



COUNCIL ASSESSMENT REPORT

NORTHERN REGIONAL PLANNING PANEL

PANEL REFERENCE & DA NUMBER	PPSNTH-99 – DA2021/0070	
PROPOSAL	Establishment of a 5MW Solar PV Electricity Generation Facility with Associated Infrastructure	
ADDRESS	LOT: 489 DP: 754944 [115 Airport Road, Narrabri, NSW 2390]	
APPLICANT	NSW Community Renewables (Narrabri) Pty Ltd c/- SLR Pty Ltd	
OWNER	Russell Barry Schatz	
DA LODGEMENT DATE	9 March 2021	
APPLICATION TYPE	Development Application	
REGIONALLY SIGNIFICANT CRITERIA	Clause 5, Schedule 7 of the State Environmental Planning Policy (State and Regional Development) 2011: Private infrastructure and community facilities over \$5 million	
CIV	\$6,085,933 (excluding GST)	
CLAUSE 4.6 REQUESTS	Not applicable	
KEY SEPP/LEP	 Environmental Planning and Assessment Regulation 2000 State Environmental Planning Policy (State and Regional Development) 2011 State Environmental Planning Policy No. 55 – Remediation of Land State Environmental Planning Policy (Koala Habitat Protection) 2020 State Environmental Planning Policy (Primary Production and Rural Development) 2019 State Environmental Planning Policy (Infrastructure) 2007 Narrabri Local Environmental Plan 2012 Narrabri Shire Council Development Control Plans 	
TOTAL & UNIQUE SUBMISSIONS KEY ISSUES IN SUBMISSIONS	Y No Submissions received	
DOCUMENTS SUBMITTED FOR CONSIDERATION	 Annexure A - Development Plans including Design, Stormwater Plans and Landscape Plan; Annexure B – Recommended Conditions of Consent; Annexure C – Internal and External Referral Responses; and, 	

	Annexure D – Support Documents and Reports.
SPECIAL INFRASTRUCTURE CONTRIBUTIONS (S7.24)	No
RECOMMENDATION	Approval
DRAFT CONDITIONS TO APPLICANT	Yes
SCHEDULED MEETING DATE	28 October 2021
PREPARED BY	Mr. Günther Weidenmann - Development Planner, Narrabri Shire Council
DATE OF REPORT	15 September 2021

EXECUTIVE SUMMARY

Description of the Proposal

Development Application (DA) 2021/0070 seeks development consent for the establishment of a 5MW solar electricity generation facility with associated infrastructure on Lot 489 in DP 754944, known as 115 Airport Road, Narrabri NSW 2390. According to the Statement of Environmental Effects (SoEE) accompanying the subject application, the proposed development entails the following:

- Establishment of a grid-connected solar photovoltaic (PV) plant including associated electrical generation, supplying no greater than 5 megawatts (MW);
- New 4m to 5m wide access road at the eastern boundary of the site;
- High chain link security fencing 2.3m high; and,
- Other associated site improvements as shown on the submitted plans

During the construction period there is estimated to be up to 30 personnel on site for up to six (6) months. The solar PV farm would operate 24 hours a day, 7 days a week, with no permanent staff on site. Maintenance inspections will be undertaken daily or on an as needs basis.

Site Description & Surrounding Land Uses

The land is legally known as Lot 489 in DP 754944 and is situated on Airport Road, Narrabri NSW 2390. The site is relatively flat with a gradual slope from the southeast to the northwest at slopes of approximately 0.3%. The site is currently used for agricultural purposes including livestock grazing with historical improved pastures. The site is located approximately 3.6km east of the Narrabri town centre, within the Narrabri Shire Council Local Government Area (LGA). Surrounding lands are similar to the investigation area consisting of agricultural land with rural dwellings, sheds, dams, and scattered remnant vegetation. There is an unnamed watercourse running through the site east to west, immediately north of the development area.

Closest residential dwelling to the proposed development site is immediately to the south of the site on Lot 21 DP869574, there is a cluster of rural residential dwellings whose properties share a boundary with the site.

The subject lot is not classified as bush fire prone land, but is liable to inundation by flooding. There are no items of environmental, cultural, scientific or scenic significance known to be located on the site.

Permissibility

The proposed development is identified as being 'electricity generating works' which is defined under the Narrabri Local Environmental Plan 2012 as follows:

electricity generating works means a building or place used for the purpose of—

- (a) making or generating electricity, or
- (b) electricity storage.

Although 'electricity generating works' are prohibited in the RU1 zone, the development is permissible by virtue of Clauses 34(1)(b) and 34(7) under the *State Environmental Planning Policy (Infrastructure)* 2007.

Consultation

Notification and referral requirements have been complied with as a part of the assessment of DA 2021/0070. The DA was notified to adjoining landowners and advertised in "The Courier" and Council's website for a period of fourteen (14) days, commencing 28 June 2021 and ending 12 July 2021. No submissions were received during the public consultation period.

The DA was also referred to Essential Energy, TransGrid, Airservices Australia, Civil Aviation Safety Authority (CASA) and Council's Technical Officers for comment – all of which raised no objections to the proposal subject to the imposition of suitable conditions of development consent.

Recommendation

It is recommended that DA 2021/0070 be approved subject to the recommended conditions of consent contain in **Annexure B**.

1. THE SITE AND LOCALITY

The proposed development will be situated on Lot 489 in DP 754944, known as 115 Airport Road, Narrabri NSW 2390.

The site is relatively flat with a gradual slope from the southeast to the northwest at slopes of approximately 0.3% and is located approx. 3.6km east of the Narrabri town centre within the Narrabri Shire Council Local Government Area (LGA) (**Figure 1**). The proposed development is located in the south eastern section of LOT: 489 DP: 754944, comprising approx. 15 hectares with a frontage of approx.385 metres to Airport Road (**Figure 2**).

Surrounding lands are similar to the investigation area consisting of agricultural land with rural dwellings, sheds, dams, and scattered remnant vegetation. There is an unnamed watercourse running through the site east to west, immediately north of the development area (**Figure 3**). Closest residential dwelling to the proposed development site is immediately to the south of the site on LOT: 21 DP: 869574, there is a cluster of rural residential dwellings whose properties share a boundary with the site.

The subject lot is not classified as bush fire prone land, but is liable to inundation by flooding. There are no items of environmental, cultural, scientific or scenic significance known to be located on the site.



Figure 1: Location plan.



Figure 2: Site plan.

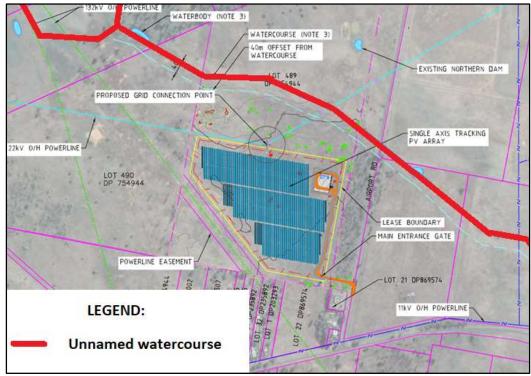


Figure 3: Location of unnamed watercourse.



Figure 4: Location of closest residential dwellings.

2. THE PROPOSAL AND BACKGROUND

2.1 The Proposal

Development Application (DA) 2021/0070 seeks development consent for the establishment of a 5MW solar electricity generation facility with associated infrastructure on Lot 489 in DP 754944, known as 115 Airport Road, Narrabri NSW 2390.

The proposed development entails the following:

1. <u>Establishment of a grid-connected solar photovoltaic (PV) plant including associated electrical generation, supplying no greater than 5 megawatts (MW):</u>

The proposal includes a no larger than 5MW grid-connected solar PV installation. The solar farm will be connected to the existing Narrabri Substation at 48 Stoney Creek Road, which is approximately 3km north-west of the proposed development site via the current overhead electricity power lines within proximity to the site.

The proposed development aims to erect an estimated 11,592 solar PV panels with a nameplate rating of 540W. Other electrical generation infrastructure is proposed on the site including a skid-mounted MV Power Station consisting of inverters, transformer and switchgear. Due to the capacity of the inverter system, the proposed development will produce less than 5MW. Most of the infrastructure will be pre-fabricated off-site, delivered and assembled on-site.

The PV arrangement will consist of 142 ground mounted single axis trackers. The PV arrays will have a clearance above the existing ground surface and extend to approximately 2.6m at

maximum tilt. The PV mounting structure will comprise of steel posts driven to approximately 1.5m below ground using a small pile driver. Additional support structures will be attached to the piles, which will then support the PV panels.

2. New 3-5.5m wide access road;

A 5m wide access road is proposed connecting the solar farm to Airport Road at the southeastern corner of the lot.

3. High chain link security fencing 2.3m high; and

The solar farm will be fully fenced with a 2.3m security fencing including barbed wire at the top. Gate access is provided on the eastern border of the site.

4. Other associated site improvements as shown on the submitted plans (see Annexure A and Figure 5).

A loading area, temporary construction office and stormwater management system including an onsite detention basin holding are indicatively shown on the General Arrangement Plan (refer to **Figure 5**).



Figure 5: Site Plan for the Proposed Development.

According to the SoEE, the solar farm PV will operate 24/7 with no permanent staff on the site. Inspections for maintenance would be undertaken as required.

3. STATUTORY CONSIDERATIONS

Section 4.15(1) of the *Environmental Planning and Assessment Act 1979* ('EP&A Act') outlines the matters which the consent authority must take into consideration when determining a development application. These matters are of relevance to the development application include the following:

- (a) the provisions of any environmental planning instrument, proposed instrument, development control plan, planning agreement and the regulations
- (b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,
- (c) the suitability of the site for the development,
- (d) any submissions made in accordance with this Act or the regulations,
- (e) the public interest.

These matters are further considered below.

3.1 Section 4.15(1)(a)(i) - Provisions of Environmental Planning Instruments

The following Environmental Planning Instruments are relevant to this application:

- State Environmental Planning Policy (State and Regional Development) 2011;
- State Environmental Planning Policy (Infrastructure) 2007;
- State Environmental Planning Policy No. 55 Remediation of Land;
- State Environmental Planning Policy (Primary Production and Rural Development) 2019;
- State Environmental Planning Policy (Koala Habitat Protection) 2020; and,
- Narrabri Local Environmental Plan 2012.

A summary of the key matters for consideration arising from these State Environmental Planning Policies (SEPP) are outlined in **Table 1** and considered in more detail below.

Table 1: Summary of Applicable State Environmental Planning Policies (Preconditions in **bold**)

EPI	Matters for Consideration	
SEPP - (State and Regional Development) 2011	Clause 20(1) declares the proposal as regionally significant development pursuant to Clause 5 of Schedule 7.	Y
SEPP - (Infrastructure) 2007	Clause 45 (Determination of development applications—other development) — electricity transmission - the proposal is satisfactory subject to conditions.	Υ
SEPP No. 55 - Remediation of Land	Clause 7 - Contamination and remediation has been considered in the Contamination Report and the proposal is satisfactory subject to conditions.	Y
SEPP - (Primary Production and Rural Development) 2019	Clause 3 (Aims of Policy) - the proposal is consistent with the aims of this Policy.	Υ

SEPP - (Koala Habitat Protection) 2020	Clause 8 - the land is not a potential koala habitat.	Y
NLEP 2012	Part 6 - Development is consistent with objectives and suitable conditions will be included where required.	Υ

State Environmental Planning Policy (State and Regional Development) 2011

Pursuant to Clause 20(1) of *State Environmental Planning Policy (State and Regional Development)* 2011 (SRD SEPP), the proposal is a regionally significant development as it satisfies the criteria in Clause 5(a) of Schedule 7 of the SRD SEPP as the proposal is development for 'electricity generating works' with a Capital Investment Value (CIV) over \$5 million. Accordingly, the Northern Regional Planning Panel is the consent authority for the application. The proposal is consistent with this Policy.

State Environmental Planning Policy (Infrastructure) 2007

Pursuant to cl.34(7) of *State Environmental Planning Policy (Infrastructure) 2007* (ISEPP), development for the purpose of a solar energy system may be carried out by any person with consent on any land. Accordingly, the proposed solar farm (which is a photovoltaic electricity generating system) is permissible subject to development consent being issued.

Clause 45 – 'Determination of development applications—other development' The proposed development will require works to connect to the overhead electricity power lines and as a result constitutes works within 5m of powerlines. Due to the location and nature of the proposed development referral to the electricity supply authority, Essential Energy, was required during the assessment period. Essential Energy provided their response on 2 July 2021, which has been incorporated into the recommended terms of consent.

State Environmental Planning Policy No. 55 – Remediation of Land

The objective of this Policy is to provide a state-wide planning approach to the remediation of contaminated land. The SEPP requires consideration of previous land uses and promotes the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment.

In accordance with the provisions under Clause 7(1) of this Policy, it is considered that the development site is suitable for the proposed development and that no further investigation is required. The development site has been historically used for primary production (livestock grazing with historical improved pastures) and is currently used for the same purposes. A search of Council's records has not produced any approvals for activities listed under Table 1 of *Planning Guidelines SEPP 55 – Remediation of Contaminated Land 1998*. There are no known previous investigations about contamination on the subject land or land use restrictions issued by the NSW Environmental Protection Authority (EPA). A site inspection did not reveal any visual indications of contamination.

State Environmental Planning Policy Primary Production and Rural Development (2019)

This Policy aims to facilitate the orderly economic use and development of lands for primary production, to reduce land use conflict and sterilisation of rural land, to identify State

significant agricultural land and to encourage and protect aquaculture. This Policy applies to the State.

The proposed development is considered to be consistent with the aims of this Policy. Furthermore, the development site is not identified as being State significant agricultural land.

State Environmental Planning Policy (Koala Habitat Protection) (2020)

This Policy aims to encourage the proper conservation and management of areas of natural vegetation that provide habitat for koalas to ensure a permanent free-living population over their present range and reverse the current trend of koala population decline. This Policy applies to each Local Government Area (LGA) listed in Schedule 1, which includes Narrabri Part 2 of this Policy applies as the land is:

- within a LGA listed under Schedule 1, being the Narrabri Shire Council LGA;
- subject to a DA; and,
- has an area of more than 1 Hectare.

In this regard, the provisions under Clause 8 require consideration and states that Council must be satisfied as to whether the land is potential koala habitat before granting consent. Additionally, Clause 8(2) specifies that Council may be satisfied as to whether the land is potential koala habitat only on information obtained by it; or, the applicant from a person who is qualified and experienced in tree identification.

An assessment undertaken by Kleinfelder has determined that there is no highly suitable koala habitat or core koala habitat present. This was based on the following:

- No evidence of a resident population of Koalas was detected during the assessment (i.e. No Koala individuals, scats or scratch marks were identified).
- Few and scattered occurrences of only one Koala feed tree was identified within the subject site.
- Due to the isolated locations of the trees, better quality habitat for Koalas occurs outside the subject site.
- The trees within the subject site do not form part of an important habitat corridor that is likely to be utilised by Koalas.

Narrabri Local Environmental Plan 2012

The subject lands are zoned RU1 Primary Production pursuant to the provisions of the *Narrabri Local Environmental Plan 2012* (LEP). The objectives of the RU1 zone are as follows:

- To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.
- To encourage diversity in primary industry enterprises and systems appropriate for the area
- To minimise the fragmentation and alienation of resource lands.
- To minimise conflict between land uses within this zone and land uses within adjoining zones.
- To allow for non-agricultural land uses that will not restrict the use of other land for agricultural purposes.

Under clause 2.3(2) of the LEP, the consent authority must have regard to the objectives for development in a zone when determining a development application in respect of land within

the zone. It is considered that the proposed Solar Farm is generally consistent with the objectives of the zone.

The proposed development is identified as being 'electricity generating works' which is defined under the LEP as follows:

electricity generating works means a building or place used for the purpose of—

- (a) making or generating electricity, or
- (b) electricity storage.

Although 'electricity generating works' are prohibited in the RU1 zone, the development is permissible by virtue of Clauses 34(1)(b) and 34(7) under the ISEPP, as discussed in an earlier section of this assessment report. Clause 8(1) ISEPP also clarifies as follows:

8 Relationship to other environmental planning instruments

Note— This clause is subject to section 3.28(4) of the Act.

(1) Except as provided by subclause (2), 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.

The following local provisions under Part 6 of the LEP are of relevance to the subject application:

Clause 6.1 'Earthworks'

Minimal earthworks are expected to be carried out in conjunction with the proposed development. Only minor earthworks are required for the underground cabling and supporting infrastructure (access roads, stormwater management etc). Suitable conditions have been included in the recommended terms of consent to address any adverse impacts that may arise during construction works.

Clause 6.2 'Flood Planning'

Clause 6.2 Flood Planning is applicable to the development, as the property is identified by LEP as being a flood planning area and as such the provisions of clause 6.2 shall be applied.

Clause 6.2 states that in assessing a development on a property, Council must consider the objectives of the clause, and be satisfied that the development;

- (a) to minimise the flood risk to life and property associated with the use of land -
- (b) to allow development on land that is compatible with the land's flood hazard, taking into account projected changes as a result of climate change,
- (c) to avoid significant adverse impacts on flood behaviour and the environment.

A Flood Impact Assessment report prepared by Torrent Consulting, has been submitted with the subject application. The modelling undertaken in the report concludes that the proposed solar farm infrastructure is unaffected by flooding, with the Solar Farm area being flood-free. Suitable conditions have been included in the recommended terms of consent to ensure that the development complies with Clause 6.2 of the LEP.

Clause 6.4 'Essential Services'

The proposed development is capable of being connected to the essential services listed under Clause 6.4. Suitable conditions have been included in the terms of consent in order to facilitate the arrangements for essential services.

Clause 7.5 'Airspace Operations'

The objective of this clause is to provide for the effective and ongoing operation of the Narrabri Airport and to protect the community for undue risk from that operation. Narrabri Airport is approximately 1.1km north of the proposed site. The proposed development will not have any impact on the Obstacle Limitation or Operations Surface. An assessment undertaken by SLR Consulting has determined that that there will be nil glare from the development at Narrabri Airport with the solar array in normal tracking mode, ie panels tilting ±60°. The Solar Glare Hazard Analysis Tool (SGHAT) results indicate a potential for glare should the panels be left at a fixed tilt angle of between 30° (westwards) to 40° (eastwards) between April to August. Such a situation should be avoided, eg during construction, during maintenance periods, etc, during these months. A condition has been included in the recommended terms of consent in this regard.

The proposed development was also referred to Airservices Australia, Civil Aviation Safety Authority (CASA) for comment, who raised no objections to the development.

Other Relevant Legislation

National Parks and Wildlife Act 1974

The National Parks and Wildlife Act 1974 includes provisions for the protection and recording of Aboriginal objects in NSW.

An Aboriginal site investigation has been undertaken by Virtus Heritage, in accordance with the provisions of the *National Parks and Wildlife Regulations* 2009 and the accompanying Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW (OEH 2010). A Due Diligence Archaeological Assessment prepared by Virtus Heritage, concludes that no Aboriginal objects were identified during the site visit and no areas of archaeological potential are identified within the project area. There are also no Aboriginal places registered within the project area.

Water Management Act 2000

According to the SoEE, there is an unnamed watercourse running through the site east to west, immediately north of the development area. A setback of approximately 100m from the watercourse has been applied to the proposed development. A Controlled Activity Approval from NSW NRAR is therefore not required.

Biodiversity Conservation Act 2016 & Biodiversity Conservation Regulation 2017

The *Biodiversity Conservation Act 2016* (BC Act) aims to maintain a healthy, productive and resilient environment for the greatest wellbeing of the community, now and into the future, consistent with the principles of ecologically sustainable development. A Biodiversity Development Assessment Report (BDAR) is required to accompany a DA if the proposal will 'significantly affect threatened species' and the Biodiversity Offset Scheme (BOS) will apply.

Under Section 7.2 of the BC Act, a development will 'significantly affect threatened species' if:

- a. It is likely to affect threatened species or ecological communities, or their habitats, according to the test in Section 7.3; or,
- b. The development exceeds the BOS threshold if the BOS applies to the impacts of the development on biodiversity values; or,
- c. It is carried out in a declared area of outstanding biodiversity value.

Section 7.2(1)(b) of the BC Act and Clause 7.1 of the *Biodiversity Conservation Regulation* 2017 (BC Regulation) sets-out the BOS threshold, being whether:

- a. The amount of native vegetation being cleared exceeds a threshold area;
- b. The development involves the clearing of native vegetation or prescribed impacts on an area mapped on the biodiversity values map.

The Flora and Fauna Assessment Report prepared by Kleinfelder advises that a BDAR and entry into the BOS is not required for the proposed development. This is based on the following rationale:

- The proposal is not State Significant Development;
- The proposal will not impact an Area of Outstanding Biodiversity Value, as listed under Part 3 of the BC Act;
- The proposal is unlikely to cause a significant impact on threatened species, population or ecological communities, as listed under Schedules 1 and 2 of the NSW BC Act, as determined by application of a five-part-test of significance under Section 7.3 of the NSW BC Act. The proposal will not impact areas identified as having 'high biodiversity value' on the biodiversity values map; and,
- The proposed development will not impact areas mapped as having 'high biodiversity value' as indicated by the NSW Biodiversity Values Map (BV Map).
- The proposed development will occupy an area approximately 15 ha; however, due to the prevalence of exotic vegetation (grasslands) it is estimated via GIS that the project will directly remove small areas of exotic groundcover vegetation, six trees and three stags, two of which contain hollows. Therefore, the project will not exceed the BOS threshold for the site (1 ha threshold for a minimum lot size of 100 ha) as determined by the NSW Biodiversity Conservation Regulation 2017.

It is considered that the above rationale satisfies the provisions under the BC Act and BC Regulation. A BDAR and entry into BOS is not required.

3.2 Section 4.15 (1)(a)(ii) - Provisions of any Proposed Instruments

At the time of submission of this Report, there were no draft environmental planning instruments that applied to the subject lands.

3.3 Section 4.15(1)(a)(iii) - Provisions of any Development Control Plan

• Development Control Plan – Industrial Development Code (DCP)

The following Table outlines the relevant Chapters / provisions of the DCP that have been considered in connection with the assessment of DA 2021/0070.

4.2 Open Starage and Work Areas		
4.3 Open Storage and Work Areas	I	
(a) Where any work or storage of materials is proposed to be undertaken outside the confines of a building, full details of those parts of the site to be used, and of the materials to be stored, are to be provided with the application.	Not Applicable. No open work or storage areas are proposed.	Y
(b) Approved open work and storage areas are to be located at the rear of industrial developments and screened from view by the use of landscaping and screen fencing. Such fencing is to be constructed of masonry materials or pre-coloured metal cladding, having a minimum height of 2.0 metres.	Not Applicable. No open work or storage areas are proposed.	Y
4.4 Security Fencing		
Security fencing should be visually unobtrusive and, wherever practicable, should be located behind the landscape setback area.	A 2.3m high security fence will be located around the site area. It will be visually unobtrusive in design.	Y
4.6 Building Setbacks	4.6 Building Setbacks	
4.6.1 Setbacks		
A front building setback of eight (8) metres from the property boundary should be provided. This eight (8) metre front setback is to be intensively landscaped.	A 10m front setback area is proposed from the existing fence onsite to the proposed security fence.	Y
Side and rear setbacks will be determined by the requirements of Ordinance 70 under the Local Government Act, 1919.	A 10m rear setback is proposed and appropriate side setbacks are proposed, with no development in proximity to the sides of the site.	Y
4.7 Landscaped Treatment		
4.7.1 Areas required to be landscape	d	
The following areas should be landscaped: (a) The front building setback; (b) Side and rear setbacks where visible from a public place or an adjoining residential area; (c) Areas adjacent to building entrances and pedestrian access points; (d) The perimeter of all approved open storage areas and	Informal planting of native shrubs along the southern and south eastern side of the lease area, outside of the fence line is proposed to complement the existing rural landscape character. A landscaping plan has been submitted as part of the application.	Y

staff/visitor parking areas. (See also Section 4.3 of this Code). Large car parking areas should be interspersed with internal planting bays to reduce the visual impact of larges areas of paved surfaces.

4.7.2 Landscape Guidelines

- (a) Landscaped areas are to be an integral part of the site, and may, due to the size and scale of development proposed, require the incorporation of mounding to add visual relief to the development.
- (b) Landscaped areas should be planted and maintained with suitable trees, shrubs and ground cover in accordance with a landscape plan, which must be submitted for approval prior to the release of building plans.
- (c) Landscaping should be completed in accordance with the approved landscape plan prior to the occupation of the development and shall be suitably maintained throughout the life of the development.
- (d) Every effort should be made to preserve existing trees on proposed development sites. All existing trees should be shown on the plan submitted with the application, and those which are required to be removed should be clearly highlighted.
- (e) Trees shall be planted on the Council footpath, 900mm in from the kerb, along the entire frontage of the property, at intervals of approximately 10 metres (making allowance for the location of the driveways). The tree types that can be used are included in Annexure 1, and shall be approved by the Shire Engineer.

The following mitigation measures are proposed:

 Shrub planting (native species to 3m) outside of security fence and within the lease boundary on the southern and south eastern sides of the solar farm to provide screening from residential properties and part of Airport Road.

According to the Visual Impact Assessment (VIA), the implementation of some mitigation measures would be recommended on the sides that are visible from the main public viewpoints and the adjoining private receptors of the residential properties.

The VIA also states that, the planting of trees directly adjoining the solar farm would not be encouraged due to the potential for shadows to be cast over the array during certain times of the day.

A Landscape Plan has been submitted as part of the VIA and no trees are proposed on the Council footpath.

Υ

4.8 Access, Parking and Off Street Loading / Unloading Facilities			
4.8.1 General Requirements			
(a)	The design, layout and construction of access, parking and service areas for all industrial development shall be in accordance with the requirements of the Narrabri Shire Parking Code.	The proposed development is not considered a 'traffic generating development' and due to the nature of the development, no prescribed parking rate is applicable.	Y
(b)	Council is required to consult the NSW Traffic Authority to obtain advice on traffic and safety aspects for major traffic generating developments. This consultation is a statutory requirement prescribed by State Environmental Planning Policy No. 11. Additional information about the consultation procedure can be obtained by contacting Council's Environmental Services Section.	Not Applicable. The proposed development is not considered a 'traffic generating development'. Therefore, concurrence from TfNSW and/or RMS is not required.	Y
(c)	Industrial development should be designed to ensure that all vehicles can enter and leave the site in a forward direction. Details of vehicle size and manoeuvring areas should be submitted with the development application to enable an adequate assessment of these aspects.	The proposed access and turning circle proposed for the site will allow all vehicles to enter and exit the site in a forward direction.	Y
(d)	Individual parking bays should be clearly delineated and have minimum dimensions of 2.6 metres x 5.5 metres, except where it is adjacent to a solid obstruction when a 3.0 metre width should be provided.	According to the submitted SoEE, the proposed parking bay for the site will be constructed according to parking requirements.	Y
4.8	2 Access and Road Constructio	n Requirements	
(a)	The following road works are generally required in conjunction with industrial development: Industrial type vehicular gutter crossings; Construction of kerb, gutter and road shoulder between the lip of the gutter and the edge of the existing bitumen seal, footway formation and paving	Road works are proposed with the proposed development, which includes: - vehicle access road via Airport Road (which is suitable for B-Double access); and, - a turning circle. The proposed access driveway width	Y

	and associated road drainage for the fill frontage of the site.	at the combined entry/exit gate is proposed to be 5 metres wide. It is	
(b)	Access drives to have a minimum width of six (6) metres;	considered this is an adequate width for the proposed development type.	
dev	e – major traffic generating elopments may require a greater ess width divided at the property	Conditions have been included in the terms of consent in line with the advice received from Council's Engineering Department.	
(c)	The location of access driveways at intersections shall be in accordance with the Traffic Authority of NSW 'Policy, Guidelines and Procedures for Traffic Generating Developments', however the minimum distance shall be 6.0 metres from the intersecting boundaries;	Engineering Department.	
(d)	Access driveways across the footpath should hard sealed, consisting of either concrete, two coat bitumen seal, asphaltic concrete, paving blocks or other approved material.		
(e)	All driveways, parking areas, loading bays and vehicular turning areas are to be constructed with a base course of adequate depth to suite design traffic, and are to be sealed with either bitumen asphaltic concrete, concrete or interlocking pavers. Full details should be indicated on the plans submitted with the Development Application.		
4.8.	3 Parking Requirements		
(a)	On-site car parking should be provided in accordance with Council's adopted Car Parking Code, copies of which are available from Council.	Due to the nature of the development, no prescribed parking rate is applicable.	Y
4.8.	4.8.4 Loading / Unloading Facilities		
(a)	Adequate provision should be made on site for the loading and unloading of delivery vehicles within designated loading bays.	Not Applicable.	Y
(b)	Loading and unloading facilities appropriate to the particular development are to be provided on site such that service vehicles	Not Applicable.	Y

	are located wholly within the site and are not required to reverse to or from the street.		
4.10	Services and Drainage		
dev (b) faci colle exte (c)	To ensure that services provided adequate for the scale of the elopment proposed. To ensure adequate drainage lities are provided within the site to ect and carry stormwater to ernal drainage systems; To reduce the hazard of flooding the diversion or concentration of er onto adjoining properties.	A Stormwater Management Plan has been provided with the application, detailing the stormwater drainage strategy during both pre-development and post-development.	Y
4.10	0.1 Water Supply		
Cou flow Cou	development shall be connected to uncil's Water Supply. Details of pressure can be obtained from uncil's Engineering Services tion.	Not Applicable.	Y
4.10	0.2 Sewer		
Where Council sewer is available, a Sewer Headworks Charge based on the size and type of Development may be charged.		Not Applicable.	Y
4.10	0.3 Trade Waste		
A Trade Waste Application will be required where liquid wastes other than sewerage are to be discharged to Council's sewerage system. Council levees a charge for the disposal of the Trade Waste to the sewer based on the volume and strength of the discharge.		No liquid waste is expected to be produced.	Y
4.10	0.4 Drainage		
(a)	Stormwater runoff from roofs and paved areas is to be collected and disposed of to the street drainage or direct to Council's underground system.	A Stormwater Management Plan has been provided with the application, detailing the stormwater drainage strategy during both pre-development and post-development.	Y
(b)	The Council will not permit the erection of buildings over drainage easements under its control.		
(c)	A contribution towards Downstream Drainage may be required based on the increased run-off generated by the development.		

The following contributions plans are relevant pursuant to Section 7.18 of the EP&A Act and have been considered in the recommended conditions (notwithstanding Contributions plans are not DCP's they are required to be considered):

 Narrabri Shire Section 7.12 – Fixed Development Consent Levies Contributions Plan 2011

Council may levy contributions for the proposed development in accordance with its adopted Section 7.12 Contributions Plan. According to the cost summary report by RPS (dated 21 January 2021), the cost of the development is \$6,694,527 (incl. GST) and therefore a 1% levy will apply. A condition has been included in the recommended terms of consent requiring the Section 7.12 Contribution to be paid to Council prior to the issue of a Construction Certificate.

3.4 Section 4.15(1)(a)(iiia) – Planning agreements under Section 7.4 of the EP&A Act

There is no planning agreement or draft planning agreement that has been entered into between the developer, relevant body or Council under Section 7.4 of the Act.

3.5 Section 4.15(1)(a)(iv) - Provisions of Regulations

The provisions under Clauses 92, 93, 94 and 94A of the Environmental Planning and Assessment Regulation 2000 do not apply to the proposed development.

Schedule 3 of the *Environmental Planning and Assessment Regulation 2000* prescribes that 'electricity generating stations' that supply or are capable of supplying more than 30 megawatts of electrical power from energy sources, including solar, is designated development. As the proposed solar farm will generate a maximum of 5 megawatts, it does not constitute designated development.

3.6 Section 4.15(1)(b) - Likely Impacts of Development

The following Table outlines the likely impacts of the proposed development that have been considered in connection with the assessment of DA 2021/0070.

Primary Matters	Comments
Context & Setting	➤ Glare/Reflectivity A Reflective Glare Assessment (RGA) prepared by SLR Consulting has been submitted to support the proposed development. The Report advises that the proposal is unlikely to have significant glare impacts with respect to aviation, road operations, rail operations, industrial and heavy machinery operations, and residential Amenity. The Report states that: ○ glare resulting from onsite lighting will be mitigated in accordance with AS4282-1997 Control of the Obtrusive Effect of Outdoor Lighting effectively controlling potential for light spill and glare generated by the proposed development; and, ○ due to the selection of the single-axis tracking system for the
	mounting of the ground-based array panels, there will be nil glare

- from the Project in relation to traffic and rail traffic disability glare in normal ±60° tracking mode.
- SGHAT software tool has shown that there will be nil glare from the Project at Narrabri Airport with the solar array in normal tracking mode (±60° tilting). The SGHAT results also indicated a potential for glare should the panels be left at a fixed tilt angle of between 30° (westwards) to 40° (eastwards) between April to August months, and should be avoided during construction and maintenance periods. A condition has been included in the recommended terms of consent in this regard.

Views & vistas

A Visual Impact Assessment (VIA) prepared by SLR Consulting has been submitted as part of the application to assess the potential visual amenity changes which may occur as a result of the proposed development

The subject site is located within 3km of Narrabri township. According to the VIA, the views of the site from public viewpoints are only generally visible along Airport Road and Kaputar Road. This is due to the low flat areas adjoining the site and obstructions between the viewpoints and the site such as residential structures and vegetation along verges and property boundaries. It is therefore considered that the proposed development would have a 'minor' visual impact rating on the existing landscape character and values of the site and its local context.

The Landscape Plan submitted with the application, aims to provide screening of the development from along the southern and south eastern side of the lease area (outside of the fence line). This would assist in minimising visual impacts of the development on the surrounding rural landscapes and the adjoining residential properties.

It is therefore considered that the proposed development is appropriate for the site and surrounding locality, subject to the implementation of measures to ameliorate visual impacts. Conditions have been included in the recommended terms of consent to this effect.

Site Design & Internal Design

The proposed development has been designed and located with consideration to the constraints of the site and potential environmental impacts, as discussed throughout this assessment report.

Access, Transport & Traffic

A Traffic Impact Assessment (TIA) has been prepared by Intersect Traffic has been submitted to support the subject application.

It is noted that, the majority of traffic movements associated with the development will occur during the construction of the solar farm (approximate 6-month period) with the delivery of panels and prefabricated structural supports.

The TIA provides rates of traffic likely to be generated from the proposed development (both during construction and once operational) and provides the following advices:

 Deliveries during construction works would be expected to be within rigid and articulated vehicles.

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	 Peak hour construction traffic has been calculated in the TIA. Based on the data collected from traffic surveys the surrounding road network has sufficient capacity to cater to the projected construction traffic. The construction traffic will be managed through a future Construction Management Plan.
	Conditions in regards to traffic and access have been included in the terms of consent in line with the advice received from Council's Engineering Department.
Public Domain	The proposed development is expected to have negligible impact on the public domain in terms of public recreation opportunities, public spaces and pedestrian linkages.
Utilities	It is considered that the proposed development is unlikely to have an adverse impact on the availability and capacity of utilities. Minimal utilities are expected to be required for the project as construction will be short-term and there will be no permanent staff on the site, nor any permanent buildings.
Heritage	Indigenous Cultural Heritage A Due Diligence Archaeological Assessment prepared by Virtus Heritage, concludes that no Aboriginal objects were identified during the site visit and no areas of archaeological potential are identified within the project area. There are also no Aboriginal places registered within the project area. A condition has been included in the recommended terms of consent, requiring works to cease and Office of Environment and Heritage to be contacted should any items suspected of being Aboriginal in origin discovered during works. European Heritage The site does not contain any listed heritage items under Schedule 5 of the LEP, nor is it located within a heritage conservation area. No other heritage items are located in proximity to the site.
Other Land Resources	The proposed development is not expected to have an adverse impact on the conservation and use of land resources, including productive agricultural land, mineral and extractive resources and water supply catchments.
Water	 A Stormwater Management Report prepared by DRB Consulting Engineers accompanies the Development Application (Annexure D). The stormwater drainage strategy for the development can be summarised as: All impervious runoff from the proposed Photovoltaic Arrays will discharge to the existing ground surface where the natural flow regime will be maintained. Runoff from the proposed gravel/hardstand area catchment will be conveyed via sheet flow and the proposed roadside swale to the proposed above ground onsite stormwater detention Discharge from the above ground onsite stormwater detention

	basing will be limited to the productionment flow rates
	basing will be limited to the predevelopment flow rates
	Council's Engineering Officer reviewed the submitted Stormwater Management Plan and did not have any comments/conditions relating to the proposed development. However, a condition is recommended to be included in the recommended Terms of Consent to ensure the suitable management of Stormwater.
Soils	The proposed development is not expected to have an adverse impact on soil conversation. Erosion and sediment controls will be required to be installed prior to the commencement of works and maintained for the duration of construction works. Conditions have been included in the recommended terms of consent to this effect.
Air & Microclimate	It is considered that the proposed development will not result in adverse air and microclimatic conditions. The SoEE and supporting technical studies identify a range of measures to mitigate any dust that may be generated during construction and operation of the proposed development. Conditions have been incorporated into the recommended terms of consent to ensure compliance in this regard.
Flora & Fauna	The proposed development will require the removal of native vegetation within the development area, including six trees (White Cypress Pine) and three dead stags, two of which contain hallows. A negligible amount of native groundcover vegetation will be required to be removed due to the predominance of exotic grasslands. Field surveys undertaken by qualified ecologist(s) recorded no threatened flora or fauna species on the site with the proposed development unlikely to cause a significant impact to any threatened species, populations or ecological communities listed under the NSW BC Act. The report concludes that the Project is unlikely to have a significant impact on flora and fauna.
	In addition, the report has identified a number of avoidance and mitigation measures to reduce potential biodiversity impacts, including but not limited to erosion and dust control, vegetation protection, and weed and chemical spill management. Conditions have been incorporated in the recommended term of consent to ensure that the identified mitigation measures are implemented for the proposed development.
Waste	A Waste Management Plan has been submitted with the subject application and identifies waste management measures for each stage of the development, including site preparation, construction and operations. Conditions have been included in the recommended terms of consent to ensure to that any waste generated by the development is appropriately managed.
Energy	The proposed development involves the establishment of renewable energy, being a 5MW photovoltaic electricity generating system and associated infrastructure.
Noise & Vibration	A Noise Impact Assessment (NIA) prepared by Muller Consulting Pty Ltd has been submitted with the subject application. The NIA concludes that the noise generated during the construction of the proposed development will have the potential to exceed relevant construction Noise Management Levels at several receiver locations. Notwithstanding, the NIA has identified several mitigation measures that should be considered during the construction phase to reduce emissions to the surrounding community. The mitigation measures have been incorporated as a condition in the recommended terms of consent.

Natural Hazards	The subject lot is not classified as bush fire prone land, but is liable to inundation by flooding. The proposed development is determined as being suitable for the proposed use and compliant with the provisions of Clause 6.2 'Flood Planning' of LEP. There are no other natural hazards known to affect the subject land.
Technological Hazards	The Flora and Fauna report by Kleinfelder identifies several measures to prevent chemical spills. Such measures include: the storage of chemicals in bunded areas, regular inspections for leaking oils or fuels from vehicles, and no re-fuelling, washing or maintenance of vehicles within 20m of natural drainage lines. A condition has been incorporated into the recommended terms of consent to ensure compliance in this regard.
Safety, Security & Crime Prevention	The proposed development is not expected to have an adverse impact on safety, security and crime prevention. The development site will be improved with security fencing.
Economic Impact on the Locality	It is anticipated that the proposal will have a positive economic impact on the locality, particularly during the construction phase of the development. This will potentially create more job opportunities for local tradespeople, and expenditure locally on groceries and meals.
	The Social Impact of the proposed development has been addressed within the submitted SoEE. According to the SoEE, the proposed development is anticipated to have an ongoing positive social impact on the local area and broader community as it:
Social Impacts	 Is consistent with the regulatory and business development framework, including state government legislation and the Narrabri Shire Council strategic plans; Will have positive impacts intergenerational equity, with the provision of cleaner energy in the future; Supports Commonwealth and NSW climate change commitments; Will generate enough clean, renewable energy for about 2,000 homes; Is an appropriate development in relation to the projected changes to population and demographics in the region; Is unlikely to have significant negative social impacts to the locality and region; and, Would be a benefit contributing to the overall community sustainability of the Narrabri community.
Construction	Conditions have been included in the recommended terms of consent to mitigate construction impacts. Such conditions relate to hours of work, parking and traffic management, waste, toilet facilities, noise and dust mitigation, and signage. A Construction Management Plan is also required to be prepared and implemented as a recommended condition of consent.
Cumulative Impacts	Acceptable, as discussed throughout this assessment report and subject to conditional approval.
Other?	No other impacts have been identified.

3.7 Section 4.15(1)(c) - Suitability of the site

The subject lands are considered to be suitable for the proposed development for the following reasons:

- The proposed development is not expected to result in deleterious impacts, subject to the imposition of suitable conditions of consent;
- The attributes of the subject lands are conducive for the purposes of the proposed development; and,
- The proposed development is permitted with development consent under Clause 34 of the ISEPP.

3.8 Section 4.15(1)(d) - Public Submissions

The DA was notified to adjoining landowners and advertised in "The Courier" and Council's website for a period of fourteen (14) days, commencing 28 June 2021 and ending 12 July 2021. No submissions were received during the public consultation period.

3.9 Section 4.15(1)(e) - Public interest

The proposed development has been assessed to be in the public interest as detailed throughout this Report, subject to the imposition of appropriate conditions of development consent. The proposed development is not expected to have a negative impact on the health and safety of the public.

4. REFERRALS AND SUBMISSIONS

4.1 Agency Referrals and Concurrence

The development application has been referred to various agencies for comment/concurrence/referral as required by the EP&A Act and outlined below in **Table 2**.

There are no outstanding issues arising from these concurrence and referral requirements subject to the imposition of the recommended conditions of consent being imposed. The Internal and External Referral Responses are attached to this report (**Annexure C**)

Table 2: Concurrence and Referrals to agencies

Table 21 Concurrence and Referrate to agencies					
Agency	Concurrence/ referral trigger	Comments (Issue, resolution, conditions)	Resolved		
Concurrence Requirements (s4.13 of EP&A Act)					
Not Applicable					
Referral/Consultation Agencies					
Essential Energy	Clause 45(2) – ISEPP 'Determination of development applications—other development'.	Essential Energy's comments were received by Council on 2 July 2021 and will be incorporated as conditions and advice in the recommended terms	Y		

		of consent.			
TransGrid	Essential Energy's records indicated that there is electrical infrastructure located on the properties, owned by TransGrid.	TransGrid's comments were received by Council on 10 August 2021. TransGrid has no objection to the proposal.	Y		
Airservices Australia	Reflective glare of Solar Panels.	Airservices Australia's comments were received by Council on 8 July 2021. The proposed solar farm will not have an impact on the safety, efficiency or regularity of existing, or future air transport operations into or out of Narrabri aerodrome	Υ		
Civil Aviation Safety Authority (CASA)	Reflective glare of Solar Panels.	CASA's comments were received by Council on 11 June 2021. CASA has no objection to the proposal.	Y		
Integrated Development (S 4.46 of the EP&A Act)					
Not Applicable.					

The development application has been referred to various Council officers for technical review as outlined **Table 3**.

Table 3: Consideration of Council Referrals

Officer	Comments	Resolved
Engineering	Council's Engineering Officer reviewed the submitted Stormwater Management Plan and Traffic Impact Assessment. Conditions will be included in the term of consent regarding stormwater drainage and traffic during the construction phase.	Yes
Waste	Council's Manager of Waste Services reviewed the submitted Waste Management Plan. Conditions will be included in the recommended terms of consent to ensure that any waste generated by the development is appropriately managed.	Yes
Strategic Planning (In regard to flood)	Council's Planning Officer reviewed the submitted Flood Impact Assessment. Conditions will be included in the recommended terms of consent to ensure that the development complies with Clause 6.2 of the Narrabri Local Environmental Plan 2012	Yes

4.2 Community Consultation

The proposal was notified in accordance with the Council's Community Participation Plan from 28 June 2021 until 12 July 2021. No submissions were received during the notification period.

5. KEY ISSUES

The following key issues are relevant to the assessment of this application having considered the relevant planning controls and the proposal in detail:

5.1 Visual impacts

A Visual Impact Assessment (VIA) prepared by SLR Consulting has been submitted with the subject application. The VIA has considered landscape character and scenic qualities in the locality, stakeholder values regarding visual amenity and potential impacts from public viewpoints.

The VIA identifies that the views of the site from public viewpoints were generally visible along Airport Road and Kaputar Road. This is due to the low flat areas adjoining the site and obstructions between the viewpoints and the site such as residential structures and vegetation along verges and property boundaries. It is therefore considered that the proposed development would have a 'minor' visual impact rating on the existing landscape character and values of the site and its local context. The VIA therefore recommends the following mitigation measure:

• the informal planting of native shrubs to compliment the existing rural landscape character along the southern and south eastern side of the lease area, outside of the fence line, to assist in minimising visual impacts of the development on the surrounding rural landscapes and the adjoining residential properties (refer to **Figure 6**).

The planting of trees directly adjoining the solar farm is also not encouraged, due to the potential for shadows to be cast over the array during certain times of the day.

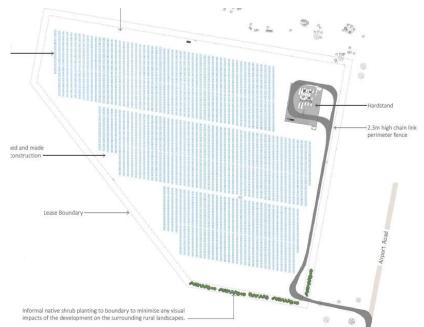


Figure 6: Indicative landscape layout for the proposed development.

Resolution: The issue has been resolved through recommended conditions of consent.

5.2 Decommissioning

A Waste Management Plan has been submitted with the subject application and identifies waste management measures for each stage of the development, including site preparation, construction and operations. Conditions have been included in the recommended terms of consent to ensure to that any waste generated by the development is appropriately managed and that a Decommission Management Plan be submitted to Council prior to decommissioning occurring.

Resolution: The issue has been resolved through recommended conditions of consent.

5.3 Flood Diversion

A Flood Impact Assessment report prepared by Torrent Consulting, has been submitted with the subject application. The modelling undertaken in the report concludes that the proposed solar farm infrastructure is unaffected by flooding, with the Solar Farm area being flood-free.

The application was also referred to Council's Strategic and Major Project Planner for comments regarding flood. Council's Strategic and Major Project Planner concluded that:

- the proposed solar farm is compatible with the existing flood hazard of the land;
- the proposed development will not detrimentally affect the future flood behaviour in the local catchment.

To mitigate the impact of the proposed development on flood behaviour, the following restrictions are proposed to be included in the recommended conditions of consent:

- the development is to be constructed to allow the free flow of flood water under and around all open structures; and,
- the site is to be kept tidy at all times and no moveable objects are to put on the site without the previous approval of Council.

6. COSULTATION WITH APPLICANT

The Draft Recommended Conditions of Consent was sent to the applicant on 17 September 2021. The applicant revied the Draft Conditions and requested the following:

Condition

Flood Behaviour

The development is to be constructed to allow the free flow of flood water under and around all open structures.

Applicant's Response:

The applicant would like to suggest changing the condition to the following:

The development is to be constructed to allow the free flow of flood under a 1% AEP event and as per flood impact assessment report recommendations.

Council's Response

After consultation with Council's Strategic Planning Officer, it was agreed to change the condition as requested.

Structural Engineers Certification

Certification from an appropriately qualified and practicing structural engineer is to be provided to the Certifying Authority, certifying the structural adequacy in accordance with the relevant Australian Standards of all reinforced concrete work, structural beams, columns & other structural members including structural drawings. The details are to be submitted to the Principal Certifying Authority for approval prior to construction of the specified works.

Applicant's Response:

The applicant suggested moving this condition to 'Prior to Works Commencing'. The design issued for a construction certificate will be preliminary and will be subject to revision once the full EPC contract is awarded. Therefore, it is more appropriate for the fully certified structural design to be provided to Council when Issued for Construction drawings are prepared. The final sentence of the consent condition, states "details are to be submitted to the Principal Certifying Authority for approval prior to construction of the specified works." Therefore, the requested change aligns with the intent of the condition.

Council's Response:

It is considered that the condition can be moved to 'Prior to Works Commencing'.

Visual Impacts

The applicant must:

b) Ensure the visual appearance of all ancillary infrastructure (including paint colours) blends in as far as possible with the surrounding landscape; and,

Applicant's Response:

The applicant would like to suggest the following wording:

The applicant must:

b) Ensure the visual appearance of all ancillary infrastructure (including paint colours) blends in as far as practicable with the surrounding landscape; and,

Council's Response:

It is considered that the condition can be reworded as requested.

7. CONCLUSION

This development application has been considered in accordance with the requirements of the EP&A Act and the Regulations as outlined in this report. Following a thorough assessment of the relevant planning controls, it is considered that the application can be supported.

8. RECOMMENDATION

That the Development Application 2021/0070 for the Establishment of a 5MW Solar PV Electricity Generation Facility with Associated Infrastructure 115 Airport Road, Narrabri NSW

2390 be APPROVED pursuant to Section 4.16(1)(a) of the *Environmental Planning and Assessment Act 1979* subject to the draft conditions of consent attached to this report as **Attachment B**.

The following attachments are provided:

- Annexure A Development Plans including Design, Stormwater Plans and Landscape Plan;
- Annexure B Recommended Conditions of Consent;
- Annexure C Internal and External Referral Responses; and,
- Annexure D Support Documents and Reports.