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Our ref: 19310.6

14 February 2021

Gunnedah Shire Council
PO Box 63,
GUNNEDAH NSW 2380

Attention: Wade Hudson

Dear Wade,

**RE: Response to Further Request for Additional Information – DA-2020/035 – 262 Hunts Road
Gunnedah NSW 2380**

Thank you for your letter dated 15 December 2020, which sought additional information regarding the proposed establishment of a solar farm (DA-2020/035) at 262 Hunts Road Gunnedah NSW 2380.

Please find below a response to these matters raised by Council, prepared by SLR Consulting Australia Pty Ltd (Formerly KDC Pty Ltd) on behalf of Providence Asset Group (PAG).

1 REQUEST FOR FURTHER INFORMATION

1.1 Visual Impacts

Council Comment:

The RFI response provided to Council does not address the comments with regards to the visual impact assessment for impacts on neighbouring dwellings and sighting locations from public spaces;

Response:

Visual impacts are important consideration for solar PV farms and as such a Visual Impact Assessment (VIA) has been undertaken provided at Appendix E of the SEE.

Viewpoint 1 of the VIA assessed the view directly adjoining the site from the corner of Black Jack Road and Bushes Lane, providing a worst case view of the site for viewpoints from the west of Black Jack Road including the residents along Bushes Lane. As a result of the viewpoint proximity to the site along with existing vegetation, topography change, and setback distances, the visual impact was noted as being moderate. The nearest resident to the west is located approximately 190m west of the site boundary. This neighbouring site contains a large number of trees which obscure view to the subject site and would provide contribution towards visual screening of the site. Further, the topography of the site slopes gently downward toward the north east. The sloping ensures that the visual impact of the solar panels is minimised with the first row obscuring subsequent panels from viewpoints in the south and west.

Viewpoint 2 is located in the public domain in front of the site on Bushes Lane, to provide a worst case viewpoint from an eastern and southern positions, noting the nearest resident is located approximately 110m from the development area boundary and is considered to be the most likely, resulting in a high visual impact rating for View Point 2. In response to

the high rating, landscaping is proposed to be established along the eastern boundary of the development area to obscure views into the site.

Viewpoint 3 represents the residents from the north west of the site which, while located over 350m from the site, is located uphill of the proposed development features generally unobscured views to the site. The provided photomontage provides a representative view of the site with the solar PV farm rendered into the proposed location. As shown, despite the uphill view and generally unobscured line of sight, the distance buffering absorbs the solar arrays into the landscape resulting in an assessed visual impact of low. Notwithstanding, landscaping is proposed along the northern boundary of the development to provide visual screening from the viewpoint direction.

The establishment of the recommended trees and large shrubs in the landscape plan (Appendix F of the SEE) provides a range of vertical canopy cover to provide visual screening to the surrounding area. Further mitigation measures include the use of anti-reflective coating on the solar panels and muted colours on supporting structures to blend into the surrounding environment. As such, the proposed development is considered to have minimised visual impact on surrounding residents.

Council Comment:

Approximate location of electrical distribution lines has not been provided;

Response:

A mark-up is provided on the site plan showing the approximately location of the powerline connection (see Enclosure A). In summary, it is proposed that the connection will be via underground cable within the development lot 2/814689 until reaching the lot boundary. From here, a boundary power pole will be erected with a single span of overhead 22kV conductor cross Bushs Lane and connect to the existing 22kV overhead line running parallel to Bushs Lane. Using a single overhead span enables the construction timeframe to be shortened and provides road access continuity along Bushs Lane with no need for a road crossing trench.

Council Comment:

Address how visual impacts will be adequately addressed without assurance of specific landscaping between adjoining residential receivers;

Response:

Landscape is proposed for the development to provide a visual screening barrier between the site and the adjoining residential receivers (refer Appendix F in the SEE). This will ensure visual impact outcomes are preserved throughout the operation of the solar PV farm. It is proposed that the site security fence will be installed with a minimum 5m setback from the lot boundary and existing fence lines. A range of hardy native species sympathetic to the region and reaching mature heights of between 1m-3m will be planted in staggered rows external to the security fence to provide growth overlap and improved screening coverage.

During the expected 2–3-year time frame required for the landscaping to reach maturity, temporary construction shade cloth will be installed on the outside of the chain mesh of the security fence to provide temporary screening of the solar array. An example of the proposed mesh material is provided in Enclosure B. It is proposed that a green shade cloth of 120gsm with 50% blockage capability will be installed to provide a balance between dust suppression, visual screening and wind permeability. Prior to construction, a detailed landscaping plan refining the initial plan provided as Appendix F of the SEE will be developed and submitted to Council for approval. The above proposal can adequately included as condition of consent as part of the Development Application determination as previously discussed with Council.

Council Comment:

Investigate the potential for distribution lines to be installed below ground between the site and existing electrical distribution network to avoid visual impacts. Despite essential energy requirements Council is required as part of this assessment to assess visual impacts and suitability of mitigation measures.

Response:

A mark-up is provided on the site plan showing the approximately location of the powerline connection (see Enclosure A). To reduce visual impacts and to avoid shading the PV array, the electrical connection to the Essential Energy network is proposed to be underground within the development lot. The connection is proposed to include only a single boundary power pole and single 25 m overhead conductor span, resulting in the minimisation of electrical infrastructure visual impacts.

Council Comment:

No plans have been provided that address visual impacts of fencing. No plans or details of green hessian have been provided for boundary fence, as previously discussed with Council's Staff.

Response:

Landscaping will be established on the outside of the security fence. Detailed landscaping plans to be included as condition of consent prior to construction. Refer to Enclosure B for details on the proposed temporary green construction mesh installed prior to landscaping reaching maturity.

Council Comment:

No potential landscaping on exterior of boundary fence as method of reducing visual impacts, as previously discussed with Council's staff.

Response:

Landscaping will be established on the outside of the security fence. Detailed landscaping plans to be included as condition of consent prior to construction.

1.2 Vegetation Clearing

Council Comment:

The vegetation clearing noted on plan prepared by DRB consulting engineers, ref: 200336, Dwg No. CIV01 and CIV02, indicating vegetation in North-East and North-West corner of the site which will be developed by solar arrays. Does the potential removal of vegetation exceed area capacity exceed BOS thresholds within the Biodiversity Conservation Act 2017? What is the BOS threshold and has it been exceeded by the proposed vegetation clearing as a result of this development?

Response:

The NSW BC Act, the NSW Biodiversity Conservation Regulation 2017 (BC Regulation) and amendments to the NSW Local Land Services Act 2013 (LLS Act) commenced on 25 August 2017. The legislation aims to deliver "a strategic approach to conservation in NSW whilst supporting improved farm productivity and sustainable development". The NSW BC Act repeals several pre-existing Acts, most notably the NSW Threatened Species Conservation Act 1995, the NSW Nature Conservation

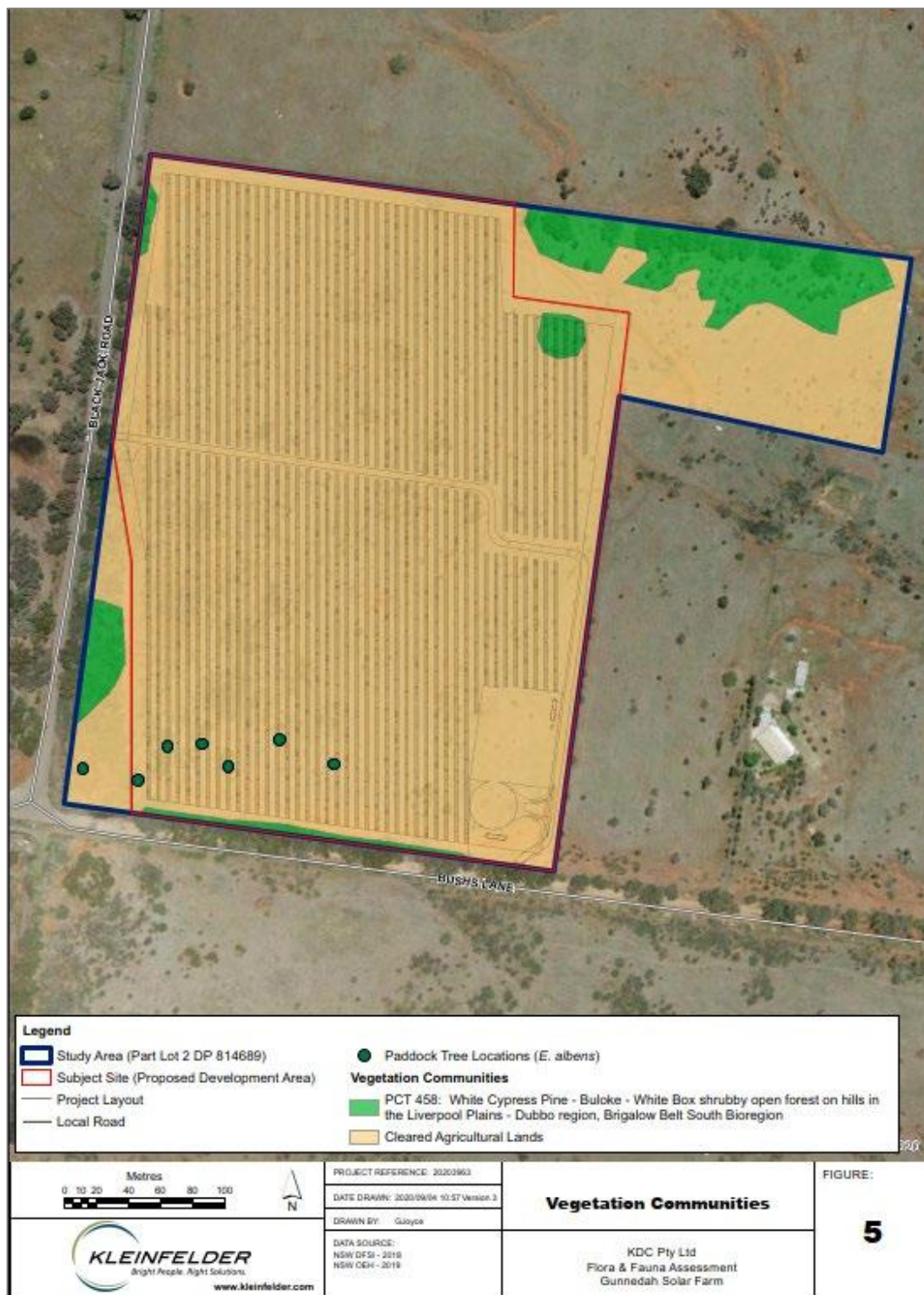
Trust Act 2001 and the NSW Native Vegetation Act 2003.

In accordance with the NSW BC Act, entry into the Biodiversity Offsets Scheme (BOS) is not required for the proposed development due to the following:

- The proposed development is not deemed to be 'State Significant' under the NSW EP&A Act.
- The proposed development will not impact an Area of Outstanding Biodiversity Value (AOBV) as listed under Part 3 of the BC Act.
- The proposed development is unlikely to cause a significant impact on a threatened species, population or ecological community, as listed under Schedules 1 and 2 of the BC Act, as determined by application of an assessment of significance pursuant to Section 7.3 of the BC Act.
- The proposed development will not impact areas mapped as having 'high biodiversity value' as indicated by the NSW Biodiversity Values Map (BV Map viewed on 27/04/2020 indicates the nearest mapped area to the study area occurs over 600m to the east).
- The proposed development will not involve clearing of native vegetation that exceeds the Biodiversity Offset Scheme (BOS) clearing threshold for the site (0.5 ha threshold for a minimum lot size of 10 ha) as determined by the BC regulation. In performing the threshold exceedance calculations, the areas of native vegetation in the northwest and northeast corners of the development were included, in addition to the isolated trees in the southern portion. Refer to Enclosure C for further discussion.

Please refer to Figure 1.

Figure 1



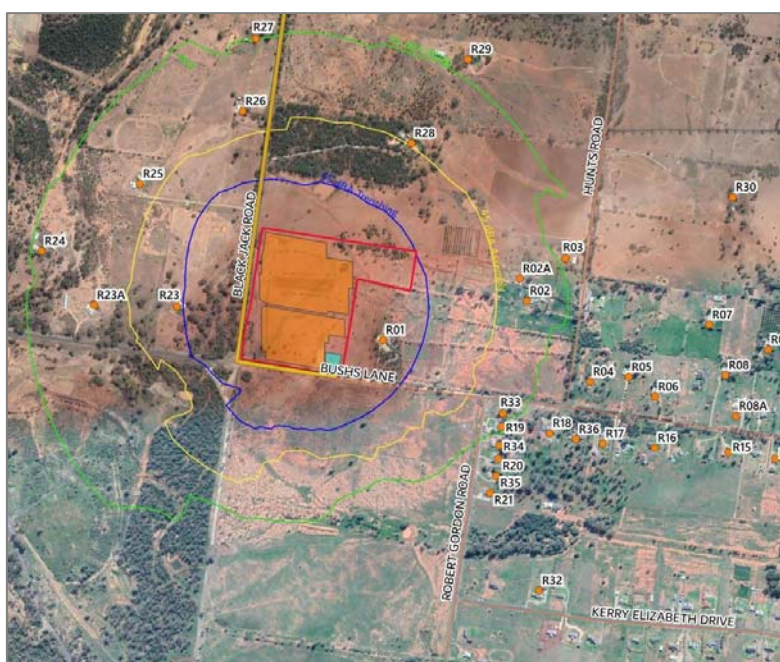
1.3 Noise

Council Comment:

The noise assessment did not include all residences along Robert Gordon Road, being close receivers to the development and potential exceedances. The noise assessment should be updated to investigate each dwelling within the immediate affected area, including those not shown on aerial imagery.

Response:

An amended noise assessment has been provided to include additional receivers along Robert Gordon Road. Refer to Enclosure D for further discussion.



Council Comment:

Provide commentary as to why acceptable noise management levels for receiver R01 are 65dBA while all other receivers are 45Dba.

Response:

An amended noise assessment has been provided in Enclosure D alongside this RFI response. Noise management levels for receiver R01 has been corrected to 45dBA.

Council Comment:

Mitigation measures are not addressed to reduce noise levels to reduce the impact and noise level at nearby receivers, in particular receiver R01.

Response:

Possible mitigation measures have been outlined in Section 7 of Enclosure D.

Construction Noise Recommendations

It is noted that construction noise emissions are anticipated to exceed the relevant NMLs depending on the type of construction and proximity of activities to receivers. The following noise mitigation measures should be considered during the construction phase to reduce emissions to the surrounding community:

- a construction noise management protocol to minimise noise emissions, manage out of hours (minor) works to be inaudible, and to respond to potential concerns from the community;
- where possible use localised mobile screens or construction hoarding around piling rig/plant to act as barriers between construction works and receivers, particularly where equipment is near the site boundary and/or a residential receiver including areas in constant or regular use (eg unloading and laydown areas);
- operating plant in a conservative manner (no over-revving), shutdown when not in use, and be parked/started at farthest point from relevant assessment locations;
- selection of the quietest suitable machinery available for each activity;
- minimise noisy plant/machinery working simultaneously where practicable;
- minimise impact noise wherever possible;
- utilise a broadband reverse alarm in lieu of the traditional high frequency type reverse alarm;
- provide toolbox meetings, training and education to drivers and contractors visiting the site during construction so they are aware of the location of noise sensitive receivers and to be cognisant of any noise generating activities;
- signage is to be placed at the front entrance advising truck drivers of their requirement to minimise noise both on and off-site; and
- utilise project related community consultation forums to notify residences within proximity of the site with project progress, proposed/upcoming potentially noise generating works, its duration and nature and complaint procedure.

Council Comment:

No consideration was given to loading/unloading areas and its proximity to receiver R01.

Response:

The model included a noise source to represent moving material on site via a tele handler – see Table 11 of Enclosure D. This refers to a tele handler picking up material at the hardstand and moving the material to work areas. This would also be similar to unloading a truck. Hoarding will be established within the loading and unloading area to minimise noise. A Construction Management Plan to be included as condition of consent prior to construction.

2 CONCLUSION

The proposed establishment of a Solar PV Farm at 262 Hunts Road, Gunnedah will provide a desirable rural compatible use desired by the Gunnedah community. It will support the region assisting to meet the energy needs of the Gunnedah region in a cost effective and environmentally friendly way.

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

Enclosure A – Site plan showing proposed connection to Essential Energy network

Enclosure B – Example construction mesh/shade cloth datasheet

Enclosure C – FFAR

Enclosure D – Updated Noise Impact Assessment