

LAND USE APPLICATION INFRASTRUCTURE DELIVERY REFERRAL

Referral Details

DA / CC File Number:	DA2021/0070
Referral Details (dd / mm / yyyy)	01/04/2021
Subject:	Proposed 5MW Solar Farm
Location:	115 Airport Road NARRABRI (Lot 489 DP 754944)
Planning Officer:	Ken Stratton

Referral Information

Any additional comments:
Please provide comment and see related documents.

Engineering

Comments / Conditions:
<p>The DA appears to be for the construction of a 5MW solar photovoltaic power generation plant at 115 Airport Road, Narrabri.</p> <p>Services (Water/Sewer/Stormwater)</p> <p>There are no Council services located within this area. A Stormwater Management Plan has been provided as part of the DA submission and indicates;</p> <ol style="list-style-type: none">1. All impervious runoff from the proposed Photovoltaic Arrays will discharge to the existing ground surface where the natural flow regime will be maintained.2. Runoff from the proposed gravel/hardstand area catchment will be conveyed via sheet flow to the proposed above ground onsite stormwater detention basin.3. Discharge from the above ground onsite stormwater detention basing will be limited to the pre-development flow rates.

- Therefore, there are no Engineering comments/conditions relating to Council utility services.

Transport & Traffic

The DA submission included a Traffic Impact Assessment which indicates that, from an operational perspective, traffic generation is expected to be minimal with only regular daily maintenance inspections carried out when necessary. The developer has determined that only one (1) visit per day per week is required for the ongoing operational activities of the solar farm.

Access to the site is via Airport Road and will connect to an internal access road. Therefore,

- A vehicle access shall be constructed in accordance with Council specifications from the edge of seal on Airport Road to the property boundary. A *'Request for Rural Access Inspection'* form is required to be completed by the developer prior to construction.

Issued to for Assessment

Date Reviewed (dd / mm / yyyy)	06/04/2021
Engineering Conditions and/or Comments:	
Anthony Smetanin Design Services Manager	

The comments noted above are a collective assessment of the DA/CC application referred to Councils Infrastructure Delivery Department for comment. It is recommended that appropriate Planning Conditions are drafted to include the comments identified in this memo. The

comments included in this referral have been approved by the Director of Infrastructure Delivery.

Yours faithfully,



Shane Burns
Director Infrastructure Delivery

LAND USE APPLICATION WASTE MANAGEMENT REFERRAL

Referral Details

DA / CC File Number:	DA2021/0070
Referral Details (dd / mm / yyyy)	03/08/2021
Subject:	Establishment of a 5MW Solar PV Electricity Generation Facility with Associated Infrastructure
Location:	LOT: 489 DP: 754944 [115 Airport Road, Narrabri NSW 2390]
Planning Officer:	Günther Weidenmann

Referral Information

Any additional comments:
<p>Development Application (DA) 2021/0070 seeks development consent for the establishment of a 5MW solar electricity generation facility with associated infrastructure on LOT: 489 DP: 754944, known as 115 Airport Road, Narrabri NSW 2390. According to the Statement of Environmental Effects (SEE) accompanying the subject application, the proposed development entails the following:</p> <ul style="list-style-type: none">• 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 Plans. <p>Also submitted as part of the application is a Waste Management Plan. Do you have any comments/conditions regarding the proposal?</p>

Issued to for Assessment

Date Reviewed (dd / mm / yyyy)	13/8/2021
Engineering Conditions and/or Comments:	
<p>The waste management plan does not address the ongoing operational hazardous waste from the maintenance of the solar panels.</p> <p>It is suggested that the waste from maintenance and disposal of solar panels should be minimised with component replacement where possible.</p>	

The material must be disposed of at a licensed facility. Narrabri shire waste sites are not licensed to take and dispose this material.

Michael Davis
Manager Waste Services

Michael Davis

The comments noted above are a collective assessment of the DA/CC application referred to Councils Infrastructure Delivery Department for comment. It is recommended that appropriate Planning Conditions are drafted to include the comments identified in this memo. The comments included in this referral have been approved by the Director of Infrastructure Delivery.

Yours faithfully,

Michael Davis
Manager Waste Services

LAND USE APPLICATION STRATEGIC PLANNING REFERRAL

Referral Details

DA / CC File Number:	DA2021/0070
Referral Details (dd / mm / yyyy)	03/08/2021
Subject:	Establishment of a 5MW Solar PV Electricity Generation Facility with Associated Infrastructure
Location:	LOT: 489 DP: 754944 [115 Airport Road, Narrabri NSW 2390]
Planning Officer:	Günther Weidenmann

Referral Information

Any additional comments:

Development Application (DA) 2021/0070 seeks development consent for the establishment of a 5MW solar electricity generation facility with associated infrastructure on LOT: 489 DP: 754944, known as 115 Airport Road, Narrabri NSW 2390. According to the Statement of Environmental Effects (SEE) 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 Plans.

Also submitted as part of the application is a Waste Management Plan.
Do you have any comments/conditions regarding the proposal?

Comments / Conditions:

Clause 6.2 Flood Planning is applicable to the proposed development, as the property is currently identified by Narrabri LEP 2012 as being part of a flood planning area.

Clause 6.2 states that in assessing an application for development on a property within the flood planning area, Council must consider the objectives of the clause, and be satisfied that the development;

- (a) minimise the flood risk to life and property associated with the use of land;*
- (b) 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.*

The township of Narrabri is located on the Namoi River floodplain and is drained by a number of smaller tributaries including Mulgate Creek, Horsearm Creek and Long Gully. Narrabri has, across the whole township, experienced above floor flooding from each of these sources on a regular basis in the past.

As depicted in the following image taken from the Narrabri Flood Study 2016, the subject lot is identified as having a hydraulic categorisation of both “flood fringe” (yellow) and “flood storage” (blue);



The Australian Disaster Resilience Handbook Collection - Flood Information to Support Land-use Planning, provides guidelines for consideration of land use applications against the floor risk of the identified property.

Clause 2.4 of the guideline 'Flood Hazard', provides useful information to be considered when determining land use approvals. Flood hazard classification provides a description of how hazardous the physical conditions produced by a flood can be, independent of the population at risk. It is typically based on benchmarking the depth and velocity of the floodwaters against thresholds to determine how hazardous this combination may be to people, cars, infrastructure and buildings, if they were exposed to the flooding.

As with flood function, flood hazard can vary according to the magnitude of the flood event and location within the floodplain for the same flood event. Consideration may need to be given to a range of flood events, including those rarer than the DFE, to identify areas that require specific constraints and management. Australian Disaster Resilience Guideline 7-3 Flood Hazard (AIDR 2017) supports this delineation, and recommends grouping the floodplain into the following categories:

- *H1—generally safe for people, vehicles and buildings*
- *H2—unsafe for small vehicles*
- *H3—unsafe for vehicles, children and older people*
- *H4—unsafe for all people and vehicles*
- *H5—unsafe for vehicles and people, and all buildings are vulnerable to structural damage*
- *H6—unsafe for vehicles and people, and all building types are vulnerable to structural failure.*

A flood hazard assessment conducted as part of a flood study often provides baseline information for general consideration as part of an initial scoping exercise for a floodplain management study. In such a preliminary assessment of risks or as part of a constraints analysis for strategic land-use planning, a combined set of hazard vulnerability curves such as those presented in Figure 6 of AUSTRALIAN EMERGENCY MANAGEMENT HANDBOOK SERIES - Technical flood risk management guideline: Flood hazard - can be used as a general classification of flood hazard on a floodplain.

The following information pertains to each lot that makes up the subject land of the proposed solar farm in a 1 in 100 year flood event;

A. Lot 489 DP754944:

- The existing ground level on this property ranges from 214.31 m AHD to 217.71 m AHD.
- The peak 1 in 100 year flood level ranges from 215.53 m AHD to 215.58 m AHD on this property.
- The depth occurring on this property during a 1 in 100 year flood ranges from 0.00 m AHD to 1.22 m AHD.
- The velocity occurring on this property during a 1 in 100 year flood ranges from 0.00 m/sec to 0.25 m/sec.

- The Minimum Floor Level of all habitable areas of any residential building on this property is required to be constructed a minimum of 500mm above the 1 in 100 year flood level.
- The Flood Planning Level (known as the Minimum Floor Level), on this property ranges from 216.03 m AHD to 217.02 m AHD.

B. Lot 490 DP754944

- The existing ground level on this property ranges from 214.31 m AHD to 217.71 m AHD.
- The existing ground level on this property ranges from 214.41 m AHD to 217.55 m AHD.
- The peak 1 in 100 year flood level ranges from 215.49 m AHD to 216.28 m AHD on this property.
- The depth occurring on this property during a 1 in 100 year flood ranges from 0.00 m AHD to 1.42 m AHD.
- The velocity occurring on this property during a 1 in 100 year flood ranges from 0.00 m/sec to 0.45 m/sec.
- The Minimum Floor Level of all habitable areas of any residential building on this property is required to be constructed a minimum of 500mm above the 1 in 100 year flood level.
- The Flood Planning Level (known as the Minimum Floor Level), on this property ranges from 216.00 m AHD to 216.85 m AHD.

Based on the above information, majority of Lot 489 is not affected by flooding in the 1 in 100 year event (south east end of the lot). However, the north west end of the lot is given a Hazard Vulnerability Classifications of H1, and some H2. Similarly, majority of the eastern side of Lot 490 is not affected by flooding in the 1 in 100 year event. However, the middle of the allotment is given a Hazard Vulnerability Classifications of H1, and some H2. Further, the northern side of the lot is given a Hazard Vulnerability Classifications of H3.

In regards to the proposed solar farm, there are no residential components proposed which means that there is no requirement for a minimum floor height of any building.

The proposed site of the solar farm is more likely to be affected by riverine flooding from the Namoi River, than local tributary flooding. In such instances, the Shire is afforded typically at least 24 hours notice of the river rising, and at approximate times for each flood level which is adequate time to complete any evacuate/emergency procedures onsite should they be required.

1 in 100 year extent;



It is considered that the proposed solar farm is compatible with the existing flood hazard of the land, and the proposed development will not detrimentally effect the future flood behaviour in the local catchment. To mitigate the impact of the proposed development on flood behavior, the following restrictions are proposed to be included in the conditions of consent;

- the development is to be constructed to allow the free flow of flood water under and around all open structures.
- A condition of consent should also be added to any approval that stipulates that 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.

Gunther Weidenmann

From: Fiona Duncan <fiona.duncan@essentialenergy.com.au>
Sent: Friday, 2 July 2021 9:03 AM
To: Gunther Weidenmann
Subject: Re: CNR-23580 / DA2021/0070 - 115 Airport Road, Narrabri (Lots 506 & 489 DP754944) 5MW solar electricity generation plant & associated infrastructure, security fencing

Dear Sir/Madam,

We refer to the above matter and to your correspondence via the NSW Planning Portal seeking comment from Essential Energy in relation to the proposed development.

Strictly based on the documents submitted, Essential Energy makes the following comments as to potential safety risks arising from the proposed development:

1. The proposed development, including security fencing, must maintain a minimum clearance of 10.0 metres from the existing 22kV overhead powerline located on the property.

Essential Energy makes the following general comments:

1. If the proposed development changes, there may be potential safety risks and it is recommended that Essential Energy is consulted for further comment.
2. Any existing encumbrances/easements in favour of Essential Energy (or its predecessors) noted on the title of the above properties should be complied with.
3. Satisfactory arrangements are to be made with Essential Energy with respect to the proposed solar electricity generation plant which will form part of the development. It is the Applicant's responsibility to enter into the required Connection Agreement/s and any other requirements with Essential Energy for the development, which may include the payment of fees and contributions. Refer Essential Energy's Network Connections team for requirements via email networkconnections@essentialenergy.com.au.
4. In addition, Essential Energy's records indicate there is electricity infrastructure located within the properties and within close proximity of the properties. Any activities within these locations must be undertaken in accordance with the latest industry guideline currently known as *ISSC 20 Guideline for the Management of Activities within Electricity Easements and Close to Infrastructure*. Approval may be required from Essential Energy should activities within the property encroach on the electricity infrastructure.
5. Prior to carrying out any works, a "Dial Before You Dig" enquiry should be undertaken in accordance with the requirements of *Part 5E (Protection of Underground Electricity Power Lines)* of the *Electricity Supply Act 1995* (NSW).
6. Given there is electricity infrastructure in the area, it is the responsibility of the person/s completing any works around powerlines to understand their safety responsibilities. SafeWork NSW (www.safework.nsw.gov.au) has publications that provide guidance when working close to electricity infrastructure. These include the *Code of Practice – Work near Overhead Power Lines* and *Code of Practice – Work near Underground Assets*.

Note that our records also indicate there is electrical infrastructure (132kV overhead powerlines) located on the properties owned by TransGrid. Please also contact TransGrid in relation to this proposal.

Should you require any clarification, please do not hesitate to contact us.

Regards

Fiona Duncan
Conveyancing Officer
Legal & Conveyancing
Governance & Corporate Services



T: 02 6589 8773 (Ext 88773) | conveyancingteam@essentialenergy.com.au

PO Box 5730 Port Macquarie NSW 2444 | essentialenergy.com.au

General enquiries: 13 23 91 | Supply interruptions (24hr): 13 20 80

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From: ConveyancingTeam
Sent: Wednesday, 30 June 2021 2:32 PM
To: 'guntherw@narrabri.nsw.gov.au' <guntherw@narrabri.nsw.gov.au>
Subject: Re: CNR-23580 / DA2021/0070 - 115 Airport Road, Narrabri

Dear Sir/Madam,

We refer to your correspondence seeking comment via the NSW Planning Portal from Essential Energy in relation to the proposed development at the above property.

Essential Energy notes that existing 22kV overhead powerlines are impacted by the proposed development.

Due to safety concerns, I have referred this proposal to Essential Energy's technical officer for review.

I shall respond to Council as soon as I can.

Note that our records also indicate that there is electrical infrastructure located on the properties owned by TransGrid. Please contact TransGrid in relation to this proposal.

Council's and the Applicant's attention is also drawn to Section 49 *Electricity Supply Act 1995* (NSW). Relevantly, Essential Energy may require structures or things that could either destroy, damage or interfere with electricity works, or could make those works become a potential cause of bush fire or risk to public safety, to be modified or removed.

Should you require any clarification, please do not hesitate to contact me.

Regards

Fiona Duncan
Conveyancing Officer
Legal & Conveyancing
Governance & Corporate Services

Sydney West

200 Old Wallgrove Road
PO Box 87 Horsley Park
NSW 2175 Australia
T (02) 9620 0777
F (02) 9620 0384

8/06/2021

Thank you for referring the Development Application to TransGrid for review.

Please be advised after reviewing the proposal, TransGrid can confirm there is no impact to TransGrid's infrastructure therefore no further assessment is required.

If you have any questions, please do not hesitate to contact TransGrid's Easements & Development Team at Easements&Development@transgrid.com.au.

A. Please find attached TransGrid's easement Guidelines, Fencing Guidelines for your review

B. Please see link to TransGrid online guidelines:

<https://www.transgrid.com.au/beingresponsible/public-safety/Living-and-working-with-electricity-transmissionlines/Pages/default.aspx>

C. Please see link to the PDF version: <https://www.transgrid.com.au/being-responsible/publicsafety/Living-and-working-with-electricity-transmissionlines/Documents/Easement%20Guidelines.pdf>

Yours faithfully

Easements & Development Team
TransGrid

Gunther Weidenmann

From: Airport Developments <Airport.Developments@AirservicesAustralia.com>
Sent: Thursday, 8 July 2021 4:51 PM
To: Gunther Weidenmann
Cc: Airspace Protection
Subject: AIRSERVICES RESPONSE: NSW-MA-716 - Solar Farm, 115 Airport Rd, Narrabri [SEC=OFFICIAL]

Hi Gunther,

I refer to your request for an Airservices assessment of a **solar farm at 115 Airport Rd, Narrabri.**

Airspace Procedures

With respect to procedures designed by Airservices in accordance with ICAO PANS-OPS and Document 9905, at a height of 220.8m (725ft) AHD the solar farm will not affect any sector or circling altitude, nor any instrument approach or departure procedure at Narrabri aerodrome.

Note: procedures not designed by Airservices at Narrabri aerodrome were not considered in this assessment.

Communications/Navigation/Surveillance (CNS) Facilities

This proposal will not adversely impact the performance of any Airservices Precision/Non-Precision Nav Aids, Anemometers, HF/VHF/UHF Comms, A-SMGCS, Radar, PRM, ADS-B, WAM or Satellite/Links.

Summary

Based on the above assessment, Airservices view is that the proposed solar farm would not have an impact on the safety, efficiency or regularity of existing, or future air transport operations into or out of Narrabri aerodrome.

Kind regards,

JOHN GRAHAM
AIRPORT DEVELOPMENT APPLICATIONS COORDINATOR, CUSTOMER ENGAGEMENT

Mobile 0439 385 472
Email John.Graham@airservicesaustralia.com

Da Vinci Building
2a Boronia Rd, Brisbane Airport, Brisbane QLD 4009



From: Airport Developments
Sent: Wednesday, 30 June 2021 4:08 PM
To: Gunther Weidenmann <guntherw@narrabri.nsw.gov.au>
Subject: NSW-MA-716 - Solar Farm, 115 Airport Rd, Narrabri [SEC=OFFICIAL]

Gunther Weidenmann

From: Airspace Protection <Airspace.Protection@casa.gov.au>
Sent: Friday, 11 June 2021 8:46 AM
To: Gunther Weidenmann; Airspace Protection
Subject: RE: DA2021/0070 - 5MW Solar electricity generation plant with associated infrastructure – 115 Airport Road, Narrabri, Lot 489 DP 754944 [SEC=OFFICIAL]

OFFICIAL

Good morning Mr Weidenmann,

The proposal as presented indicates there is nil reflectivity from the solar panels associated with the Solar facility proposed for Airport Road Narrabri. Consequently CASA has no objection to the proposal as presented.

Regards

Matthew Windebank
Aerodrome Engineer | Airport Development and Airspace Protection
Air Navigation, Airspace & Aerodromes Branch
CASA\ Aviation Group
p: (02) 6217 1183 **m:** 0477 741 186
e: matthew.windebank@casa.gov.au



From: Gunther Weidenmann <guntherw@narrabri.nsw.gov.au>
Sent: Thursday, 10 June 2021 11:57 AM
To: Airspace Protection <Airspace.Protection@casa.gov.au>
Subject: DA2021/0070 - 5MW Solar electricity generation plant with associated infrastructure – 115 Airport Road, Narrabri, Lot 489 DP 754944

Good morning

RE: DA2021/0070 - 5MW Solar electricity generation plant with associated infrastructure – 115 Airport Road, Narrabri, Lot 489 DP 754944

Please find enclosed documentation for the 5MW Solar electricity generation plant with associated infrastructure, which is referred for your consideration/comments/conditions.

Attached are copies of: