# Resource Consents
# Pre-application Meeting Summary

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| *Date: 15/07/2024* | *Start/finish time:* ***2pm – 2.40pm (approx.)*** | |
| ***Reference number: PRE2024-011*** | | |
| ***Applicant: NZ Clean Energy*** | | ***Agent: Andrew Brown, Mitchell Daysh*** |
| ***Property Address: Lake1352 Homebush Road*** | | |
| ***Valuation Number: 2420008700 & 2420004001*** | | |
| ***Planner: Richard Bigsby*** | | |
| ***Attendees:*** | ***SDC:***<br>*Planning: Richard Bigsby* | ***Applicant:***<br>Andrew Brown – Senior Consultant<br>Tracey Morse – Senior Planner |

## Proposal Description

(From the proponent's summary)

*Darfield Solar & Energy Storage Project (DAR) is a utility scale 112 MW renewable energy project. DAR consists of 112 MW of Solar PV plus 100 MW / 200-400 MWh of battery energy storage (BESS). The scheme will generate enough electricity to supply approximately 26,016 homes per year and will save approximately 27,108 tonnes of CO2 per annum and will be operational for 40 years.*

*The site is situated on 148 ha of agricultural land at 1352 Homebush Road, approximately1.5km north of Darfield. The site is directly adjacent to the eastern side of the Fonterra Kimberley Factory. The application site is currently grazed with sheep, which will continue post construction. The subject land and surrounding areas lie within the General Rural Zone under the Partially Operative District Plan (PODP).*

*The construction for the Project is expected to last approximately 12-18 months and will generate over 100 jobs during this time (comprised of a mix of full and part time roles), with a further approximately 20 jobs (predominantly part time) being created long term for the operations and maintenance. The panels stand approximately 0.9m - 2.8m off the ground, allowing for grazing livestock on the grass beneath.*

*The solar farm will be connected to the Kimberley Substation, located within the land occupied by the Fonterra Kimberley Factory, via an overhead line or underground cable.*

*The proposal is for approximately 186,666 solar PV panels on 148ha of grazing land. The panels will be fixed onto a single axis tracking mounting system tracking east/west, which are piled into the ground, causing minimal soil disturbance.*

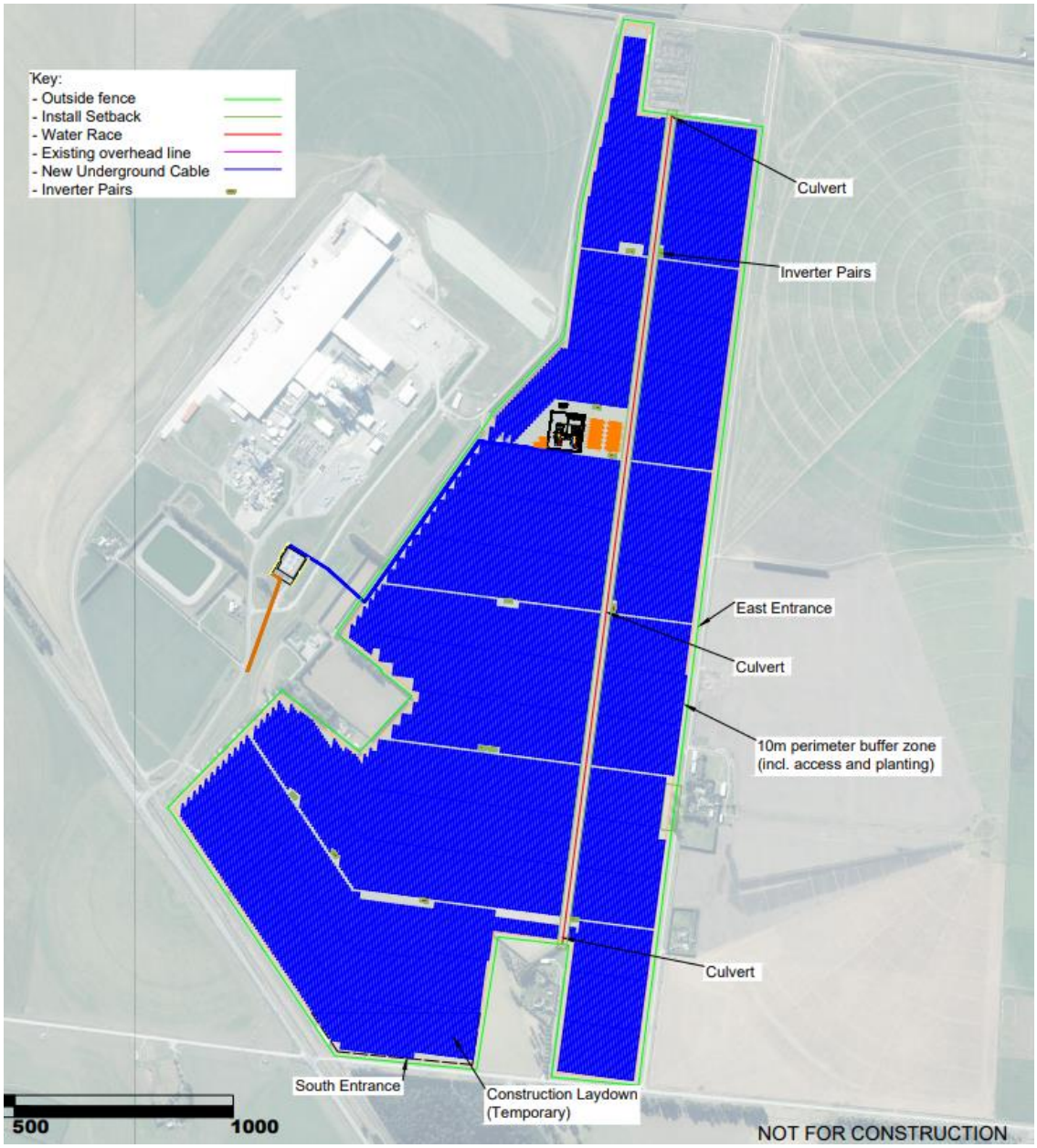
*Each solar panel is approximately 2.2m long x 1.3m wide and 35mm thick and will be dark in colour. Solar panels have an anti-reflective coating that reduces the amount of light that is reflected away from the solar panel thus ensuring as much energy as possible is absorbed.*

*Approximately 60 solar panels will be mounted on Single Axis Tracking Solar Tables, and these will be up to approximately 60m long and 2.2m wide. When parallel with the ground, the panels stand approximately 1.5m above ground level and when at full tilt, they stand approximately 2.8m tall and will be approximately 0.9m off the ground. There will be an approximately 2.8m gap between each row of solar tables.*

*Each solar table is fixed to the ground by steel foundation posts rammed into the ground and in accordance with the required wind and soil loading calculations. Each table structure is designed to move so the solar panels pivot east to west towards the sun's rays as the sun moves through the sky. In the morning the solar panels will face east, at mid-day the solar panels will be more or less horizontal and at the end of the day the solar panels will face west. If need be, to mitigate potential adverse effects from glint and glare, the tracking of the panels can be manipulated to avoid offending angles over the affected period of time at a scale of individual tracking tables.*

*The solar panels, which create Direct Current (DC) electricity, will be connected to approximately twenty inverters which convert the power to Alternating Current (AC) electricity. The inverters will be situated throughout the site and connected back to the substation and BESS through a network of underground cables.*

*The substation, switching station building, and site office will be based within the western section of the site and adjacent to the BESS. The BESS stores excess power generated within the site during the day and direct this power to the substation at night, when demand on the National Grid is highest. The BESS will also be able to store excess power within the National Grid during the day to direct back into the Grid at night*



## Summary of Key Matters Discussed at Meeting

1. There is agreement with the approach to the draft assessment provided by Andrew. SDC acknowledge that the energy & infrastructure, and transport provisions are 'self-contained'. Consent will be triggered as Discretionary overall, due to EI-R31.
2. There is agreement that the effects identified by Andrew are relevant, in addition to others potentially relevant identified by SDC (flood/hazard, reverse sensitivity and environmental health/EMF).
3. Construction effects – it would be useful to have a CMP submitted has part of application/committed via volunteered conditions for certification.
4. Transport effects – Understood to have already engaged with NZTA and Kiwirail. TMP and transportation effects (particularly construction-phase) will be covered.
5. Landscape and visual effects – Assessment to be provided in application and SDC would appoint specialist to peer review. Based on prior proposals, I would encourage you to think about visual screening and also rural character effects.
6. Glint & glare effects – Assessment to be provided in application and SDC would appoint specialist to peer review. Andrew & Tracey confirmed that assessment is addressing effects on moving receptors accounts for driver eye level in trucks/trains etc.
7. Ecology effects – Assessment to be provided in application and to be potentially reviewed by SDC biodiversity specialists – Effects of concern include impacts on bird nesting sites and with on-going bird strike. Indicated agreement can be mitigated via management plans.
8. Effects on HPL – Assessment to be provided in application and SDC would appoint specialist to peer review. Land is presently used for sheep grazing and land use would be continued once array is established. Applicant to demonstrate operational/functional need to be located on HPL in assessment. SDC suggested consideration of farm management plan if necessary. It was an adopted condition from the KeaX solar array application.
9. Stormwater – operational-phase consent will be needed. Applicant will lodge simultaneously with ECan. SDC indicated unlikely to have a planner that can process both applications under each Council's planning framework. SDC will communicate timings with ECan.
10. Natural hazards – SDC will require assessment of flood risk, particularly for BESS, inverters and any permanently retained buildings. Whilst NH-R2 is not triggered, establishing FFLs for these would be recommended. This could be done via the flood model or with assessment from ECan if the positions on-site are identified on plans.
11. Reverse sensitivity – SDC recommend consideration of dust effects on panels/array. Andrew/Tracey confirmed to be regularly cleaned using Ionised water (source TBC), and anticipated to mitigate these effects.
12. Noise – SDC will need assessment of both operational and construction phase noise effects. For construction phase, please consider the use of a Noise Management Plan and controls needed, particularly if multiple percussive piling rigs will be utilised.
13. Archaeology & heritage effects - will need engagement with Mahaanui Kurataio Limited for Mana whenua, SDC will co-ordinate on applicant's behalf once the application is lodged.
14. Contaminated land effects – The panel design and integrity is considered avoid for the most part to avoid potential contamination of soils. SDC recommended regular inspection regime/monitoring be included in the application. It would also be useful to have confirmation of the panel specifications and confirmation the units are sealed.
15. EMF effects – SDC recommend including a statement of compliance from SQEP.
16. ETA – lodgement. Possibly end of this month – first half of August.
17. SDC signalled that the application is likely to be processed out of house. SDC have a conflict of interest, given part ownership of Orion and proposal will be connected to nearby Orion substation.

## Post Meeting Follow Up and/or Additional Comments

Planning (Richard Bigsby):

1. Richard to discuss capacity with SDC Consultants to ensure someone is available at lodgement.

**Expected lodgement date: First half of August 2024**

## Notes

- The advice given at the pre-application meeting and in this Actions List relates to the specific proposal discussed at the meeting. This advice may not apply to the application lodged if it differs from the proposal presented at the meeting.
- This advice is not legally binding on any decision by Selwyn District Council on a future resource consent application or other Council approval process. A formal in-depth assessment will be made once a resource consent application has been lodged.
- The SDC planner who attends the pre-application meeting may not be the planner that processes the application when it is lodged. We do our best to ensure this continuity however due to existing workload, this is not always possible.
- Expert reports provided with the application may be peer reviewed by experts engaged by the Council at the applicant's cost.