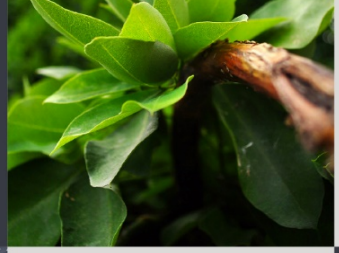
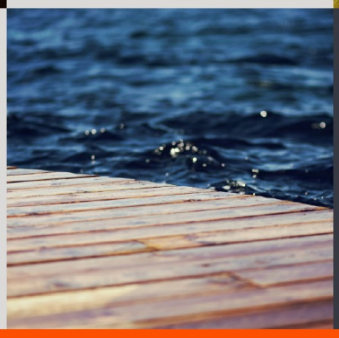




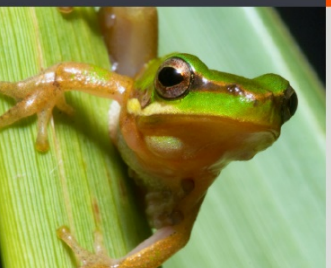


STATEMENT OF ENVIRONMENTAL EFFECTS

Electricity Generating Works (5x Megawatt Solar Farm)
No. 1 Dingo Lane, Myocum | Lot 15 DP 1178892

Prepared for Byron Shire Council
By Planit Consulting Pty Ltd

September 2020 – Issue A



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Document Control

Issue	Date	Description	Prepared By	Checked By
A	25.09.2020	Draft for client review and owners' consent	JT	LB
1.0	XX.XX.2020	Final		

Disclaimer

Contents

Executive Summary

This Statement of Environmental Effects supports a Development Application to provide a new 5x megawatt (MW) solar farm and associated works (such as access, parking, viewing platform and the like) at 1 Dingo Lane, Myocum (subject site). The solar farm forms an integral component of Council's Net Zero Emissions and Renewable Energy Strategy and will generate enough electricity to:

- reduce Council's carbon emissions
- offset Council's power usage; and
- send additional renewable power back into the grid.

The subject application marks a further important step towards delivering on these goals, and realising the project which has been actively pursued since May 2019.

The subject site is legally described as Lot 15 in DP 1178892, and is approximately 39ha in size. Located within the locality of Myocum in the Byron Shire, the subject site is approximately 3.5km south-south-east of the township of Mullumbimby and 6.5km north-west of the Pacific Highway/Hinterland Way highway interchange. The existing locale primarily comprises rolling rural landscapes, rural living and agricultural pursuits (predominately grazing). Council's waste and recycling management facility adjoins the site, along with quarrying activities. Built form comprises a mixture of dwellings and farm buildings, often placed within elevated paddocks, or nestled within interspersed vegetation. The subject site comprises large portions of flat land, before sloping up at the sites southern end. The subject site includes 1st and 2nd order streams within the floodplain, which ultimately feed into Simpsons Creek on the eastern side of the Pacific Highway.

The proposal involves the provision of a 5xMW solar farm provided by an array of solar panels that span approximately 11ha. The panel array is located centrally and to the north of the site. The panels will be either a fixed or 'single axis tracking' format and accordingly both mounting formats have been considered within this assessment. The solar panels are mounted up to 2m above finished ground level. No significant earthworks are proposed to accommodate the siting of the solar panels and 5m wide spacing between panel rows is anticipated to allow maintenance access and 10m spacing between the perimeter fencing and landscaping to ensure a defendable firefighting space.

To the south of the panel array a solar inverter and storage area is positioned above the Q100 level.

Towards the northern edge of the subject site a carpark and viewing platform to accommodate education opportunities with school and other tour groups, as well as accommodate interested day-trip movements. Is proposed. The viewing platform is located on piers to achieve a view of and over the panel array and reduce the likelihood of flood inundation. A 15m x 5m roofed area provides shelter for approximately 30x people and materials and colours used to be a muted, earthy tone. Formal carparking for 5 vehicles and 1x coach-sized bus support the viewing platform, whilst informal/overflow parking is also available for a further coach sized bus and an additional 5x vehicles in peak periods.

To mitigate external impacts, the proposal is setback from Dingo Lane and existing vegetation. The interface of the panel array includes a 2.7m high security fence along each side. To the northern, eastern and western elevations a 10m buffer is present between the panel array and the security fence, along with a 4-5m wide landscape screen outside of the security fencing. This landscaping is to accommodate a layering of plantings, including a screen of 4m+ in height. These interface provisions have been

implemented post both glare and visual impact assessments, which considered the visual catchment the subject site sits within.

Of note, simultaneous to the preparation of the Development Application package, a Design and Construct process is being conducted by Byron Shire Council. This process remains ongoing and may result in future modifications to the solar farms particulars as the final scale and capacity of the proposal is optimised based on a combination of the most suitable technology at the time of procurement, along with detailed grid connection considerations. Notwithstanding, this report considers the merits of the application and has adopted a precautionary approach to testing its impacts. Accordingly, once the final tender is awarded, any modification considered necessary is anticipated to result in a less-intensive outcome for the site.

As mentioned earlier, the Dingo Lane Solar Farm project has been identified as an integral component of Byron Shire Council's 'Net Zero Emissions Strategy for Council Operations 2025 (the Strategy). Responding to Council's commitment to 'Replace existing energy supplies from fossil fuels with renewables', the strategy identified the Dingo Lane Solar Farm as a key opportunity to offset traditional electricity used by Byron Shire Council within its operations, as well as community emissions where possible.

The proposal has been considered broadly by Council over a number of years and in concert with other key documents, such as the Our Byron, Our Future: Community Strategic Plan 2028, Byron Rural Land Use Strategy and draft Byron Shire Local Strategic Planning Statement – March 2020. Whilst the proposal does not achieve holistic alignment with the Byron Rural Land Use Strategy 2017 as it proposes a non-agricultural land use on land mapped as Important Farmland, in considering the scale of the proposal, its ability to be returned to farmland should the project conclude or an imperative for additional farmland to become available and the comparative value of the solar farm, the proposal is not considered to be inconsistent with applicable State or local policy positions.

Ultimately this Statement of Environmental Effects concludes that the proposal satisfies the relevant provisions of the *Environmental Planning and Assessment Act 1979* and is within the public interest.

1. Background

1.1 Introduction

Planit Consulting has been commissioned by Byron Shire Council to prepare a Statement of Environmental Effects (SEE) relating to a new solar farm and ancillary features at 1 Dingo Lane, Myocum.

Approval is sought pursuant to Section 4.12 of the *Environmental Planning & Assessment Act, 1979* (the Act) for the proposed development. Approvals relating to the erection of the structures (Construction Certificate) and other matters relevant to both the *Roads Act 1993 and Local Government Act 1993* addressed within their specific applications.

The purpose of this report is to articulate the application, consider its impacts and satisfy the provisions and heads of consideration of the applicable environmental planning framework. This report should be read in conjunction with the following documentation

Table 1: Development Application Package

Development Application Package	
Concept Site Plan & Perimeter Section	Prepared by Planit Consulting, dated 3 July and 21 September 2020 respectively
Ecological Assessment	Prepared by Planit Consulting, dated XXXX
Engineering Assessment	Prepared by Planit Consulting, dated September 2020
Traffic Impact Assessment	Prepared by Planit Consulting, dated September 2020
Statement of Landscape Intent	Prepared by Planit Consulting, dated XXXX
Glare Impact Assessment	Prepared by Environmental Ethos, dated XXXX
Visual Impact Assessment	Prepared by Environmental Ethos, dated XXXX
Geotechnical Site Investigation	Prepared by Australian Soil and Concrete Testing, dated 9 January 2020
Acid Sulfate Soil Investigation	Prepared by Australian Soil and Concrete Testing, dated 10 January 2020

1.2 Public Notification

Under Part A of the Byron Development Control Plan 2014 and the Byron Shire Council Community Participation Plan – October 2019, the proposed development is identified as requiring 'Level 3' public notification and advertising as the proposal will be determined by the Northern Regional Planning Panel. Further details regarding the pre-lodgement consultation can be found XXXXXXX.

1.3 Consent Authority

When considering the particulars of the proposal and the provisions of *State Environmental Planning Policy (State and Regional Development) 2011,* the proposal is declared Regionally Significant Development by virtue of involving Council related development valued over $5 million. Whilst the value of the Proposal is also beyond the $10 million threshold for State Significant Development, as the subject site is not considered to comprise an environmentally sensitive area of State significance, the Proposal is not declared State Significant Development and does not require an Environmental Impact Study.

Within clause 4.5 of the Act, for development declared as Regionally Significant Development, the consent authority is identified as the Sydney district or regional planning panel for the area in which the development is to be carried out. The Northern Regional Planning Panel is the nominated body for the Byron Local Government Area.

1.4 Designated Development

Schedule 3 of the *Environmental Planning and Assessment Regulations 2000* (the Regulations) outlines the criteria for development which is classified as Designated Development. The proposed development does not exceed the threshold criteria within Schedule 3 of the Regulations to be considered Designated Development.

1.5 Integrated Development

The proposed development is not identified as integrated development for the purpose of Council's assessment as shown below.

Table 2: Integrated Development

Act	Response
Fisheries Management Act 1994	The proposal does not propose works pursuant to the provisions of S144, 201, 205, 219
Heritage Act 1977	The subject site is not listed under the NSW Heritage Act 1977
Mine Subsidence Compensation Act 1961	Pursuant to district maps held by the Mine Subsidence Board (MSB), the site is not located in any mapped districts prepared by the MSB.
Mining Act 1992	The proposal does not seek consent for mining activities.
National Parks and Wildlife Act 1974	No known Aboriginal heritage items exist on the subject site.
Petroleum (Onshore) Act 1991	This application does not seek to grant a production lease pursuant to S9.
Protection of the Environment Operations Act 1997	The activities proposed within this proposal are not considered a scheduled activity to which requires assessment of the *Protection of the Environment Operations Act 1997*.
Roads Act 1993	Pursuant to S138, the proposed access works will require separate approval under the *Roads Act 1993*.

Rural Fires Act 1997	The subject site is identified as bushfire prone area under Clause 46(a) – *Rural Fires Regulation 2013*, however the proposed land use is not identified as a 'special fire protection purpose'.
Water Management Act 2000	The subject site does not require dewatering or propose works within 40m of a waterway and is therefore not integrated development under the *Water Management Act 2000*.

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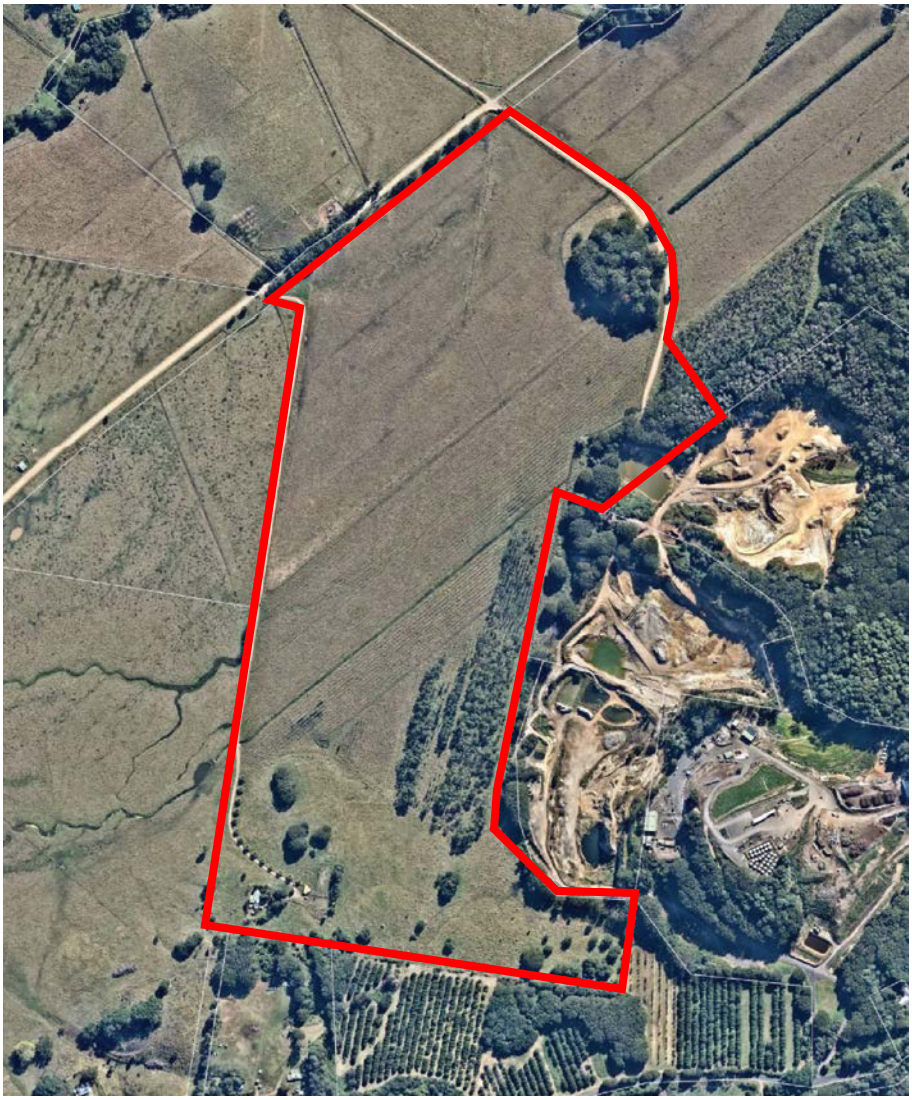
2. Site Details

2.1 Site Description & Context

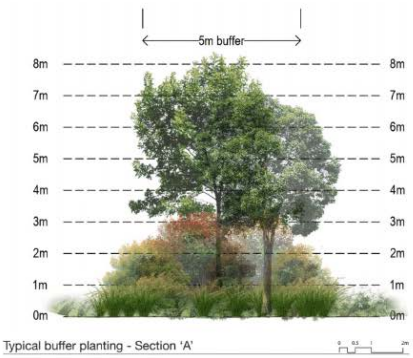
The subject site is located within the locality of Myocum in the Byron Shire, approximately 3.5km south-south-east of the township of Mullumbimby, and 6.5km northwest of the Pacific Highway and Hinterland Way interchange.

The site address is 1 Dingo Lane, Myocum and is legally described as Lot 15 DP 1178892. Adjoining the existing Resource Recovery Facility and quarry, the site is owned by Byron Shire Council and includes an 'operational' land tenure.



LEGEND

1. VISITOR AREA
   Refer to Visitor Area Typical Layout on following page.
2. LANDSCAPE BUFFER PLANTING
   Refer to typical buffer planting arrangement for information.
3. OPEN GRASSLAND AREAS
4. SOLAR ARRAY AREA



Typical buffer planting - Section 'A'

The site itself is 39ha in area, is of irregular shape and has an approximate frontage of 830m to an unsealed portion of Dingo Lane. Vehicular access is gained from an existing accessway in the northwest corner of the site. The site is currently utilised for agricultural purposes by way of cattle agistment and includes an existing dwelling house at the southern end of the site. The site is predominately open grassland with the exception of sporadic vegetation, primarily located along its eastern boundary. The land slopes from south to north, with the area of panel array being predominately flat.

The existing locale comprises rolling rural landscapes, accommodating rural living and 'green-based' pursuits (such as bespoke agriculture and recreation uses). Built form comprises a mixture of dwellings and farm buildings, often placed within elevated paddocks, or nestled within interspersed vegetation.

2.2 Mapped Planning Controls & Site Constraints

The subject land is identified as being mapped by the following planning provisions:

- RU2 Rural Landscape Zone, RU1 Primary Production and SP2 Infrastructure under the Byron Local Environmental Plan 2014
- 1AH General Rural Zone zone under the Byron Local Environmental Plan 1988
- Maximum Height of Building of 9 meters
- Minimum lot size of 40ha
- Important Farmland
- Key Fish Habitat
- Bushfire Prone Land
- Byron Shire Environmental Values Mapping (Wildlife Corridors, Koala Habitat, Threatened Fauna Habitat & High Conservation Value) 2012

3. Proposed Development

3.1 Proposal Details

This Statement of Environmental Effects supports a Development Application to provide a new 5x megawatt (MW) solar farm and associated works (such as access, parking, viewing platform and the like) at 1 Dingo Lane, Myocum (subject site). The solar farm forms an integral component of Council's Net Zero Emissions and Renewable Energy Strategy.

Provided by a panel array spanning approximately 11ha and located centrally and to the north of the site, the panel array is supported by a solar inverter located south of the floodplain and integrated into the wider electricity network. The panels will be either a fixed or 'single axis tracking' format and accordingly both mounting formats have been considered within this assessment. The solar panels are mounted up to 2m above finished ground level. No significant earthworks are proposed to accommodate the siting of the solar panels.

The subject site will be accessed by the existing 2-lane unsealed section of Dingo Lane. On the northern edge of the site a carpark and viewing platform is proposed to accommodate education opportunities with school and other tour groups, along with accommodating interested day-trippers. The viewing platform is located on piers to achieve a view of and over the panel array and reduce the likelihood of flood inundation. A 15m x 5m roofed area provides shelter for approximately 30 people and materials and colours used to be a muted, earthy tone. Formal carparking for 5 vehicles and 1x coach-sized bus support the viewing platform, whilst informal/overflow parking is also available for a further coach sized bus and an additional 5 vehicles in peak periods. The proposal provides sufficient carparking and manoeuvring space to ensure vehicles leaving in a forward gear and despite a recommended speed reduction, no impact to the efficiency of Dingo Lane is anticipated.

To mitigate external impacts, the proposal is setback from Dingo Lane and existing vegetation. The interface of the panel array includes a 2.7m high security fence along each side. To the northern, eastern and western elevations a 10m buffer is present between the panel array and the security fence, along with a 4-5m wide landscape screen outside of the security fencing. This landscaping is to accommodate a layering of plantings, including a screen of 4m+ in height. These interface provisions have been implemented post both glare and visual impact assessments, which considered the visual catchment the subject site sits within. No vegetation is required to be removed facilitate the proposal and the prepared landscape intent plans identify broad areas for future landscape and environmental embellishment to support environmental connectivity and further mitigate visual and glare intrusion on the existing condition.

The site benefits from electricity and telecommunication service provision. Sufficient space and management of stormwater is proposed to ensure no adverse impacts upon the environment.

Of note, simultaneous to the preparation of the Development Application package, a Design and Construct process is being conducted by Byron Shire Council. This process remains ongoing and may result in future modifications to the solar farms particulars as the final scale and capacity of the proposal is optimised based on a combination of the most suitable technology at the time of procurement, along with detailed grid connection considerations. Notwithstanding, this report considers the merits of the application and has adopted a precautionary approach to testing its impacts. Accordingly, once the final

tender is awarded, any modification considered necessary is anticipated to result in a less-intensive outcome for the site.

Post the construction phase the proposal will not be staffed, rather tours and maintenance undertaken on an 'as needs' basis. Accordingly, the proposal does not include office or bathroom facilities, likewise, makes no amendment to the site's existing waste collection practices. Specific waste management provisions will be negotiated with waste providers for the construction phase of the proposal.

4. Assessment

4.1 Environmental Planning & Assessment Act 1979

The proposal constitutes 'development' as defined by the *Environmental Planning and Assessment Act 1979* (*The Act*) and requires development consent as per clause 34 of *State Environmental Planning Policy (Infrastructure) 2007*.

Section 4.15 establishes the assessment process applicable to development applications, which are addressed, in the same order, below.

4.2 State Environmental Planning Policies

Whilst a variety of State Environmental Planning Policies (SEPPs) are applicable to the land, the following provides an assessment of those with relevance to the proposal.

4.2.1 State Environmental Planning Policy (Infrastructure) 2007

The Infrastructure SEPP aims to facilitate the effective delivery of infrastructure across the State. In this regard Division 4 – Electricity generating works or solar energy systems provides opportunity for solar farms through exempt, complying and permissible with consent provisions.

Clause 34 enables development with consent for the purpose of electricity generating works within prescribed rural, industrial or special use zones (which includes RU1, RU2, SP2 and equivalent zones, such as 1A General Rural). Accordingly, the proposal is permissible with consent throughout the site and no other clauses or heads of consideration are detailed within the Infrastructure SEPP of relevance to the proposal.

4.2.2 State Environmental Planning Policy No. 33 – Hazardous and Offensive Development

SEPP 33 ensures that in considering any application to carry out potentially hazardous or offensive development that sufficient information is available for assessment.

The proposal does not involve a potentially hazardous industry as identified within Appendix 3 of the Applying SEPP 33 Guidelines and does not include the use or storage of hazardous materials. Likewise, the proposal is not anticipated to include the storage or use of any Dangerous Goods above the screening thresholds established within the Applying SEPP 33 Guidelines.

Of note, the proposal does not incorporate a battery-based storage facility which would enable electricity generated by the solar farm to be stored for later dispatch to the grid. Should battery storage be pursued in the future further screening will be required as some batteries are classified as a dangerous goods according to the Australian Dangerous Goods Code (ADGC). Should a Preliminary Hazard Assessment be required, this assessment should have suitable regard to the existing environment, potential impacts and mitigation measures at that time.

In light of the above, it is concluded that the proposed solar farm is not potentially hazardous and no Preliminary Hazard Assessment is considered required and Part 3 of SEPP 33 is not applicable to the proposal.

4.2.3 State Environmental Planning Policy 55 – Remediation of Land

Clause 7 of SEPP 55 details that a consent authority must not consent to the carrying out of any development on land unless it has considered whether the land is contaminated. In this regard, the subject land is not known on any contaminated land registers, nor involve existing land uses likely to result in site contamination. The proposal does not involve extensive ground disturbance and earthworks, likewise, does not involve specifically sensitive land uses, such as a child care centre. Accordingly, the proposal is considered to satisfy the provisions of SEPP 55.

4.2.4 State Environmental Planning Policy (Koala Habitat Protection) 2019

The provisions of the Koala Habitat SEPP are applicable to the proposal as the subject site is located within the Byron Local Government Area (which is identified within Schedule 1) and is greater than 1ha in size.

Despite the absence of any evidence of koalas on the land during the site inspection and monitoring period, the site contains Eucalypt Plantation, and is considered as 'core koala habitat.' Specifically, the Eucalypt Plantation comprises exclusively of a regionally relevant koala tree species (Eucalyptus saligna) and koalas having being recorded within 2.5km of the site boundaries in the last 18 years.

Notwithstanding the definition of 'core koala habitat' being applicable to the Eucalypt Plantation, the proposal does not involve clearing of native vegetation, will not impede movement between koala habitat and incorporates management measures to address key indirect koala impacts, such as the proposed perimeter fencing. The proposal satisfies all 5x criteria identified within the Tier 1 Assessment under the Draft Koala Habitat Protection Guidelines for proposals, being 'low or no impact development'. Accordingly, the provisions of Koala Habitat SEPP are considered to be satisfied.

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

Whilst the SEPP Primary Production and Rural Development applies to the land, no relevant provisions are detailed by virtue of the land use proposed. Notwithstanding, the proposal has embodied suitable regard for rural land use conflicts and has had strong regard for the natural and physical constraints and opportunities of the land. Further, the proposal does not fragment rural pursuits within the locality, or adversely impact any planned future supply of rural residential land. The provisions of the SEPP are therefore considered satisfied.

4.3 Byron Local Environmental Plan 2014

The footprint of the proposed works are identified within the Land Application Map for the *Byron Local Environmental Plan 2014* (Byron LEP 2014) and as such its provisions apply to the proposal. The following provisions provide an assessment of the clauses of key relevance to the proposal.

4.3.1 Clause 1.2 Aims of the Plan

The proposal is considered to make a positive contribution towards the stipulated aims of the Byron LEP 2014, specifically:

- to progressively respond to changes in the natural, social and economic environment in a way that is consistent with the following principles of ecologically sustainable development
- the principles of intergenerational equity,
- the principle of eliminating or reducing to harmless levels any discharge into the air, water or land of substances or other effects arising from human activities, and
- to promote the orderly and economic use of land.

4.3.2 Land Use Table – RU2 Rural Landscape

The proposed electricity generating works are prohibited within the RU2 zone and as such relies upon the Infrastructure SEPP for its permissibility.

Notwithstanding the proposal not being identified as permitted with consent within the zone, the proposal provides a compatible land use and includes landscaping to uphold both the rural landscape character of the land and scenic quality. As detailed within the supporting Visual Impact and Glare Impact Assessments, the proposal has had specific regard to the landscape character units of the locality and incorporates design measures to ensure its suitable integration into the wider rural character and fabric. The proposal is not considered to notably detract from sustainable primary industry or existing or anticipated agricultural practices. Further, the proposed can ultimately be dissembled if demand for additional agricultural land is required.

In light of the above, the proposal is considered compatible with the objectives of the zone and the strategic opportunities of the land.

4.3.3 Clause 4.3 Height of Buildings

A maximum height of buildings of 9m applies to the subject site. Aside from the landscaping screen, the proposed viewing platform comprises the tallest component of the proposal, which measures 5.1m. The height of the development is considered to appropriately respond to topographic constraints, acknowledge the landscape-based setting of the area and be sympathetic to the wider scenic qualities of the locale. The provisions of clause 4.3 and considered satisfied.

4.3.4 Clause 6.1 Acid Sulfate Soils

The subject site has been investigated through site-specific analysis, which identified potential or actual Acid Sulfate Soils. Whilst no deep and extensive excavations are proposed, the Acid Sulfate Soil Investigation identifies liming rates (with a safety factor of 1.5) of up to 12 kg of lime (CaCo3) per tonne of soil, which will be implemented through the construction phase of the proposal. These provisions are welcomed to be further enforced through conditions of consent as necessary. The provisions of Clause 6.1 are thereby considered to be satisfied.

4.3.5 Clause 6.2 Earthworks

The proposed development will involve minor earthworks to accommodate footings for each panel within the panel array, as well as the construction of the carpark and access for the viewing platform and solar inverter areas. The extent of the earthworks will not alter existing drainage patterns, soil stability, or amenity of adjoining properties. An AHIMS search has confirmed that no declared Aboriginal locations or places occurred within proximity to the site, accordingly, it is unlikely that the earthworks would disturb any relics. If any items of archaeological significance are found, work will be halted and a suitable consultant engaged and relevant authorities notified. An Erosion and Sediment Control Plan will be developed during detailed design Construction Certificate stage and be continually maintained and amended as required to minimise environmental harm.

In considering the above, the proposal is not likely to have an adverse impact on water resources, environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land and as such is considered consistent with the provisions of clause 6.2.

4.3.6 Clause 6.3 Flood Planning

The proposed development occurs on land subject to flood inundation, and as such the provisions of clause 6.3 of the Byron LEP 2014 apply.

Whilst the solar inverter is specifically located on land elevated above the Q100 flood event level, the remainder of the proposal is positioned within the floodplain. As such, the panel array, security fencing and viewing platform include open structures and material selection which can withstand flood flow and inundation, ensuring their compatibility with the flood hazard. Whilst the structures reduce the availability of unimpeded land for stormwater, the reduction is of a minor scale and in light of the localised flood regime, which includes a number of unaffected overland flow paths, is not anticipated to significantly affect the site or wider catchments flood behaviour. The proposal does not involve staffing and occasional education trips are not likely within extreme weather events, as such no increases of risk to life are expected. The proposal does not involve vegetation removal, instead proposes significant plantings, further, suitable sediment and erosion measures will be in place during the construction phase and no ongoing effects are anticipated.

In light of the above, the proposal is considered to achieve the flood planning objectives, being minimising the flood risk to life and property, avoiding significant adverse impacts on flood behaviour and the environment and enabling development on land that is compatible with the land's flood hazard, including climate change considerations

4.3.7 Clause 6.4 Floodplain Risk Management

The subject site is affected by the flood provisions cited within clause 6.4 of the Byron LEP 2014, however the proposal does not include the sensitive land uses listed, nor introduce development that influences evacuation or emergency response issues, operational capacity or response facilities. Accordingly, the proposal is considered to satisfy the provisions of clause 6.4.

4.3.8 Clause 6.6 Essential Services

The proposed development enjoys existing access to electricity and telecommunication services, likewise vehicular access is obtained at the northwestern corner of the site, and along the western boundary. Sufficient space and management of stormwater is available to ensure no adverse impacts upon the environment.

As the proposal is not proposed to involve active staffing, no additional water or sewerage services, or changing to the site's existing services are proposed.

In light of the above, the subject land will be suitably facilitated by essential services.

4.4 Proposed Environmental Planning Instruments

Section 4.15 of the Act requires that any proposed instrument that is or has been the subject of public consultation under the *Act* and that has been notified to the consent authority (unless the Planning Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved) is taken into consideration. The following draft EPIs have been identified as having or potentially having relevance to the proposed development.

4.4.1 Proposed State Environmental Planning Policy - SEPP (Environment)

The proposed State Environmental Planning Policy - SEPP (Environment) will repeal and replace the following EPIs:

- *State Environmental Planning Policy No. 19—Bushland in Urban Areas*
- *State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011*
- *State Environmental Planning Policy No. 50—Canal Estate Development*

- *Greater Metropolitan Regional Environmental Plan No. 2—Georges River Catchment*
- *Sydney Regional Environmental Plan No. 20—Hawkesbury-Nepean River (No.2-1997)*
- *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005*
- *Willandra Lakes Regional Environmental Plan No. 1—World Heritage Property.*

The proposed development is not relevant to the existing EPIs listed above and is not located in an area of critical or potential habitat according to the draft mapping. Therefore, the proposed development is compliant with the draft provisions of the proposed Environment SEPP.

4.4.2 Proposed new State Environmental Planning Policy – 55 (Remediation of Land)

The proposed new Remediation of Land SEPP will provide a state-wide planning framework for the remediation of land, maintain the objectives and reinforce those aspects of the existing framework that have worked well, require planning authorities to consider the potential for land to be contaminated when determining development applications and rezoning land, clearly list the remediation works that require development consent and introduce certification and operational requirements for remediation works that can be undertaken without development consent.

The subject site is complaint with the existing SEPP 55 and has previously been considered suitable for development. The proposed development would not raise any concerns regarding the proposed new SEPP.

4.4.3 Planning Proposals

A review of current planning proposals relevant to the Byron LEP 2014 has found that no current proposals are applicable to the proposed development.

4.5 Byron Development Control Plan 2014

The Byron Development Control Plan 2014 (Byron DCP 2014) is applicable to the subject site and proposal. Considering the nature of the proposal a number of Chapters within the Byron DCP 2014 are not applicable, such as Chapter B2 and no tree or vegetation removal is proposed, B5 as there is no nexus between the solar farm and cycling infrastructure, and the like. Applicable Chapters within the Byron DCP 2014 are detailed further below.

4.5.1 Part A: Preliminary

This development application has been prepared in accordance with Part A of the Byron DCP 2014 and accordingly is supported by a pre-lodgement community consultation process.

Pre-lodgement community consultation XXXXXX

4.5.2 Chapter B3: Services

The purpose of this chapter is to identify the minimum requirements necessary to adequately service development for water, sewer, stormwater management, on-site effluent disposal and other necessary infrastructure.

The site enjoys electricity and telecommunications services, as well as a vehicle access via Dingo Lane.

Additional or augmentation of existing water supply (via water tank) and sewage services (via an on-site sewage system) are not proposed at this time as the proposal does not involve active staffing, rather incremental use of the site by school tour groups and for routine maintenance. Should these services be

identified as necessary in the future the land is not identified as being significantly constrained and can accommodate these facilities through the relevant approval pathways.

The proposal seeks to work with the existing stormwater regime for the site, which includes culvert crossings and overland flow paths to the north and northeast, as well as retain general consistency with the existing topography of the site. The proposal includes an increase in the impervious area of the subject site by way of the panel array and accordingly a stormwater quantity assessment has been carried out to determine any detention requirements. Broadly, whilst the panel array is impervious, and will focus water as it runs off the panels, stormwater will still be absorbed and dispersed through the soil below the panel array. This assessment is contained within the Engineering Assessment prepared by Planit Consulting, dated September 2020.

Through this assessment it was determined that pollutant loading on proposed access roads will be minimal and allow flow over grass, therefore receiving treatment prior to discharging offsite. Likewise, the solar panels are not anticipated to collect extensive quantities of pollutants and their runoff will sheet flow over grass and discharge offsite.

In light of the above, the installation of stormwater treatment devices is not considered necessary, or proposed, as any impact to water quality downstream shall be negligible. Further, no detention is required and upon completion of the proposal's construction, stormwater runoff characteristics shall be generally as per the existing conditions.

Suitable stormwater measures will be employed through the construction phase of the project, such as sediment and erosion control measures, to avoid scour and erosion of streams.

Accordingly, the stormwater management provisions of Chapter B3 of the Byron DCP 2014 are considered to be satisfied.

4.5.3 Chapter B4: Traffic Planning, Vehicle Parking, Circulation and Access

The proposal provides for 5x formal parking spaces to cater for the viewing platform, further 5x informal spaces for peak periods and space for maintenance, security visits and the like once the solar farm is operational are also provided within the panel array and adjoining the solar inverter. The proposed access, parking and manoeuvring areas provide opportunity for turning space onsite, allowing vehicles to enter and exit the site in a forward direction. The local road network is adequate to carry the minor increase in traffic volumes that the proposed development is projected to produce.

The proposed development is compliant with Chapter B4 of the Byron DCP 2014.

4.5.4 Chapter B6: Buffers and Minimising Land Use Conflict

The proposed development relates to a solar farm and supporting activities on a rural landscape lot. The broader locality also exhibits rural landscape land uses and character, accommodating a variety of agricultural pursuits, rural living and small-scale home-based business and 'green' pursuits. Notwithstanding this wider character, the subject site also adjoins an existing resource recovery facility and quarrying activities.

Solar farms typically do not involve impacts which generate land use conflict, with the exception of visual impact. The proposal is supported by both Visual Impact and Glare Impact Assessments which address this issue in great detail, concluding that no significant impacts are anticipated. Beyond visual, the solar farms do not generate noise, odour, increase traffic significantly, or involve other impacts that require

buffering or the like. Accordingly, the operations of the proposal are considered to be a benign land use within the wider rural landscape and is not anticipated to result in any impacts beyond the site boundary, or to the existing residence on the subject site, to the south.

Whilst the locality does not currently accommodate intensive agriculture uses, it is noted that the subject site and wider locality are mapped as Important Farmland under the North Coast Regional Plan 2036, and as such, primacy for future agricultural pursuits should be strategically maintained. When considering the position and landscape screening of the proposal, it is not expected that any land use conflicts of significance will arise from the potential co-existence of these development types and land use conflict minimised by the dormant operational nature of the proposal. Site attributes, such as topography, prevailing winds and vegetation do not give rise to any additional opportunities for conflict and the proposed development is considered compliant with Chapter B6 of the Byron DCP 2014.

4.5.5 Chapter B8: Waste Minimisation and Management

The overarching Site Waste Minimisation and Management Plan for the proposal is detailed below.

Construction

Construction materials will be stockpiled immediate to their relevant built footprint enabling efficient construction, suitable space for source separation and appropriate setbacks to overland flow paths and vegetation. Site waste receptacles, such as skip bins, will be used as required and also located close to construction areas.

Operation

The proposal does not include active staffing and is only anticipated to attract visitors for occasional school-based tours, interested locals and tourists, and contractors for routine maintence tasks. Accordingly, existing waste operations of the site are not proposed to be amended.

Post determination a more detailed and refined Site Waste Minimisation and Management Plan will be prepared by the contractors engaged and we welcome an appropriate condition of consent to reflect this outcome. Notwithstanding, the broad provisions detailed above encourage source separation of waste, reuse, and recycling by ensuring appropriate storage and collection facilities for waste, and quality design of waste facilities and are considered to satisfy the waste management provisions of the Byron DCP 2014.

4.5.6 Chapter B9: Landscaping

The proposal is supported by a fit for purpose Statement of Landscape Intent, delivering a landscape that performs functionally and aesthetically. Whilst the majority of the landscaping is provided in the form of the landscape perimeter screen, greater detail and finesse is provided within the vicinity of the viewing platform and car park to enhance the visitor experience and create a comfortable microclimate. The proposed landscaping has had regard to ongoing maintenance, location of services, biodiversity, safety and establishing a sense of place. Accordingly, the proposal is considered to satisfy the provisions of Chapter B9 of the Byron DCP 2014.

4.5.7 Chapter C2: Areas Affected by Flood

To ensure appropriate flood planning and hazard is considered for the proposal, BMT were engaged to prepare flood modelling, including the 1 in 100 AEP Water Level, depth and velocity. Whilst flood depths range across the site, broadly, increased depths were recorded at the northern end of the site, where no works are proposed. In summary, the viewing platform and visitor carparking area is located in an area with a peak flood depth of 0.75 – 1.0m, whilst the panel array, landscaping and fencing varies from 0m

towards the south of the proposal, through to 1.25m at the north of the array. Of note, the deck of the viewing platform is located 1.3m above existing ground level, whilst the solar panels are located up to 2m above ground level and the solar inverter located above the flood level.

When considering the proposal in light of the 'flood planning matrix':

- Land use, suitability, and floor level provisions allow the proposal to be considered, subject to the use of flood compatible material and appropriate provision of services, and does not require a minimum fill level.
- Building components must be flood compatible below the relevant flood planning level
- Structural soundness is now prescribed beyond compliance within Building Code of Australia requirements
- No flood effect action is prescribed
- No site-specific flood evacuation strategy information is required.

As detailed earlier, BMT have provided appropriate review to mitigate the absence of flooding information within Byron's rural areas. Further, whilst land is available on the subject site above the flood planning level, the proposed location holds greater efficiency in operations and reduces impacts without increasing flooding risk, or creating unsustainable social or economic impacts.

Whilst all electrical components within the array will be placed above the flood level where possible, any electrical components, conduits, cables installed below the flood level will be waterproofed or placed in waterproof enclosures.

In summary, the proposal, except for the solar inverter, is located within land identified as flood prone. The flood level, depth and velocity have been identified, which include low velocities, ranging between 0.19 – 0.45m per second, and depths between 0m – 1.25m. The proposal includes open and/or elevated structures within the floodplain to minimise interference with the existing flood regime. The proposal does not include any habitable floor areas or staffing, in-turn ensuring no additional strain upon emergency management, or increasing risk to life. Building materials used for the proposal are to be resistant to damage, deterioration, corrosion or decay when inundated by floodwater and appropriate measures will be employed for electrical components. The abovementioned measures provided a comprehensive response and compliance with the provisions of Chapter C2 of the Byron DCP 2014.

4.6 Planning Agreement

No Planning Agreements are applicable to the site.

4.7 Environmental Planning and Assessment Regulation 2000

The following provisions of the EP&A Regulations are applicable to the proposal:

Clause 50 – How must a development application be made?

Pursuant to Clause 50 of the Environmental Planning & Assessment Regulations, reference is made to the following:

- Potential areas of concern arising from the proposed development are identified as follows: -
- Impacts on the character and amenity of the area; and
- The need to restrict any likely loss of amenity

The above matters have been identified by way of inspection of site, review of applicable planning controls, and completion of detailed survey.

The measures proposed to ameliorate those matters identified above are summarised as follows:

- Provision of essential infrastructure;
- Responsiveness to site constraints; and
- Compliance with Council's controls and regulations.

For the purposes of Section 4.15(1)(a)(iv) of the Act, the following matters are prescribed as matters to be taken into consideration by a consent authority in determining a development application:

AS 2601-2001 The demolition of structures

The proposal does not necessitate, or seek approval for the demolition of any buildings.

Subdivision Order & Plan of Development

No subdivision order made under Schedule 7 of the Act or development plan are applicable to the subject site or proposed development.

Dark Sky Planning Guideline

The proposed development is not located in on land within the local government area of Coonamble, City of Dubbo, Gilgandra or Warrumbungle Shire or on land located less than 200 kilometres from the Siding Spring Observatory.

Medium Density Design Guide for Development Applications

The proposed development is not for the purposes of manor house or multi dwelling housing (terraces) or rely upon the Medium Density Housing Code.

4.8 The Likely Impacts

Bushfire Hazard

The area surrounding the solar array is almost entirely modified land, utilised primarily for grazing or resource recovery / quarry, with very little native vegetation. There is an area of unmaintained eucalypt forest sitting between the site and the adjoining quarry, a 1ha isolated pocket of camphor laurel forest in the site's north as well as copses of camphour laurel forest in the site's east, which connect to a larger remnant forest to the north of the quarry. These vegetation communities are considered to present the greatest bushfire risk in and around the site.

In accordance with Planning for Bushfire Protection 2019 (PBP 2019), solar farms are not special fire protection purpose development, do not require referral under Section 100B of the Rural Fires Act, nor subject to the requirements of AS3959 but are noted as requiring special consideration. PBP2019 notes that solar farms should be provided with adequate access for emergency vehicles, have a dedicated supply of water for firefighting and be maintained with a defendable space between combustible vegetation.

Early consultation with NSW Rural Fire Service (RFS) technical staff was undertaken as part of preparing the Development Application, who also reiterated these same bushfire protection measures and indicated that conditions of consent to ensure compliance with Section 8.3.5 of PBP2019 is upheld through any future construction and operation of the solar farm.

The public road network to the site has been determined to be adequate for supporting two-way traffic and the passage of buses. The same considerations can be applied when considering the suitability for emergency firefighting vehicle access to the land. The roadway access into the site as well as the internal private roadway are being upgraded to provide safe entry and exit for larger vehicles as well as vehicle passing, which in turn, will ensure safe and efficient accessibility in and around the site for emergency vehicles.

A dedicated supply of water for firefighting will be made available onsite and located adjacent to the access roadway (per communications with the NSW RFS)

In regard to the panel array itself, greater than 10m setbacks / buffer areas are provided from any combustible materials, including landscape screening, the viewing platform and wider vegetation. This 10m buffer area can be managed as an inner protection area (IPA) for the life of the development and is displayed on the Perimeter Section Plan prepared by Planit Consulting and dated 21 September 2020. Similarly, the landscape screening is also located greater than 40m from any surrounding bushfire hazard vegetation, ensuring that it itself does not constitute a bushfire threat. It is intended that the vegetation fuel under and between the solar panels will be maintained in a low fuel state through land management activities such as mowing and application of pesticides. All electrical components are required to be manufactured in material that does not allow combustion and ignition.

A Bush Fire Emergency Management and Operations Plan should be prepared at the design and construct phase of the project (Construction Certificate) by the solar farm operator. This Plan will identify all relevant risks and mitigation measures associated with the construction and operation of the solar farm, detailing measures to:

- prevent or mitigate fires igniting
- ensure work is not carried out during total fire bans
- ensure suitable fire-suppression equipment, access and water is available
- safely store and maintain any flammable materials onsite

- notify the local NSW RFS Fire Control Centre for any works that have the potential to ignite surrounding vegetation, proposed to be carried out during a bush-fire fire danger period to ensure weather conditions are appropriate

Collective consideration of these matters will ensure appropriate bush fire emergency management planning and mitigate any likely bushfire impacts for the proposal.

Adjoining Land

The subject site was identified by Council for the proposal due to its efficiency to provide energy, as well as its spatial location and separation from adjoining land uses. The subject site acts as a buffer area to the adjoining Resource Recovery Centre and the panel array is greater than 400m from existing dwellings beyond the site. This buffer assists mitigating any physical impacts that the proposal could generate, such as ambient noise and visual or glare impact. Electric Magnetic Field (EMF) sources will be constructed within the proposal, such as the solar panels and solar inverter and transmission line, however typical and maximum EMF levels for these types of infrastructure are expected to be low. Adverse health impacts from EMFs are therefore unlikely as a result of the proposal, particularly considering the dormant nature of operations and generous setbacks pursued. Finally, post construction, which will be supported by best practice construction environmental management planning, the site will only be accessed sporadically for routine maintenance, interested day trippers and educational tours. Accordingly, no notable increase in traffic noise or dust from the unsealed Dingo Lane is anticipated.

Conclusion

The proposal is perceived to enhance the existing site and provide economic, social and environmental benefits including;

- Developing the site in a manner sympathetic with the surrounding environment and site constraints.
- Having no detrimental ecological impacts within the site or surrounding environment by avoiding vegetation removal and providing opportunity for further landscape embellishment.
- Providing safe and convenient access and movability to and from the site that will not result in an unaccepted impact upon the locality in terms of traffic and noise.
- Promoting confidence and realistic expectations concerning development to be permitted in the future.
- Promoting sustainable energy production and creating short term job opportunities (construction).
- Incorporating approximate mitigation measures to ensure visual and glare impacts of significance will not be experienced by development and public viewpoints within the visual catchment.

4.9 The Suitability of the Site for the Development

The subject land, specifically the development envelope area, is largely free of significant constraint and suitable for solar farm purposes. Whilst the subject site is identified as flood prone, key infrastructure, i.e. the solar inverter, is located above the flood planning level, the solar panels and viewing platform elevated above the flood level and the dormant nature of the land use ensuring no notable effect on floodplain risk management and emergency services, effectively mitigating the constraint. Beyond flooding, the development envelope is not identified as encumbered by any biophysical constraints of significance, such as vegetation, heritage, or other sensitive environmental conditions.

As detailed previously, the subject site is identified as Important Farmland within the North Coast Regional Plan 2036. Whilst the provisions relating to Important Farmland and the Northern Rivers Farmland Protection Project - Final Recommendations, February 2005 address strategic land use processes, the proposal does not undermine the objectives of these provisions due to the scale of the proposal and the particulars of the existing site. The proposal is also sited central to the land, mitigating any land use conflicts should surrounding land be pursued for agricultural purposes.

As the proposal will have relatively low levels of impact on the soil surface, both in the installation of infrastructure and during operation, the proposal is considered to be highly reversible in terms of the preserving agricultural capability of the development site. Final ground conditions will be conscious of the ability for decommissioning and rehabilitation to pre-existing condition for alternate land uses, including agriculture, which may involve safeguarding soil conditions. Should the project cease, all above ground infrastructure can be removed and current agricultural activities could recommence.

In summary, the subject site is located within an area characterised by rolling rural landscapes, accommodating a majority rural living outcome. The subject site is largely free of significant environmental constraints and mapped constraints mitigated through existing siteworks or the contemporary design proposed. This SEE has not identified any matters that question the site's suitability to accommodate the proposed development

The scale of the proposal responds to the site's elevated position and attributes. Whilst the proposal harnesses its natural outlook, the built form is not stark within the landscape, or anticipated to generate privacy concerns for its residents, or residents nearby. Accordingly, the site is considered suitable for the development as proposed.

4.10 Submissions made

Submissions made during the pre-lodgement consultation phases of the proposal are outlined within XXXXXXX. Further, Council will consider any public or Agency submissions received, in addition, the applicant formally requests an opportunity to review and address any submissions received.

4.11 The Public Interest

The proposal exhibits compliance with Council's prescriptive controls, and upholds the aims, objectives and performance criteria of the applicable planning framework.

For the reasons outlined, the proposal is considered to be in accordance with the public interest and warrants approval, subject to the application of reasonable and relevant conditions.

5. Other Considerations

Below are further considerations believed to be of relevance to the proposed development.

5.1 Biodiversity Conservation Act 2016

The *Biodiversity Conservation Act 2016*, together with the *Biodiversity Conservation Regulation 2017*, outlines the framework for addressing impacts on biodiversity from development and clearing. It establishes a framework to avoid, minimise and offset impacts on biodiversity from development through the Biodiversity Offsets Scheme.

The Biodiversity Values Map identifies land with high biodiversity value that is particularly sensitive to impacts from development and clearing. The subject site is not identified on the Biodiversity Values Map, or is any vegetation removal sought.

5.2 North Coast Regional Plan 2036

The NSW Government's vision for the North Coast is to create the best region in Australia to live, work and play thanks to its spectacular environment and vibrant communities. This is embodied in the goals and directions of the North Coast Regional Plan 2036.

The proposed development is consistent with the Regional Plan and specifically helps achieve the following goals:

- Goal 1: The most stunning environment is NSW
    - Direction 4: Promote renewable energy opportunities

6. Conclusion

Planit Consulting Pty Ltd has prepared a Statement of Environmental Effects for a proposed solar farm and viewing platform at 1 Dingo Lane, Myocum.

The proposal represents a key action within Byron Shire Council's goals of the Net Zero Emissions and Renewable Energy Strategy. The proposal seeks generate enough electricity to reduce Council's carbon emissions, offset Council's power usage, and send additional renewable power back into the grid. Collectively, this represents a significant benefit for the Local Government Area. The strategic need to explore renewable energy sources and reduce greenhouse gas emissions is well documented and championed by the Byron community.

The application has been prepared in accordance with the provisions of the *Environmental Planning and Assessment Act 1979* and the relevant requirements of the *Byron Local Environmental Plan 2014*, Development Control Plan and associated policies. An assessment of the proposed development against the instruments reveals the proposed development complies with the planning objectives and provides a positive contribution to the wider rural landscape, whilst also promoting sustainability improvements for energy generation. Supporting assessments have been pursued, specifically visual and glare impact assessment, mitigating impacts external to the solar farm footprint.

Planit's detailed assessment of the proposal has confirmed that the proposed development warrants support by the consent authority and Development Consent issued, including reasonable and relevant conditions in accordance with Part 4 of the *Act*.

If you have any questions in relation to the information presented within this report, please contact Planit Consulting on (02) 6674 5001.