicles and plant to be undertaken within 20 m of natural drainage lines.
d) Any soil affected by any fuel or chemical spillages is to be removed from the site and deposited within a landfill licensed to receive that soil.
e) Battery storage is not permitted on the project site without prior approval from Council.

Reason: to protect the area from any soil contamination and to assist in the latter rehabilitation of the site.

32. Storage and Handing of Dangerous Goods

In regards to Storage and Handing of Dangerous Goods, the following must apply:

a) Storing and handling all dangerous or hazardous materials on-site in accordance with AS1940-2004 the storage and handling of flammable and combustible liquids, or its latest version;
b) Ensure that substation is suitable bunded; and
c) Minimise any spills of hazardous materials or hydrocarbons, and clean up any spills as soon as possible after they occur and remove any affected soil in an approved waste facility.

Reason: to protect the area from any soil contamination and to assist in the latter rehabilitation of the site

33. Waste Management

No waste is permitted to be received or disposed of onsite. All waste must be removed from site as soon as practicable and must be sent to an appropriately licensed waste facility for disposal that can suitably accept the waste material. A Waste Management Plan must be prepared in consultation with Council and be approved by Council prior to issue of the construction certificate. The plan must include, but is not limited to:

a) Waste minimisation and recycling strategies to minimise waste going to landfill;
b) A list all anticipated waste during construction and decommissioning the development and a classification of all waste generated on site in accordance with the EPA's *Waste Classification Guidelines 2014* (or its latest version);
c) Storage and handling of waste on site (including a site map of where any waste that is to be stored onsite) in accordance with its classification;
d) A list of where waste will be disposed of at a suitable reciprocal in accordance with its classification;

e) An appropriate location of waste stockpile onsite during construction and decommissioning to minimises impact on the residential amenity of the neighbouring neighbourhood.

Reason: To ensure waste from the development is minimisation and affectively managed to minimise the impacts on the surrounding environment.

34. Demolition

Any demolition works shall be conducted and the site maintained in a safe condition during the process of the demolition in accordance with Australian Standard 2601-2001 the Demolition of Structures, Workcover guidelines and the Work Health and Safety Regulation 2011.

Reason: To ensure compliance with legislative requirements.

35. Asbestos Material

Work involving the removal of more than ten (10) square metres of asbestos containing material must be undertaken by a NSW licensed contractor as required by the NSW Work Health and Safety Regulations 2011.

Prior to commencement of any work, the Principal Certifying Authority must be provided with: Written notice is to include the following details:

a) A copy of a signed contract with a person licensed to remove asbestos,
b) The contract must specify the landfill site to which the asbestos containing material is to be delivered.

Reason: To ensure compliance with legislative requirements.

36. Community Consultation

Community consultation recommendations and strategies as per the Statement of Environmental Effects June 2020 are to be implemented where required. This is including, but not limited to:

a) Project information for the project is to remain on the project website including an overview of the project, key timeframes and will allow interested stakeholders the opportunity to review information and contact the project team.
b) Continued liaison with the community where required with surrounding landowners during the construction phase to ensure that no further issues arise.
c) Relevant information and detail is to be posted on the project website as it is made available.

37. Temporary Office

Prior to the issue of the construction certificate, an application for approval pursuant to Section 68 of the *Local Government Act, 1993* to place a temporary office is to be lodged with Council.

Reason: To ensure compliance with legislative requirements.

38. Decommissioning and Rehabilitation

Within 18 months of the cessation of operations, the site must be rehabilitated to the satisfaction of Council. This rehabilitation must comply with the objectives in the following table:

Feature:	**Objective:**
Development site (as a whole)	• Safe, stable and non-polluting • Minimise the visual impact of any above ground ancillary infrastructure agreed to be retained for an alternative use
Solar farm infrastructure	• To be decommissioned and removed, unless the Council agrees otherwise
Land use	• Restore land capability to pre-existing agricultural use
Community	• Ensure public safety

Reason: To ensure that the development does not impact the long term use of the site as per the objectives of the RU1 Primary Production zone under the *Berrigan Local Environmental Plan 2013*.

39. Incident or Non-Compliance Notification

Council must be notified in writing immediately after an incident or non-compliance within the conditions of consent detailing the incident or non-compliance and reasons for this (if known) and what actions have been done, or will be, undertaken to address this.

Reason: To ensure resolutions to any breach can be achieved with minimal disruption.

40. Access to information

Information for the development must be publically available on its website as relevant to the stage of the development and is up to date, including, but not limited to:

a) The Statement of Environmental Effects.
b) The final layout plans for the development.
c) Current statutory approvals for the development.
d) Any proposed staging plans for the development if the construction, operation or decommissioning of the development.
e) How complaints about the development can be made.

f) A complaints register.
g) Any other matter in relation to public consultation on the development as required by Council.

Reason: To ensure compliance with legislative requirements.

41. Resources, Workforce and Accommodation

The recommendations and strategies as per the Statement of Environmental Effects June 2020 revised December 2020 are to be implemented where required. This is including, but not limited to:

a) Preparation of a detailed Construction Schedule for discussion with local community, resource providers, service providers and accommodation providers.
b) Locate resources for the project locally where possible.
c) Engage the majority of construction workforce from the local area, including both specialised contractors and other workers.
d) Through tender and procurement processes, the applicant will give higher weighting to these individuals and companies that employ staff from the local area.
e) Undertake initial and ongoing engagement with local housing and accommodation providers to determine availability of accommodation ahead of time and ensure that peak periods of those providers are not detrimentally affected.

Reason: To ensure the community is engaged as part of the overall project.