

28 April 2022

Our reference: RC225180

KeaX Limited  
C/- Boffa Miskell Ltd  
PO Box 110  
Christchurch 8140

Attention: Claire Kelly

Sent via email: [REDACTED]

Dear Claire

## Request for Further Information

I have reviewed your resource consent application **RC225180** to construct and operate Brookside Solar Array. More information is needed so that I can better understand your proposal and its potential effects.

### Further information

In accordance with section 92(1) of the Resource Management Act 1991, I request the following information:

1. National Environmental Standard for Assessing and Managing Contaminants in Soil
  - Given the size and use of the site for rural production purposes (currently and historically) it is considered more likely than not that HAIL activities have occurred on the site, particularly around the existing buildings on the site. Therefore, please either demonstrate compliance with the NES or provide the relevant assessments under the NES (completed by a suitably qualified person).

Compliance with Regulations 5(8) and 8(3) need to be demonstrated. Regulation 8(3) places limitations on the amount of earthworks which it appears the proposal may comply with however the duration of permitted earthworks is limited to 2 months. Based on the details provided with the application my thoughts therefore are that a Detailed Site Investigation is required in accordance with Regulation 9.

## 2. Flood Management Overlay

- a) The site is not located within a flood zone under the Operative District Plan but is within the Flood Management Overlay under the Proposed District Plan. During a 1 in 200-year flood event the modelling indicates that water levels could reach up to 0.5m -1m on the site (although I acknowledge flooding would likely disperse more evenly on the site). During a 1 in 500-year flood event small areas of 'high hazard' are identified (where flood levels of between 1- 1.2m may be reached).

While flooding on the site would unlikely be an issue for the solar panel structures as noted in the application, please provide a relevant risk assessment for all buildings/key infrastructure on the site (including the site office, inverters, batteries), taking into consideration the relevant objectives and policies of the PDP. If the applicant considers that there is a need to raise any buildings or structures on site because of the modelling (please note, the Building Department consider this modelling and require foundations to be adjusted accordingly) please also update the landscape and visual assessment, if necessary.

Please refer to the following link for the modelling data:

<https://apps.canterburymaps.govt.nz/SelwynNaturalHazards/>

## 3. Noise

- a) The application does not demonstrate compliance with the noise limit standards of the District Plan during the construction period. While the application notes construction noise would be managed under the relevant NZ standard, Rule 9.16 applies as construction would exceed a 12 month period.

Therefore, please demonstrate compliance with Rule 9.16 of the District Plan by providing an acoustic assessment provided by a suitably qualified and experienced practitioner. This assessment also needs to consider noise amenity effects.

Alternatively, if it can be demonstrated, to the satisfaction of Council, that adverse noise effects generated by the site's construction would not be dissimilar to construction undertaken consecutively over the site over a 12 month period this may be considered acceptable. The consent, if approved however, would need to have tight timeframes placed on it. For example, the start and completion of each stage could not exceed a 4 month period. In the absence of an assessment, Council's assessment would also need to note that compliance with the noise

standard may not be achieved during construction. I note that this approach however may also be too restrictive for the applicant, given potential delays associated with materials and the inability to potentially undertake site prep etc outside of these timeframes.

- b) The application states that pile machinery may only be used for a few months (Section 4.4) and that 2 or 3 pile driving machines may be used for Stages 2 and 3 to minimise the total length of time they are needed. Please provide further details regarding the frequency and duration of construction noise, particularly with regards to driving the solar panel posts into the ground.
- c) Please confirm if noise associated with the daily operation of the solar farm will be audible beyond the legal boundaries of the site. ie, will the humming associated with equipment be audible at adjoining boundaries?

#### 4. Proposed staging and Ecological Assessment recommendations

- d) The application (Section 4.1) notes the proposed staging timeframes however Section 6.8 also indicates that construction of the solar array will not occur between September – January in accordance with the recommendation made in the ecological assessment. Therefore, please clarify if there are any changes proposed to the staging timeframes noted under Section 4.1.

#### 5. Vehicle crossings

- a) The application makes reference to the placement of security fencing around the site, but I couldn't locate any information regarding whether security gates would be placed near the vehicle entranceways onto the site. Please clarify if security gates are proposed or other security fencing is proposed internally within the site (for example, around the curtilage areas for the dwellings at 821 and 883 Hanmer Road). If gates are proposed please also assess the proposal against Rule 4.5.1.4.
- b) The application states that the existing vehicle crossings are constructed to the District Plan standard. For assessment purposes please confirm to what standard they are formed to with regards to Appendix E10.2.4.

6. Vehicle movements

The application indicates that the 60 ecm/day permitted by the District Plan for the site would be complied with. To assist with this assessment please clarify the following:

- a) The application notes that approximately twenty light vehicle trips will occur daily during the construction of the site. Please clarify in terms of the District Plan if this is the equivalent to 40 equivalent car movements per day (average over a one week period).
- b) The application makes reference to eight heavy vehicle movements per day. Please provide an assessment against the equivalent car movements definition and whether this would consist of trucks and/or trucks and trailers.

**Equivalent Car Movements Per Day:**  
is defined as follows.

1 car to and from the property	= 2 equivalent car movements
1 truck to and from the property	= 6 equivalent car movements
1 truck and trailer to and from the property	= 12 equivalent car movements

averaged over any one week period.

7. Battery storage and managing other environmental risks on the site

- a) Please provide details on how potential environmental risks, in particular fire and contamination, will be mitigated on the site. My experience with solar panel farms over recent months has indicated that the key concerns for some owners/occupiers of adjoining properties are the risks associated with potential contamination from batteries and the general fire risks associated with other equipment on the site. Please refer to any national standards, regulations, safety requirements or any other relevant requirements that will be adhered to by the applicant, including whether they will have their own procedures in place. My understanding with regards to the batteries is that the potential contamination risk would largely be influenced by the type of battery used.

- b) In terms of fire risk, please also confirm if the applicant would have measures in place to mow the grass/pasture on site, if required. I gather the applicant would as it would also be within the applicant's best interest to reduce fire risk.

8. Maintenance of pasture under panels

- The application states that pasture would be maintained under the panels to allow for cropping or grazing. Please confirm if established vegetation under the panels would be achievable given the reduction in light and potential lack of irrigation that these areas would receive. If vegetation is unable to be maintained this may give rise to dust nuisance effects and may impact upon the findings of the landscape assessment.

9. Reverse sensitivity

- The application notes that reverse sensitivity effects and conflicts with incompatible activities won't occur as the solar farm will not be sensitive to ploughing, harvesting and fertilising. However, as these activities may increase the potential for dust to accumulate on the panels please provide further comment as to why this is not considered to be an issue.

10. Glare/reflectivity

- The application notes that as the panels are designed to be efficient and require low reflectivity surrounding properties would not be affected by glare/reflectivity. However, please provide evidence to support that effects on adjoining/adjacent property owners and occupiers would be less than minor. In the short term, established vegetation could not be relied upon as it would not screen all lines of sight from adjoining/adjacent dwellings. Views onto the site may also be achieved along the entranceways and from two storey dwellings adjoining or in close proximity to the site, for example from the dwelling at 180 Grahams Road. Consideration also needs to be given to those adjoining/adjacent vacant sites that could erect dwellings/additional dwellings as of right (in the Outer Plains one dwelling per 20ha is permitted).

11. Landscaping/landscape assessment of the site

- a. Please provide an assessment against Rule 2.1 of the District Plan (Shelterbelts and amenity plantings), specifically the rules relating to shading. This applies to any new shelterbelt plantings on the site.

- b. Page 15 of the Landscape and Visual Assessment makes reference to that area of the site which retreats inland from Branch Drain Road as being filled with exotic shelterbelt species and planted in double staggered rows to provide screening for Stage 2. Please confirm what screening/area shown on Figure 3 of the landscape assessment is being referred to as the legend in Figure 3 appears to suggest native planting is proposed, if I have the correct area.
- c. The Landscape and Visual Assessment draws its conclusions based on the boundary plantings achieving a minimum height of approximately 4m however the recommendations (Section 7.0) with regards to the native plantings notes that the plant heights would only need to reach 3m – 4m. Please clarify how the lower height may impact upon the assessment, if at all.
- d. Councils landscape peer reviewer (Graham Densem) has requested the following:  
*‘Can any examples be cited as to the on-going viability of pastures beneath the proposed solar panels?’*

Therefore, please provide a response.

You must respond in writing to this request before Friday, 20 May 2022 and do one of the following:

- (a) Provide the information; or
- (b) Tell us that you agree to provide the information, but propose a reasonable alternative date; or
- (c) Tell us that you refuse to provide the information

Please note that if you do not respond in some way before Friday, 20 May 2022 or you refuse to provide the information requested, we are required to publicly notify your application. This will result in increased costs to you and take longer to process. It is important that you respond to this request, otherwise your application can be declined for lack of information.

Yours faithfully,



**Charlotte Scotchbrook**

Senior Resource Management Planner