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Our ref: 19310.6

23 June 2021

Gunnedah Shire Council
PO Box 63,
GUNNEDAH NSW 2380

**Attention:** Ashleigh Stewart

Dear Ashleigh,

**RE: Response to Recommended Determination of Development Application 2020/035 – 262 Hunts Road Gunnedah NSW 2380**

Thank you for your letter dated 1 June 2021, which advised that Council will be recommending refusal for the proposed establishment of a solar farm (DA-2020/035) at 262 Hunts Road Gunnedah NSW 2380.

Please find below a response to Reasons for Refusal, prepared by SLR Consulting Australia Pty Ltd (Formerly KDC Pty Ltd) on behalf of Providence Asset Group (PAG).

## 1 REASONS FOR REFUSAL

**Council Comment:**

> *1. Pursuant to the provisions of Section 4.15 (1)(a)(i) of the Environmental Planning and Assessment Act 1979, the development is considered to be inconsistent with the aims of the Gunnedah Local Environmental Plan 2012 and objectives of the RU4 Primary Production Small Lots zone*.

**Response:**

The proposed development is consistent with the objectives of the RU4 Primary Production Small Lots zone as it will provide a compatible land use which minimises land use conflict in the area whilst contributing to the land use diversity of the area. The proposal will not increase demand for public services or facilities and will have minimal impact on rural character, native vegetation and wildlife corridors or on waterways, wetlands or riparian zones.

An assessment of the proposed development against the objectives of the RU4 Primary Production Small Lots zone has been undertaken in Table 1 (issued to Gunnedah Shire Council 8th September 2020).

**Table 1 - Response to RU4 zone objectives**

| Objective | Response |
|---|---|
| + To enable sustainable primary industry and other compatible land uses. | Solar farms are compatible with rural land uses due to their low environmental impacts on soil, water, and air quality. The overall loss of agricultural productivity is considered to be low with options to allow for sheep grazing under the arrays being explored.<br><br>The solar farm is not expected to have any long-term detrimental impacts which would inhibit any future primary production on the site or the surrounding area. |
| + To encourage and promote diversity and employment opportunities in relation to primary industry enterprises, particularly those that require smaller lots or that are more intensive in nature. | The provision of a solar PV farm on a small lot in the agricultural area will contribute to the diversity of compatible land uses and provide employment opportunities during the construction period, and ongoing maintenance employment opportunities during operations. |
| + To minimise conflict between land uses within this zone and land uses within adjoining zones. | Due to their relatively low environmental impacts, visual impacts are often the primary concern with solar PV development. As a result, substantial landscaping is proposed to be planted around the development site supported by an appropriate setback and existing trees both within the site and within the road verge. Further mitigation measures will be implemented such as green construction mesh covering on security fencing until landscaping reaches maturity, and anti-reflective coatings on solar panels to further reduce potential impacts. These measures minimise available views into the site, thereby minimising potential land use conflict with neighbouring land uses. |
| + To maintain the rural and scenic character of the land. | The visual impacts are proposed to be mitigated through the provision of landscaping obscuring views of the solar farm and associated security fence from the north, east, and west. Further mitigation measures will be implemented such as green construction mesh covering on security fencing until landscaping reaches maturity, and anti-reflective coatings on solar panels to further reduce potential impacts. These measures minimise available views into the site, thereby minimising potential land use conflict with neighbouring land uses.<br><br>In combination with a substantial setback and existing road verge trees, the visual impact is considered to be effectively managed to sufficiently minimise impacts on the surrounding land. |
| + To ensure that development does not unreasonably increase the demand for public services or public facilities. | Solar PV farms have low impact on public infrastructure. Construction periods see a higher impact on road infrastructure in the short term, however the overall number of delivery vehicles is generally low per day and only a 300m portion of the vehicle route is unsealed. |

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| | AM and PM peak hour traffic volumes on the local and state road network during construction of the Solar Farm are still expected to be well below the existing capacity thresholds determined above then the local and state road network has sufficient spare two-way capacity to cater for the construction and operation of the Solar Farm. The addition of up to 18 vtph will not cause the capacity thresholds determined above to be reached therefore it can be concluded that the proposed development will not adversely impact on the local and state road network mid-block efficiency. The site will feature all facilities and amenities required for the construction period.<br><br>Road impacts will be effectively managed during the construction period. |
| + To conserve and enhance the quality of valuable environmental assets, including waterways, riparian land, wetlands and other surface and groundwater resources, remnant native vegetation and fauna movement corridors as part of all new development and land use. | The solar PV farm only requires clearing of 9 isolated trees to facilitate the proposal. A small portion of immature shrubs located within the north eastern portion of the site will also be removed to facilitate the proposed development. No watercourses are located within the development area. The provision of landscaping consisting of local native species will enhance the existing trees on the site and will provide improved fauna movement corridors around the site whereby no such corridors previously existed. Ground cover vegetation will re-populate on site once construction is complete. |
| + To provide opportunities for a restricted range of employment-generating development that is compatible with, and adds value to, local agricultural production. | The proposed solar PV farm is considered to add value to the local agricultural base as it will enhance the existing electrical supply for the Gunnedah region with minimal impacts on the agricultural productivity of the area, water quality, and soil quality.<br><br>The solar farm is not expected to have any long-term detrimental impacts which would inhibit any future primary production on the site or the surrounding area. |
| + To minimise conflict between land uses in the zone and with adjoining zones. | Due to their relatively low environmental impacts, visual impacts arise as a primary concern typical of solar PV development. As a result, substantial landscaping is proposed to be planted around the development site supported by an appropriate setback and existing trees both within the site and within the road verge. These measures minimise available views into the site, thereby minimising potential land use conflict with neighbouring land uses and land zones. |
| + To maintain native vegetation and wildlife corridors. | A total of 9 isolated trees are proposed to be removed as part of the application. A small portion of immature shrubs located within the north-eastern portion of the site will also be removed to facilitate the proposed development. To ameliorate the loss of these trees and mitigate the visual impact of the project, |

| | |
|---|---|
| | substantial landscaping is proposed along the northern, eastern, and western boundaries. This landscaping will improve the presence of native vegetation around the site and provide enhanced wildlife corridors by connecting the existing vegetation community at the site.<br><br>The site has been chosen due to its cleared and highly disturbed nature minimising impacts on native vegetation and biodiversity. |

As discussed above, the proposed solar PV farm is considered to be a compatible and complimentary land use within the rural/primary production area by nature of its low environmental impacts and proposed management of visual impact on the rural setting. The provision of landscaping around the northern, eastern, and western boundaries enhances the existing vegetation communities noted within the site and sufficiently compensates for the proposed loss of 9 site trees.

The proposed solar PV is considered to meet the objectives of the RU4 Primary Production Small Lots zone and is appropriate for the area.

**Council Comment:**

*2. Pursuant to the provisions of Section 4.15 (1)(a)(iii) of the Environmental Planning and Assessment Act 1979, it is considered the proposal fails to demonstrate consistency with the provisions of the Gunnedah Development Control Plan 2012: - Chapter 4 Design, Traffic and Access, Landscaping, Noise and Chapter 6 Conflicting Land Uses;*

**Response:**

A full assessment against the relevant components of the Gunnedah Development Control Plan has been included in table format below, noting there are no areas of non-compliance. Refer to Table 2 (issued to Gunnedah Shire Council 1st June 2020).

**Table 2 - Gunnedah DCP 2012 Compliance**

<table>
<tr><th colspan="4">4 Industrial</th></tr>
<tr><td>Control</td><td>Requirement</td><td>Comment</td><td>Compliance</td></tr>
<tr><td>4.1 Building Setbacks</td><td><table><tr><th>Street</th><th>Minimum Setback (Primary and Secondary Frontage)</th><th>Side/Rear (non-street frontage)</th></tr><tr><td>Mullaley Road (Oxley Highway)</td><td>10m</td><td>BCA</td></tr><tr><td>Farrar Road</td><td>10m</td><td>BCA</td></tr><tr><td>Quia Road</td><td>10m</td><td>BCA</td></tr><tr><td>Blackjack Road</td><td>10m</td><td>BCA</td></tr><tr><td>Other</td><td>7.5m</td><td>BCA</td></tr></table></td><td>The setback of Black Jack Road will be greater than the required 10m.</td><td>Y</td></tr>
<tr><td>4.4 Traffic and Access</td><td>• The Traffic Assessment is required to demonstrate the adequacy of:<br>○ Road network;<br>○ Geometric design for intersections, including pavement impacts;<br>○ Site access;<br>○ Loading/Unloading facilities;<br>○ Safe on-site manoeuvring for largest design vehicle; and</td><td>A Traffic Impact Assessment has been prepared for this proposal and is located at Appendix D of the Statement of Environmental Effects. The TIA has addressed internal circulation, access, traffic generation, parking, and an assessment of the exiting surrounding road network conditions.</td><td>Y</td></tr>
</table>

| | | | |
|---|---|---|---|
| | ○ Wearing surfaces for access driveways, parking areas, loading/unloading facilities and associated vehicle manoeuvring areas relative to the design vehicle. | | |
| | • Access driveways across the footpath should be hard sealed, consisting of either concrete, asphaltic concrete, paving blocks or other approved material. | N/A | N/A |
| | • Unsealed vehicle movement areas are not acceptable due to environmental management impacts. | The road between Black Jack Road and Bushs Lane to the site is unsealed. The TIA considered the sealing of this road to be unnecessary as construction will be temporary for 4 to 6 months and during the operation staffing requirements for maintenance at the site will be minimal, expected to be one or two vehicles, visiting once per month. | Y |
| | • Kerb, gutter and road shoulder between the lip of the gutter and the edge of the existing bitumen seal, footway formation and paving and associated road drainage, must be constructed for the full frontage of the site. | N/A | N/A |
| | • All vehicles must be able to enter and exit the site in a forward direction. | All vehicles will enter and exit in a forward motion. | Y |
| | • Site access is not permitted:<br>○ Close to traffic signals, intersection or roundabouts with inadequate sight distances;<br>○ Opposite other large developments without a median island;<br>○ Where there is heavy and constant pedestrian movement on the footpath; or<br>○ Where right turning traffic entering the site may obstruct through traffic. | The proposal is not close to any traffic signals, intersections or roundabouts.<br>There are no large developments opposite.<br>There is no footpath surrounding the site.<br>It is considered there will be no obstructions to traffic.<br>There are less than 50 car parking spaces and therefore this control does not apply. | Y<br>Y<br>Y<br>Y<br>Y |

<table>
<tr>
<td></td>
<td>
• Separate signposted entrance and exit driveways are required for developments requiring more than 50 parking spaces or where development generates a high turnover of traffic.<br><br>
• The number of access points from a site to any one street frontage is limited to 1 ingress and 1 egress.<br><br>
• Driveways must be provided in accordance with AS 2890.1 Parking Facilities.<br><br>
• Access and parking arrangements must comply with the following:<br><br>
Driveway types
<table>
<tr><th></th><th>Type</th><th>Entry Width (m)</th><th>Exit Width (m)</th><th>Minimum Separation of driveways (m)</th><th>Splay at kerb line (m)</th><th>Kerb Return Turnout Radius (m)</th></tr>
<tr><td rowspan="5">Light vehicles</td><td>1</td><td>3-6</td><td>combined*</td><td>NA</td><td>0.5</td><td>-</td></tr>
<tr><td>2</td><td>6-9</td><td>combined*</td><td>NA</td><td>1</td><td>-</td></tr>
<tr><td>3</td><td>6</td><td>4-6</td><td>1-3</td><td>1</td><td>2-9</td></tr>
<tr><td>4</td><td>6-8</td><td>6-8</td><td>1-3</td><td></td><td>2-9</td></tr>
<tr><td>5</td><td colspan="5">Direct feed from a controlled intersection via a dedicated public roadway via an intersection controlled by STOP and GIVE WAY signs, traffic signals or a roundabout</td></tr>
<tr><td>Heavy Vehicles</td><td>6</td><td>8-10</td><td>8-10</td><td>3</td><td>1</td><td>2-9</td></tr>
<tr><td>Heavy Vehicles</td><td>7</td><td>10-12</td><td>10-12</td><td>3</td><td>1</td><td>2-9</td></tr>
</table>
Selection of driveway type based on parking spaces
<table>
<tr><th rowspan="2">Road Frontage</th><th colspan="6">Number of Car Parking Spaces Served by the Driveway</th></tr>
<tr><th>Less than 25</th><th>25-100</th><th>101-300</th><th>301-600</th><th>More than 600</th><th>Heavy Vehicles</th></tr>
<tr><td>Major</td><td>1-2</td><td>2-3</td><td>3-4</td><td>4</td><td>5</td><td>7</td></tr>
<tr><td>Minor</td><td>1</td><td>1-2</td><td>2-3</td><td>3-4</td><td>4</td><td>6</td></tr>
</table>
</td>
<td>Noted<br><br>Noted<br><br>The operational access point will be off Bushs Lane and will be 4m wide. It complies as there will be only one or two operational staff members at the site at any one time.</td>
<td>Y<br><br>Y<br><br>Y</td>
</tr>
<tr>
<td>4.5 Parking</td>
<td>
<table>
<tr><th>Land Use</th><th>Parking Requirements Gross Floor Area (GFA)</th></tr>
<tr><td>Industrial Retail</td><td>1 space per 45m$^2$ GFA</td></tr>
<tr><td>Industrial</td><td>1 space per 75m$^2$ GFA<br>OR<br>1 space per 2 employees<br>WHICHEVER IS GREATER</td></tr>
<tr><td>Sex services premises</td><td>1 space per staff working at any one time PLUS 1 space per room where sexual services are provided</td></tr>
<tr><td>Transport/Truck Depot</td><td>Space of each vehicle present at peak time onsite and driver parking</td></tr>
<tr><td>Vehicle Body Repair Workshop or Repair Station</td><td>1 space per 40m$^2$ GFA<br>OR<br>3 spaces per workshop bay<br>WHICHEVER IS GREATER</td></tr>
<tr><td>Warehouses</td><td>1 space per 300m$^2$ GFA<br>OR<br>1 space per employee<br>WHICHEVER IS GREATER</td></tr>
<tr><td>Other</td><td>Based on predicted peak vehicle use</td></tr>
</table>
</td>
<td>The proposal will require only 1 parking space, as there will only be one or two operational staff members on site at any one time. As such, the proposal complies with this control, as 10 car parking spaces are provided.</td>
<td>Y</td>
</tr>
<tr>
<td>4.6 Landscaping</td>
<td>
• Landscaping is required:<br>
○ in the front 3m if street setback;<br>
○ side and rear setbacks where visible from public place or adjoining residential area; and o areas adjacent to building entrances and customer access points.
</td>
<td>Landscaping is provided along all four boundaries of the site. Although Bushs Lane currently features large growth vegetation that provides a screening barrier for the development from southern viewpoints, the Applicant will also establish informal additional vegetation screening to complement existing vegetation along Bushs Lane. Refer to the Landscape Plans at Appendix F of the Statement of Environmental Effects.</td>
<td>Y</td>
</tr>
</table>

| | | | |
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| | • Landscaping is to be provided on side and rear boundaries where visible from a public place or adjoining residential area; | Landscaping is provided where the solar panels will be visible from a public place and the properties to the east and west. | Y |
| | • For properties located in Farrar Road, landscaping is to be provided all lot boundaries; | N/A | N/A |
| | • Landscaping for shading shall be provided in outdoor car parking areas where >10 spaces are required, to provide shading and soften the visual impact of large hard surfaces. | N/A | N/A |
| | • Shade structures shall be provided for 30% of parking spaces in outdoor car parking areas where ≥30 spaces are required, to provide shading and soften the visual impact of large hard surfaces. | N/A | N/A |
| | • Landscaping shall comprise only low maintenance, drought and frost tolerant species. | The species selected for the proposal have been chosen due to their low maintenance and drought tolerance. Furthermore, the chosen species compliment and conform to the surrounding landscape. | Y |
| 4.7 Fencing | • Open work or storage areas visible from a public place or street must be fenced by masonry materials or pre-coloured metal cladding of minimum 2m height. Fencing is to be located behind the building setback. | The proposed fencing is at 2.2m height and is located behind the building setback. | Y |
| | • Security fencing must also be located behind the building setback area except when of a decorative nature to be integrated in the landscaped area. | The perimeter fencing is behind the 10m required setback of Black Jack Road. | Y |
| 4.8 Loading/ Unloading Facilities | • Adequate space and facilities are required to be provided wholly within the site. | Adequate space and facilities will be provided on site. | Y |
| | • Loading and delivery bays must be designed to allow vehicles to enter and exit the site in a forward direction. | Vehicles will be able to enter and exit the site in a forward direction. | Y |
| | • Loading bay(s) must be sited to avoid use for other purposes such as customer parking or materials storage and be line-marked and signposted. | Noted. | Y |

| | | | |
|---|---|---|---|
| 4.9 Outdoor Lighting | • Outdoor lighting must comply with AS 4282 Control of Obtrusive Effects of Outdoor Lighting | Noted – no outdoor lighting is proposed at this stage. | Y |
| 4.11 Noise | • Windows, doors and other wall openings shall be arranged to minimise noise impacts on residences where proposed within 400m of a residential zone. | N/A | N/A |
| | • External plant (generators, air conditioning plant, etc.) shall be enclosed to minimise noise nuisance where adjoining a residential area. | N/A | N/A |
| Chapter 6 General Development Specifications | | | |
| 6.2 Parking | • Parking must be provided as per the Schedule in Appendix 1. | The parking requirements under the schedule for the proposal are for 1 car space. The proposal has capacity for 10 car spaces and therefore complies with this control. | Y |
| 6.3 Landscaping | • Location and grouping of plant types shall be multi-functional providing privacy, security, shading and recreation functions. | The location and grouping of the chosen plant types are multifunctional providing privacy, security and shading. | Y |
| | • Landscaping for shading shall be provided in outdoor car parking areas where >10 spaces are required, to provide shading and soften the visual impact of large hard surfaces. | N/A | N/A |
| | • Shade structures shall be provided for 30% of parking spaces in outdoor car parking areas where ≥30 spaces are required, to provide shading and soften the visual impact of large hard surfaces. | N/A | N/A |
| | • Landscaping shall comprise low maintenance, drought and frost tolerant species. | The chosen species for the landscaping will be low maintenance and are drought and frost tolerant. | Y |
| 6.6 Environmental Controls | **6.6.2 Erosion and Sediment Control**<br>• Runoff shall be managed to prevent any land degradation including offsite sedimentation.<br>• Reference shall be made to the NSW Governments Managing urban stormwater: soils and construction Volume 1 (available from Landcom), commonly referred to as "The Blue Book". | An erosion and sediment control plan governing the construction phase of the development will be provided at Construction Certificate stage. | Y |

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| | • Cut and fill will be minimised and the site stabilised during and after construction.<br>• Arrangements are to be in place to prompt revegetation of earthworks to minimise erosion.<br><br>**6.6.4 Waste Management**<br>General waste storage and collection arrangements shall be specified. | A Waste Management Plan has been prepared and located at Appendix L of the Statement of Environmental Effects. | Y |

**Council Comment:**

*3. Pursuant to the provisions of Section 4.15 (1)(b) of the Environmental Planning and Assessment Act 1979, it is considered the proposal fails to demonstrate that the likely impacts of the development relating to noise, visual, social and economic impacts will not be adverse.*

**Response:**

Noise

The Applicant recognises the number of concerns and objections to the project related to potential noise impacts both during construction and operation. While the detailed Noise Assessment report established that operational noise is not expected to exceed the more stringent (lower) requirements of the Intrusiveness Noise Level or the Amenity Noise Level as per the NSW EPA Noise Policy for Industry 2017, the Applicant acknowledges that the certain elements of the required construction activities are expected to exceed the guidelines of the EPA.

Due to the nature of certain required construction activities, no viable solution is available to reduce these specific noise impacts below the EPA guidelines. It is noted while the construction of the solar farm is expected to occur over a period of approximately 6 months, piling activities, which represent the largest noise impacts, are expected to be of a significantly shorter duration (in the region of 3-4 weeks). To provide greater context to enable Council's assessment of the project, a summary of the construction activities, duration and their expected noise implications is provided in Table 3 - Indicative breakdown of construction activities and relative noise impact

**Table 3 - Indicative breakdown of construction activities and relative noise impact**

| Item | Activity | Indicative duration | Noise impact |
|---|---|---|---|
| **Site clearing and civil works** | Use of mechanical digger to dress any required project layout areas, prepare hardstand areas, foundations and access roads.<br>Minimal site dressing is expected to be required.<br>Pouring of concrete foundations for inverter, transformer and switchgear | Approximately 10 days. | Low – noise levels will be mainly diesel engine noise from a tracked digger, similar to a tractor working the land.<br><br>Installation of access roads may require some rolling, as per normal early stage road construction. |
| **Site deliveries** | Deliveries from heavy goods vehicles. | Early construction stages, to be undertaken in accordance with the approved Traffic Management Plan | Moderate – noise levels will be mainly diesel engine noise from trucks, forklifts etc. as well as some mechanical noise from setting down equipment in the site compound. |

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| **Piling** | Mechanical ramming of steel piles into the ground. Expected to be approximately 2,200 piles overall. | 22 days at a very conservative rate of 100 piles/day installed. | High - Piling noise is reasonable significant and on calm days with little to no wind, a repetitive metallic "tinking" noise will be heard outside the boundaries of the site while piling works are ongoing. |
| **Trenching** | Mechanical digging of trenches for underground cable runs. | ~5 days. Trenching requirements of a 6MW solar farm are insignificant and with pre-planning it is expected that these would undertaken in a short time. | Low – noise levels will be mainly diesel engine noise from a tracked digger, similar to a tractor working the land. |
| **Mechanical installation** | Distribution of equipment (trackers, modules, electrical equipment) throughout the site. Manual mechanical installation of equipment. | 30 days | Low – mainly vehicle movements around site, as well as construction workers conversing and minor mechanical noise as components are placed / bolted in place. |
| **Electrical installation** | Distribution of equipment (switchboards, inverter and transformer station, cabling). | 30 days | Negligible – mainly vehicle movements around site, with 1-2 large crane movements to install inverter, transformer and switchgear stations, as well as construction workers conversing. |
| **Commissioning** | Electrical testing works. Energising the solar farm. | 15 days | Negligible – Commissioning will be undertaken by a small number of highly skilled staff. Some |

Construction noise impacts are temporary and will be minimised through management procedures. It is noted the work has the potential to cause disruption to surrounding residential premises during the day therefore the following feasible and reasonable mitigation considerations outlined within the NSW EPA Guidelines will be used to manage these impacts.

Mitigation measures like the following are likely to be implemented:

- Using alternative, quieter work methods to reduce the noise at the source;
- Scheduling the noisy work during recommended standard hours;
- Restricting work to defined hours and using respite periods, for example working during defined periods outside business hours and providing respite to residents, subject to negotiation (for example periods of 'quiet' or no work and respite offers, such as movie tickets);
- Temporary relocation of residents to allow a concentrated period of noisy works.

Confirmation of specific measures can be provided prior to the release of a construction certificate.

In addition to the available mitigation strategies outlined in the project specific Noise Assessment report and reiterated in the Statement of Environmental Effects, construction hoarding is proposed to be established between the designated loading/unloading areas and the receivers of greatest impact, given the higher volume of work traffic in this area.

### Visual Impacts

Visual impacts are often considered to be the main impact of solar PV farms and as such a Visual Impact Assessment (VIA) has been undertaken provided at Appendix E of the Statement of Environmental Effects. The VIA includes a detailed investigation into the impact on surrounding areas of the solar farm, with a number of viewpoints assessed within the VIA.

The establishment of the recommended trees and large shrubs provide a range of vertical canopy cover to provide visual screening to the surrounding area. Further mitigation measures include the use of anti-reflective coated solar panels and muted colours on supporting structures to blend into the surrounding environment. As such, the proposed development is considered to have minimal visual impact on surrounding residents with the landscaping established.

### Landscaping

During the meeting held between Providence Asset Group (the Applicant), SLR (Town Planner representing the Applicant) and Gunnedah Shire Council (Andrew Johns, Wade Hudson, Ashley Stewart) on the 18th March 2021, the Applicant committed to providing additional guidance and confirmation on the proposed landscaping and vegetative screening barriers for the purposes of a conditioned consent.

The Applicant accepts a condition of consent to be applied outlining the requirement for landscaping to be established and maintained for the lifespan of the asset that adequately screens the site from external receivers. A detailed landscaping plan will be provided to Council prior to issue of the Construction Certificate. The landscaping plan will consist of a mixture of hardy local native species of variable heights planted in staggered rows so as to provide an increased level of coverage. A 10m buffer zone will be established between the lot boundary and the site security fence within which landscaping will be established and maintained. The buffer zone will also allow landholder and operational access around the full perimeter of the site.

The detailed landscaping and vegetation management plan will include requirements for maintenance including watering. In the event particular plantings do not survive, the vegetation management plan will outline the requirements for plant replacements with consideration given to the actual performance of the screening.

Finally, although Bushs Lane currently features large growth vegetation that provides a screening barrier for the development from southern viewpoints, the Applicant will also establish informal additional vegetation screening to complement existing vegetation along Bushs Lane. These plantings will be located within the 10m buffer zone external to the site security fence. Detailed landscaping plans to be included as a condition of consent prior to construction.

### Social and Economic Impacts

An analysis of the social and economic impacts associated with the development of the site has been detailed below to ensure that, where relevant, social and economic considerations are an integral part of the development assessment process. A Social Impact Statement (SIS) was prepared by Mara Consulting and included at Appendix J of the Statement of Environmental Effects (issued to Gunnedah Shire Council 1st June 2020).

The proposed establishment of a solar farm on the site is anticipated to have an ongoing positive social and economic impact on the local Gunnedah area and the broader community.

A review of existing renewable projects along with NSW State Government research reveals support for renewable energy projects is generally favourable within the North-West Region (including the broader Gunnedah region). This research revealed:

- 94 per cent of respondents supported using renewables to generate electricity in NSW.
- 81 per cent believed NSW should increase the use of renewables over the next five years.
- 95 per cent supported the use of solar farms in NSW, 92 per cent in their local region, and 84 per cent within 1–2 kilometres of where they lived.

The most common perceived advantages of renewables included environmental benefits and lower cost of electricity. The most common perceived disadvantages included higher cost and concerns about efficiency and reliability. In the North-West, 74 per cent were prepared to use renewables 'provided I don't have to pay more for my electricity' and 22 per cent were prepared to pay more to support them.

The SIS found that the project will improve intergenerational equity through its beneficial contribution to Australia's Climate Change and greenhouse gas minimisation efforts, specifically:

- Directly contribute to helping Australia in meeting the Renewable Energy Target;
- Reduce greenhouse gas emissions required to meet Australia's international climate conditions; and
- Assist in the transition towards cleaner electricity generation.

This is achieved by the potential to generate up to 5MW of electricity potentially powering 2,000 homes during daylight hours whilst reducing CO2 emissions by around 200,000 tonnes over the lifespan of the project.

Ongoing communication with the community has been highlighted as an imperative to maximise social benefits of the proposed development. Further recommendations include the following:

- Liaison with local industry representatives to maximise the use of local contractors, manufacturing facilities, materials;
- Establish visual screening early to minimise the visual impact on the solar farm. Visual screening should be done in consultation with closest property holders in accordance with Visual Impact Assessment and Landscaping Plan;
- Establish and maintain good relations with people living in the vicinity of the proposal site at the beginning of the proposal; and
- Implement a community consultation plan to manage impacts to community stakeholders, including but not limited to:
    - Mitigation measures to reduce potential construction impacts;
    - Protocols to keep the community updated about the progress of the Proposal and proposal benefits;
    - Protocols to inform relevant stakeholders of potential impacts (haulage, noise, air quality etc.);
    - Protocols to respond to any complaints received;
    - Information on how potential customers can access the renewable energy source; and,
    - A process to monitor the predicted social impacts and amend mitigation and management measures as required.

In summary, the proposed establishment of a Solar PV Farm on the site is anticipated to have an ongoing positive social and economic impact on the local area and the broader Gunnedah community. Overall, it is considered that the development:

- Is consistent with the regulatory and business development framework, including state government legislation and the Gunnedah 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 Gunnedah community.

**Council Comment:**

*4. Pursuant to the provisions of Section 4.15 (1)(c) of the Environmental Planning and Assessment Act 1979, it is considered the proposal fails to demonstrate that the site is suitable for the development.*

**Response:**

The site has been chosen for its suitability in terms of land use zoning, relatively flat topography, limited trees and vegetation and access to high-capacity transmission lines.

The proposed solar PV electrical generation plant is permissible with consent within the RU4 Primary Production Small Lots zone, under the Gunnedah LEP 2012. The proposed development is consistent with the objectives of the RU4 Primary Production Small Lots zone as it will provide a compatible land use which minimises land use conflict in the area whilst contributing to the land use diversity. The proposal will not increase demand for public services or facilities and will have minimal impact on native vegetation and wildlife corridors or on waterways, wetlands, or riparian zones. The development is compliant with the relevant LEP clauses, presenting no variations to any development standard. The proposal is compliant with the requirements of Gunnedah DCP 2012.

The proposed development also aligns with the goals of The New England North West Regional Plan as it will provide an appropriately sized renewable energy project in a location with ready access to the electrical network which will support the regional development of the Gunnedah LGA and New England Region. The New England North West Regional Plan 2036 (the Regional Plan) provides an overall strategic plan to manage development in the New England region.

The Regional Plan distinctly highlights the role of renewable energy in the growth of the New England region with the Plan's visions outlining the need for the area to harness the solar and wind potential. Goal 1 – A strong and dynamic regional economy identifies renewable energy as a priority growth sector. Direction 5 of the Plan further calls for the promotion and growth of the renewable energy sector, specifically the solar sector through supporting and facilitating smaller-scale renewable solar projects.

Furthermore, the Plan outlines the future economic narratives and priorities for Gunnedah LGA. The Plan states that a priority for the Gunnedah LGA is 'identify and promote wind, solar and other renewable energy production opportunities'. Goal 1 of the plan is to create a 'strong and dynamic regional economy' within the New England region and Direction 5 of this goal is to 'Grown New England North West as the renewable energy hub of NSW'.

It is noted, a development for a large-scale 29MW Solar Farm was approved in May of 2020 and is located approximately 5km north of the site, accessed via Quia Road. Additionally, a 5MW solar farm located within RU4 Primary Production Small Lots Zone at 347 Dangarsleigh Road, Armidale was approved on the 27th of August 2020.

As per the above, the proposed solar PV is considered to meet the objectives of the RU4 Primary Production Small Lots zone, The Gunnedah DCP 2012 and is considered appropriate for the area.

**Council Comment:**

*5. Pursuant to the provisions of Section 4.15 (1)(d) & (e) of the Environmental Planning and Assessment Act 1979, it is considered that with the submissions received and the circumstances of the case, the application fails to demonstrate that proposal is in the public interest.*

**Response:**

The proposed solar PV electrical generation operation located at 262 Hunts Road Gunnedah will provide electrical power to support the needs of Gunnedah and the surrounding agricultural operations along with rural towns and villages. With the projected growth of the Gunnedah area, the new electrical generator proposed under this DA will greatly assist in meeting the growing electrical demands required to support that growth.

The site has been chosen for its suitability in terms of land use zoning, relatively flat topography, limited trees and Vegetation, and access to suitable distribution lines.

The proposed solar PV electrical generation plant is permissible with consent within the RU4 Primary Production Small Lots zone, under the Gunnedah LEP 2012. The proposed development is consistent with the objectives of the RU4 Primary Production Small Lots zone as it will provide a compatible land use which minimises land use conflict in the area whilst contributing to the land use diversity of the area. The proposal will not increase demand for public services or facilities and will have minimal impact on native vegetation and wildlife corridors or on waterways, wetlands, or riparian zones. The development is compliant with the relevant LEP clauses, presenting no variations to any development standard. The proposal is compliant with the requirements of Gunnedah DCP 2012.

The design of the development incorporates appropriate stormwater management, respects the natural environment, and minimises potential amenity impacts on neighbouring properties.

Due to the use of high-quality solar tracking systems and site buffer distances to surrounding receivers and transport networks, potential for glare impacts, as reported in the Visual Impact Assessment, on the surrounding area has been found to be negligible.

Given the merit of the design and the absence of any significant adverse environmental impacts or planning issues, the proposed Development is considered to be in the public's interest and worthy of Council's support.

**Council Comment:**

> *6. The development is not supported by the Gunnedah Urban Landuse Strategy. The development would prevent the land from being developed into residential lots for the future growth of Gunnedah for over 25 years.*

**Response:**

It is acknowledged that part of the development area is located within a Residential Phasing area noted within the Gunnedah Urban Landuse Strategy. The site is located within Area M and is noted to retain the existing RU4 with re-evaluation of R5 once Areas D, F, and H are exhausted. 262 Hunts Road has not been identified as one of the three key development areas for rezoning to R2 Low Density Residential to meet projected demand of residential growth up to 2035 and beyond.

The development area is located on the very southwestern corner of Area M with a portion of the development area located outside of Area M, see

Figure 1 - Residential Phasing Plan Extract – Area M (RFI response 8th September 2020).

The location of the development area at the boundary of the area allows for sufficient area for any future residential expansion if deemed to be required by Council once the existing housing stock has been exhausted. The proposed

landscaping, while designed for existing proximate residential properties will continue to provide effective visual buffering to any future residences in the area.

**Figure 1 - Residential Phasing Plan Extract – Area M**


**Council Comment:**

> *7. The development failed to address the listed items within the request for information issued by Gunnedah Shire Council dated 8 April 2021 under Section 54 of the Environmental Planning and Assessment Regulation 2000.*

**Response:**

During the meeting held between Providence Asset Group (the Applicant), SLR (Town Planner representing the Applicant) and Gunnedah Shire Council (Andrew Johns, Ashleigh Stewart and Jack Morrissey) on the 15th of April 2021, the Applicant committed to providing additional guidance and confirmation in accordance with the key issues discussed by the Northern Regional Planning Panel in the briefing meeting held on the 24th of March 2021 with Gunnedah Shire Council.

A response to the key issues discussed and additional information requested was provided prior to Council finalising their assessment of the development application for determination. The amount of detail is considered appropriate for a determination to be made by the RPP.

**Table 4 – Record of NRPP Briefing 24 March 2021**

| Key Issues Discussed | Response |
|---|---|
| + The Panel was briefed by Wade Hudson, as the assessing officer was not available. | Noted. |
| + Wade Hudson declared a possible conflict of interest, being that a friend of his wife has made a submission in relation to the development application. For this reason, despite Wade providing the briefing to the panel on this occasion due to absence of the relevant officer, the assessment itself will be undertaken by another assessing officer, Ashleigh Stewart. | Noted. |
| + The status of the application is that council is waiting on response to a request for further information. | It is noted, the applicant provided a response to a request for further information to Gunnedah Shire Council on the 19th of March prior to the Northern Regional Planning Panel Briefing held on the 24th of March. The Applicant understands that Gunnedah Shire Council was satisfied with the response. |
| + The development site is in the RU4 zone and the proposed use is permissible. | Noted. The proposed solar PV is considered to meet the objectives of the RU4 Primary Production Small Lots zone and is appropriate for the area. |
| + The site is proximal to a number of residences and there is potential for land use conflict particularly with respect to construction noise and visual effects. | Construction noise impacts are temporary and can be minimised through management procedures in line with accepted practice. A Construction Management Plan will be prepared for the proposal.<br><br>A summary of the construction activities, duration and their expected noise implications has been provided in Table 1. The indicative noise table was also provided as part of the RFI response issued to Gunnedah Shire Council on the 19th of March.<br><br>Substantial landscaping is proposed as part of the development which will complement existing trees both within the site and within the road verge. This arrangement reduces available views into the site, in turn minimising potential land use conflict with neighbouring land uses. |
| + The site is reasonably close to residential areas and it is possible that it will be nominate as a future residential area in the current strategic planning review being undertaken by council. The applicant is to investigate this potential longer-term use and report on any land use conflicts that could arise. | At cessation of operation, the solar farm will simply be decommissioned with all equipment removed and with no ongoing environmental impacts burdening any future land use including residential. |
| + The development would have a lifespan of 25 years and the likely use over this period should be investigated. | At cessation of operation, the solar farm will be decommissioned with all equipment removed, minimal site rectification works and with no ongoing environmental impacts burdening any future land use including possible expansion of residential land use zones. |
| + Appropriate construction stage access needs to be identified. | A Construction Management Plan (CMP) will be in place governing the construction phase of the development. This CMP will include management of the site access during the construction phase. |

| | |
|---|---|
| | Access to the project will be via the existing Hunts Road to the south of the site. |
| + Landscaping will be external to the security fence to mitigate visual impacts, but the security of this arrangement needs to be examined to ensure planting would be protected. | Landscaping will be established on the outside of the security fence as agreed with Council and clearly outlined in more detail in the RFI response submitted to Council on 19th of March 2021. Detailed landscaping plans to be included as condition of consent prior to construction.<br><br>Detailed protection measures outside of staking and signage to dissuade vandalism are not considered necessary in this rural setting. |
| + The loss of native vegetation and habitats requires careful consideration. | The site has been largely cleared of native vegetation for ongoing agricultural purposes. A total of 9 isolated trees are proposed to be removed as part of the application. A small portion of immature shrubs located within the north eastern portion of the site will also be removed to facilitate the proposed development.<br><br>To ameliorate the loss of these trees and improve visual impacts, substantial landscaping is proposed along the northern, eastern, and western boundaries. This landscaping will improve the amount of native vegetation in the site and provide enhanced wildlife corridors by connecting the existing vegetation community which currently exists only in pockets across the site. |
| + Given the potential for significant impacts the applicant needs to demonstrate what practical and effective mitigation measures will be incorporated into the proposal particularly with respect to construction noise, visual impacts, and details of landscaping. | The proposed visual mitigation measures focus on extensive landscaping buffer planting.<br><br>Based on the recommendations of the VIA and the positioning of the solar farm, a landscape plan was created to mitigate the visual impacts on the surrounding area. |
| + The applicant should ensure that all issues raised by submitters are responded to individually. | A total of thirteen (13) submissions were received during the exhibition period for the proposed development. A summary of the items raised was provided within the RFI letter received on the 10th August 2020 with a response to each individual submission provided to Gunnedah Shire Council on the 8th of September 2020. |

# 2 CONCLUSION

As evidenced throughout this document, and throughout supporting documentation submitted to Council, the proposed establishment of a sub 5MW Solar PV Farm at 262 Hunts Road, Gunnedah will provide a renewable electricity generating asset, which is compatible with the applicable land use requirements. It will support the region assisting to meet the energy needs of the Gunnedah region in a cost effective and environmentally friendly way, putting Gunnedah at the forefront of the renewable energy transition.

We trust that the information provided is sufficient, however, if any clarification is needed or you require further information, please contact our office.

Yours sincerely,

Rachel Pettitt
**Town Planner**
**SLR Consulting**