

**BEFORE A COMMISSIONER APPOINTED BY THE SELWYN
DISTRICT COUNCIL**

IN THE MATTER OF the Resource Management Act 1991

AND

IN THE MATTER OF applications by KeaX Limited for
resource consent to establish a solar
array at 115 Buckleys Road,
Brookside.

**STATEMENT OF EVIDENCE OF AMANDA LEIGH ANTHONY
ON BEHALF OF THE APPLICANT
(LANDSCAPE PLANNING)**

Dated: 16 February 2024

KeaX Limited
Applicant
Campbell McMath
(campbell@keaenergy.nz)

Applicant
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1 INTRODUCTION

- 1.1 My full name is Amanda Leigh Anthony. I am an Associate Principal and Landscape Architect at Boffa Miskell Limited, a national environmental consulting firm specialising in landscape planning, urban design, landscape architecture, planning, ecology, biosecurity and cultural advisory. I hold a Bachelor of Landscape Architecture (BLA) qualification from Louisiana State University in the USA. I am a Registered Member of the New Zealand Institute of Landscape Architects Tuia Pito Ora (NZILA) and a Member of the Resource Management Law Association.
- 1.2 I have practised as a landscape architect in New Zealand since 2009 on a wide range of projects along with work experience in the USA and Australia. I have worked with a wide range of clients around New Zealand including local authorities, land developers, and the infrastructure and renewable energy sectors.
- 1.3 My experience includes carrying out landscape and visual effects assessments, natural character assessments, territorial landscape studies and coastal natural character studies. I have also undertaken peer reviews of landscape assessments on behalf of Rotorua District Council, Stratford District Council, Tasman District Council, Marlborough District Council and Queenstown District Council for various resource consent applications and activities.
- 1.4 Recently, I have prepared several landscape and visual effects assessments for proposed solar developments across New Zealand and carried out peer reviews on behalf of District Councils on solar farm applications.
- 1.5 In this matter, I was engaged by KeaX Limited (KeaX) in May 2023 to undertake a Landscape Effects Assessment (LEA) of a proposed 111-hectare (ha) solar farm located at 115 and 187 Buckleys Road, Brookside (the Site), approximately 10km north of Leeston in Canterbury.
- 1.6 My evidence is in respect of the resource consent application (RC235464) by KeaX (the Applicant) to construct a new solar array (or solar farm) on the 111ha Site (the Proposal).

- 1.7 I am the principal author of the LEA for the Buckleys Road Solar Farm dated 9 August 2023, which was Appendix 13 to the Application.

2 **CODE OF CONDUCT**

- 2.1 Whilst this is a Council hearing, I acknowledge that I have read and agree to comply with the Environment Court's Code of Conduct for Expert Witnesses, contained in the Environment Court Practice Note 2023. My qualifications as an expert are set out above. Other than where I state that I am relying on the advice of another person, I confirm that the issues addressed in this statement of evidence are within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

3 **EXECUTIVE SUMMARY**

- 3.1 The Proposal consists of the construction and operation of a 111-ha solar farm located at 115 and 187 Buckleys Road, Brookside, approximately 10km north of Leeston in Canterbury.
- 3.2 The Site has a flat topography and is currently used as a dairy farm. Numerous shelterbelts, mature trees and rural-type fences delineate the Site into paddocks, which is a typical characteristic in this part of the rural Canterbury landscape.
- 3.3 The methodology used to assess the level and nature of effects of the Proposal on the landscape character and values is consistent with *Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines*¹.
- 3.4 Overall, I have assessed the proposal as having very localised, adverse landscape effects of **low-moderate** (minor), reducing to **low** beyond the Site over time due to the proposed mitigation planting. The adverse visual effects will range from **low to low-moderate** for public viewing locations and **neutral to low** for private viewing locations following the construction of the solar farm. As the mitigation planting is established within the 'gap' areas and grows to form a dense

¹ 'Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines', Tuia Pito Ora New Zealand Institute of Landscape Architects, July 2022.

impermeable screen, the adverse visual effects will reduce to **very low** from all public viewing locations and **very low to neutral** from all private viewing locations.

- 3.5 A **Graphic Supplement** has been appended to my evidence which includes a map of the submitters' location in relation to the Site (**Figure A**), a Revised Landscape Mitigation Plan (**Figure B**) and more detailed maps of each submitter's boundary with the Site/proposal (**Figures C - E**).
- 3.6 Following the review of submissions and the Selwyn District Council's section 42A Planning Report, a revised landscape mitigation strategy is proposed to address matters raised by the submitters and Council Planner, and is outlined below:
- (a) The proposed 2m high, evergreen, exotic shelterbelt north of 324 Branch Drain Road will be extended by 50m to the east as requested in the submission from the Kewish's.
 - (b) A 100m long, single row of 2m high exotic, shelterbelt planting is proposed west of the Wāhi Taonga site.
 - (c) Confirmation of plant species for the proposed mitigation planting.
- 3.7 The **Revised Landscape Mitigation Plan** has been appended to my evidence as **Figure B** which incorporates the changes outlined above.

4 **SCOPE OF EVIDENCE**

- 4.1 My evidence relates to the landscape and visual effects of the Application and addresses the following matters:
- (a) The proposed activity (the Proposal);
 - (b) The Site and existing environment;
 - (c) Statutory Provisions;
 - (d) Assessment of Landscape and Visual Effects;
 - (e) Response to Selwyn District Council's section 42A Planning Report regarding landscape and visual effects;
 - (f) Response to the submissions concerning landscape and visual effects;

- (g) The proposed conditions of consent and
- (h) Conclusion.

4.2 In preparing this evidence, I have read and considered the following documents:

- (a) The resource consent application for the Proposal (including the AEE);
- (b) The evidence of Campbell McMath (the Applicant);
- (a) The submissions received on the Proposal from:
 - (i) Donna Irons and Simon Robinson of 79 Buckleys Road;
 - (ii) Ewan John Chapman, Anneka Rose Dalley, and Michael John Dalley (Haurere Farms) of 23, 56 and 80 Buckleys Road;
 - (iii) Katrina Marie Deans and Corey Krygsman of 15 Stewarts Road;
 - (iv) David Green (Glenmore Farming Co Ltd) of 313 Branch Drain Road;
 - (v) Donna Kewish, Dave Kewish and Ann Williams of 324 Branch Drain Road; and
 - (vi) Clark James Casey of 198 Branch Drain Road;
- (b) Selwyn District Council's s42A Planning Report regarding landscape and visual effects;
- (c) Landscape Effects Assessment peer review undertaken by Bron Faulkner²;
- (d) Landscape Evidence of Andrew William Craig³;
- (e) Glint and Glare peer review undertaken by Velden Aviation Consulting Ltd;⁴
- (f) Glint and Glare Evidence of Rudi Van Der Velden⁵; and

² Landscape Review prepared by Bron Faulkner, dated 31 August 2023.

³ Landscape Evidence of Andrew William Craig for Selwyn District Council dated March 2024.

⁴ Review of Boffa Miskell Assessment of Glint and Glare at Buckleys Road Solar Farm, prepared by Velden Aviation Consulting Ltd, dated 21 September 2023.

⁵ Glint and Glare Evidence of Rudi Van Der Velden prepared for Selwyn District Council, dated March 2024.

(g) The proposed conditions of consent included in the s42A and prepared by Claire Kelly of Boffa Miskell.

- 4.3 My evidence is consistent with the concepts and principles outlined in *Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines*⁶.
- 4.4 A Site visit was undertaken on 14th June 2023 during clear and sunny weather conditions to understand the Site, its context, and the nature of available views.

5 THE PROPOSED ACTIVITY

- 5.1 KeaX proposes to construct a 111-ha solar farm on the Site. The Site is located directly south of an existing Orion substation that will facilitate connections into the local lines network. The overall capacity of the solar farm will be able to generate energy for approximately 11,200 homes in Canterbury annually, equating to 100 GWh on completion. The proposed solar farm will take approximately 12 months to construct.
- 5.2 The solar array will consist of a single-axis tracking system and move with the sun throughout the day. When the panels are flat/horizontal (in stow position) they will be 1.80m above the ground and no more than 3.0m above the ground (during maximum tilt).
- 5.3 The panels will be on piles that are driven into the ground approximately 1.8m deep and the rows will be approximately 4.0m apart (when the panels are horizontal). The reflectivity value of the panels will be below 4%.
- 5.4 It is proposed that sheep will graze underneath the panels to maintain the grassy land cover. The solar panels will be setback at least 60m from the shared boundary with the dwelling at 324 Branch Drain Road and approximately 20m from the remainder of the southern boundary. This will enable a new shelterbelt to be established and allow for maintenance access on both sides.

⁶ 'Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines', Tuia Pito Ora New Zealand Institute of Landscape Architects, July 2022.

- 5.5 The Site will be accessed from an existing accessway located off of Branch Drain Road, approximately 460m south of the existing substation.
- 5.6 Construction activities are understood to be internal vegetation removal, fencing, earthworks, the piling and establishment of the panels and buildings. Access tracks will also be located throughout the Site for construction and maintenance purposes.
- 5.7 Within the Graphic Supplement to the LEA, dated August 2023, Visual Simulations⁷ have been prepared for Viewpoint 1 located on Buckleys Road (refer to Figures 8-9) and Viewpoint 10 located on Branch Drain Road (refer to Figures 13-14). The simulations illustrate the Proposal once it has been constructed (with 2m high, staggered, double rows of exotic shelterbelt species in between the 'gaps' in existing vegetation) and five years after the planting has been implemented (plants shown at 3.5m high after 5 years).
- 5.8 Further details of the Proposal and mitigation planting are outlined within the AEE and LEA.

6 THE SITE AND EXISTING ENVIRONMENT

- 6.1 A description of the broader landscape and the Site can be found in the LEA on pages 7-10.⁸
- 6.2 In summary, the Site is located within a highly modified, flat rural landscape currently used for dairy farming which is characterised by several forms of linearity including shelterbelts, fencing and paddocks. The Site is not located in an Outstanding Natural Landscape (ONL) or in a Visual Amenity Landscape (VAL) in either the District or Regional Plans. Rural amenity values that relate to the Site include the following:
 - (a) Areas of open, green pasture which are separated into paddocks by linear shelterbelts and mature trees that criss-cross the landscape.

⁷ Refer to Appendix 13: Graphic Supplement to the Landscape and Visual Effects Assessment.

⁸ Refer to Appendix 13: Landscape and Visual Effects Assessment to the Application.

- (b) There is a general lack of structures and buildings, aside from the pivot irrigators and power lines.

7 STATUTORY PROVISIONS

- 7.1 Under the Operative District Plan (ODP), the Site is zoned Outer Plains and includes Wāhi Taonga Site C29 relating to Ovens/Middens.
- 7.2 Under the Partially Operative District Plan (PODP), the Site is zoned General Rural Zone. Key objectives relate to maintaining or enhancing rural character and amenity values of the rural area.
- 7.3 A full assessment of the proposal against the relevant landscape-related statutory provisions can be found in Section 6.3 of my LEA. In summary, I consider the proposal to be consistent with the ODP and PODP policies and objectives as they relate to landscape outcomes in the Outer Plains and General Rural Zones.

8 ASSESSMENT OF LANDSCAPE AND VISUAL EFFECTS

- 8.1 A full assessment of effects on the existing landscape, rural character and visual aspects can be found in Section 6.0 of my LEA. In summary, I consider:
 - (a) Landscape effects at the establishment of operations = Low-Moderate (adverse) at a very localised level.
 - (b) Landscape effects at 5 years = Low (adverse) beyond the Site.
 - (c) Visual effects at the establishment of operations:
 - (i) From public viewing locations = Low to Low-Moderate (adverse)
 - (ii) From private viewing locations = Neutral - Low (adverse)
 - (d) Visual effects at 5 years:
 - (i) From public viewing locations = Very Low (adverse)
 - (ii) From private viewing locations = Neutral – Very Low (adverse)
- 8.2 Mr Andrew Craig (Landscape Architect) was engaged by Selwyn District Council to prepare landscape evidence and agrees with the

observations and conclusions reached in my LEA. Noting specifically in paragraphs 17 - 20:

- (a) *I am satisfied that the proposed mitigation planting in combination with that existing will effectively screen the solar array from neighbours and public view, although there will initially be some views to the arrays which will diminish over time while planting matures.*
- (b) *I agree with the landscape mitigation measures proposed by the applicant and am of the opinion that they will be effective and enduring subject to implementation of the Landscape Management Plan.*
- (c) *The type of amenity expected of the rural environment for the Zone in which the Site is located will be maintained subject to implementation of the proposed mitigation measures.*
- (d) *Landscape and visual effects would not be contrary to both the ODP and PDP objectives and policies where they concern landscape outcomes for the Zone in which the Site is located.*

8.3 Several submitters have raised concerns about the effects on their rural amenity and visual effects resulting from the Proposal. I have addressed these concerns below as has Mr Craig in his landscape evidence.

8.4 For completeness, I confirm my position on the Proposal (i.e. my assessment of the landscape and visual effects) remains the same having now read the submissions and section 42A report, which I discuss below.

8.5 **GLINT AND GLARE**

8.6 The Glint and Glare analysis prepared by Boffa Miskell was peer-reviewed by Rudi Van der Velden of Velden Aviation Consulting Ltd. Mr Van der Velden generally agrees with the findings of the Boffa Miskell analysis noting:

- (a) **For dwellings:** *"...this review agrees with the BML assessment that no mitigation requirements are really needed for the dwellings considered based on the solar farm PV array system*

proposed. Existing vegetation around dwellings and also planned landscaping for visual screening (as per Landscape Plan in Appendix E) should reduce any low level glare impacts to the dwellings even further.”⁹

(b) *“Boffa Miskell assessment of the impacts and mitigations proposed for the dwellings is covered comprehensively and very well and there is good agreement with the results they have obtained.”¹⁰*

(c) **For road users:** *“Boffa Miskell's proposal around landscaping as well as consideration of existing vegetation should largely mitigate the majority of predicted yellow glare to road traffic. As noted in some areas, additional mitigation measures that consider having plantings to at least 3.5m would be essential to minimise glare to acceptable levels to ensure less than minor impact.”¹¹*

(d) Mr Van der Velden queried the driver's eye level height used in the Boffa Miskell analysis for road users of larger vehicles through the Section 92 process. Boffa Miskell re-ran the analysis using a driver's eye level of 2.5m (rather than 1.5) and found that four of the surrounding roads could potentially be impacted by solar glare.

(e) Boffa Miskells' s92 response dated 24 October 2023:

“Further analysis at 2.5m high on a bare earth scenario has identified that four roads (Brookside and Irwell, Buckleys Road, Caldwell's Road and Hanmer Road) in the vicinity of the Site have the potential for glare visible to road travellers in higher vehicles.

- *Buckleys Road: Potential Glare in the location of VPs 1 & 2 would be oblique to the direction of travel along the road corridor. Mitigation is not required, however,*

⁹ Refer to page 18 of the Glint and Glare Peer Review undertaken by Velden Aviation Consulting Ltd.

¹⁰ Refer to page 23 of the Glint and Glare Peer Review undertaken by Velden Aviation Consulting Ltd.

¹¹ Refer to page 23 of the Glint and Glare Peer Review undertaken by Velden Aviation Consulting Ltd.

proposed planting along the Site boundary would screen any potential glare from view.

- *Brookside and Irwell Road: Potential glare available in the direction of travel towards the Site would be screened by existing vegetation as illustrated on Figure 19 along eastern site boundary. This vegetation is between 3 and 10m in height and is visible in the right-hand side of VP3 on Figure 10.*
- *Hanmer and Caldwell's Roads: For potential glare identified at the junction of Caldwell's and Hanmer Road in the location of VP6, it is proposed to have no panel backtracking in this location, to avoid the effects of glare in alignment with the road corridor until planting achieves a height of 3m where it would screen views from higher vehicles. For the area of the Wahi Taonga site where there is no planting, no backtracking is proposed to eliminate glare."*

8.7 As illustrated in the **Revised Landscape Mitigation Plan**, a 100m long, single row of 2m high exotic, shelterbelt planting is proposed west of the Wāhi Taonga site. As setout in the proposed conditions, once the proposed planting reaches a height of 3m, the requirement for 'no backtracking' will no longer be required. This additional planting will further reduce the potential for glare at the junction of Hanmer and Caldwell's Roads.

8.8 In the Glint and Glare evidence, Mr Van der Velden concludes: *The adverse impacts due to any glint and glare based on my peer review is in line with results from the Boffa Miskell AEE and associated glint and glare assessment. That is, that the overall impact due to glint and glare, once all mitigation measures have been taken into account, will be less than minor for both dwellings and road users.*

9 **SECTION 42A OFFICER'S REPORT**

9.1 Mr Bigsby prepared the section 42A report for Selwyn District Council (SDC) in relation to KeaX Limited's land use consent application.

- 9.2 I have read the s42A report and have identified only one issue requiring clarification that relates to my area of expertise. Paragraph 88, Mr Bigsby notes, *'The Applicant will need to expand on the plant species at the hearing.'*
- 9.3 As set out in Section 7.0 of my LEA, the proposed plant species shall consist of fast-growing, evergreen exotic shelterbelt species (*Cupressus x ovensii*, Oven's Cypress or a similar plant species with a very rapid growth rate). The exotic plant species (Oven's Cypress) was selected based on its very rapid growth rate, existence in the local area and the visually impermeable barrier it forms. To clarify, a 'similar plant species' as referred to in my LEA is considered to be another 'Cypress' variety that is capable of a similar growth rate and forming a visually impermeable barrier.
- 9.4 While I acknowledge that both Mr Bigsby and Mr Craig support a mix of native and exotic plantings, which I agree with, it has been made reasonably clear through the submissions (this Proposal and the previous), that neighbouring properties are concerned about the potential visibility of the solar arrays. To ensure the Proposal is visually contained in the shortest period of time possible, exotic fast-growing shelterbelt plant species have been proposed. Shelterbelts (specifically cypress varieties) are a common feature across the Canterbury Plains and the proposed planting will be in keeping with this.
- 9.5 Further to this, the Glint and Glare analysis and findings are also based on the existing vegetation in place around the Site boundaries (consisting largely of exotic species) in addition to the proposed mitigation planting.

10 **SUBMISSIONS**

- 10.1 A total of 8 submissions have been received concerning the application. Of the 8 submissions, 1 has been disregarded as the submitter was not notified, 1 is in support and 6 oppose the application with all wanting to be heard at the hearing.
- 10.2 Of the 6 opposing submissions, 4 have raised similar matters concerning rural amenity values as a result of the Proposal. Based on this reoccurring theme I have addressed the effects on rural amenity values/rural character as a whole regarding the Site and then respond

to individual concerns raised by the following submitters. Refer to **Figure A** for the location of the submitters in relation to the Site.

I address the following submission points below:

- (a) **Effects on rural amenity (character) values;**
- (b) **79 Buckleys Road**
 - (i) Proximity of solar panels to the southern property boundary shared with the Site.
- (c) **23, 56 and 80 Buckleys Road**
 - (i) Potential glare on roads.
 - (ii) Proposed shelterbelt plant species (as opposed to natives).
- (d) **324 Branch Drain Road**
 - (i) Proposed 2m high planting extended a further 50m to the east.
 - (ii) Visual effects.

10.3 **Effects on rural amenity (character) values**

- (a) As described in the LEA, the Site will transition from an open rural landscape to one containing energy infrastructure having a maximum height of 3m (generally less than 3m due to the tracking system proposed). The Site will still be covered in pastoral grasses, have grazing animals (sheep) amongst the solar panels or other farming as found to be practicable, and areas of 'openness' specifically along Branch Drain Road where the solar arrays are setback at least 20m from the road carriageway (and in some instances along Buckleys Road). The existing shelterbelts that border the Site will remain in place and contribute to the linear vegetation patterns currently present in the local landscape.
- (b) While the *General Rural Zone is characterised by a landscape dominated by openness and vegetation, and with significant visual separation between neighbouring residential buildings*, context is everything. In the context of the Site, while it currently expresses a sense of open green paddocks that are delineated

by shelterbelts and mature trees, the introduction of utility buildings and structures is an anticipated outcome.

- (c) The provisions in both the ODP and PODP anticipate a level of change that incorporates built form within landscapes that display 'openness and vegetation'.
- (d) Built forms such as utility structures, tunnel houses, hay barns, stock yards or any other buildings which do not have a built-in floor, up to a height of 12m, are permitted activities in the ODP with no control over building coverage. The PODP permits plantation forestry and the establishment of structures (including tunnel houses, shade houses and greenhouses) with no limitation on building coverage and with a maximum height of 12m. These types of structures could be built within **5m**¹² (under the ODP) and **5m**¹³ (under the PODP) of the shared Site boundaries (with the submitters') without requiring resource consent, subject to recession planes. I also note that under the PODP artificial crop protection structures and crop support structures, less than 6m in height where green or black cloth is used on any vertical faces can be constructed 3m from a shared boundary¹⁴. While my assessment has not relied on these activities in a "permitted baseline" sense, and I acknowledge and accept that 12m high structures may not cover the entirety of the 111-ha Site, they could cover a portion of it with a mix of other land uses (for instance, forestry, agriculture, horticulture and solar arrays).
- (e) With that being said, I consider a collection of 12m high structures located within 5m of the shared Site boundaries (with the submitters' properties) to be more visually dominating than the Proposal (the arrays range in height from 1.8m – 3m depending on the time of day). There is potential for permitted utility structures to significantly reduce a sense of 'openness', stand out in contrast to the local landscape and appear more 'industrial' than the Proposal. The introduction of permitted 12m

¹² ODP 3.13.1.

¹³ PODP GRUZ-Table 1.

¹⁴ PODP GRUZ-Table 1.

high structures would also not require mitigation planting or screening to maintain or enhance the rural character and amenity values of the local rural area.

- (f) A majority of the Site boundaries already have 3.5m+ high, established shelterbelts in place that visually contain it from neighbouring properties that border the Site. Where there are gaps in the existing shelterbelts, additional mitigation planting is proposed as illustrated in **Figure B** of the Graphic Supplement. The proposed mitigation planting along the Site boundaries will visually contain the Proposal within the confines of the Site and screen it from neighbouring views over time, therefore limiting the character change to the immediate Site area.
- (g) Mr Craig has also elaborated on the landscape effects¹⁵ of the Proposal and concludes that the Proposal will result in acceptable landscape effects (less than minor)¹⁶ as they relate to rural amenity.

10.4 **79 Buckleys Road**

- (a) As described in the submission received from 79 Buckleys Road, the owners are concerned about the decrease in their rural amenity value and the potential visibility of the solar panels along their southern property boundary based on their proximity. I have addressed the effects on rural character above. Their submission also provided **Images 2 - 3** below which illustrate the view from their dwelling and southern property boundary. Refer to **Figure C** which depicts the submitters' location as it relates to the Proposal.

¹⁵ Refer to paragraphs 33 – 60 of Mr Craig's Landscape Evidence.

¹⁶ Refer to paragraphs 60 and 62 of Mr Craig's Landscape Evidence.



Image 1: View from the dwelling located at 79 Buckleys Road looking south towards the Site, supplied within their submission.

- (b) As illustrated in **Image 2** above, there is an existing shelterbelt in place which spans the length of the shared boundary between the Site and 79 Buckleys Road. The existing shelterbelt predominately screens the Site from view. However, I acknowledge, that should there be gaps in the shelterbelt, glimpses of the Proposal to the south may be apparent.



Image 2: View through existing pine shelterbelt located on the southern Site boundary of 79 Buckleys Road, supplied within their submission.

- (c) However as shown in **Image 3** above, there is an approximate 1m - 1.2m high 'gap' between the ground level and tree canopy. In response to this gap and noting the existing shelterbelt is within 79 Buckleys Road (rather than the Site) a supplementary single row of exotic shelterbelt plant species has been proposed

as part of the application and is shown on the Landscape Mitigation Plan.

- (d) The proposed supplementary single row of exotic shelterbelt plant species will be spaced at 1.5m centres and be a PB3 grade. The recommended plant species within the LEA is an Ovens Cypress (*Cupressus x ovensii*) or similar which has a very rapid growth rate being able to reach 7m of height within 5 years.
- (e) As illustrated in the Sections (Figure 7) provided within the Graphic Supplement to the LEA, the mitigation planting will be fenced from grazing stock which will avoid the lower portion of the planting being grazed. In time the gap illustrated above in **Image 3** will be filled by the proposed planting within the Site.
- (f) The solar panels will also be setback at least 88m from the dwelling itself and between 12m – 36m from the shared boundary as shown in **Figure C**. There are also existing solar panels located 44m – 56m north of the dwelling within 56/80 Buckleys Road which would likely be more visible than the Proposal.

10.5 **23, 56 and 80 Buckleys Road**

- (a) As described in the submission received from 23, 56 and 80 Buckleys Road, the owners are concerned about glare onto the surrounding road network, adverse effects on rural amenity and the existing pine shelterbelt (within the Site) that borders their property has gaps in it. The submission also considers natives should be planted on the inside of the pines. I have addressed the effects on rural character and glint and glare above.
- (b) The existing dwelling located at 23 Buckleys Road is approximately 465m north-east of the closest solar panel and 440m north-east of the closest Site boundary. The dwelling is also surrounded by what appears to be a very dense shelterbelt. The dwelling within 80 Buckleys Road is located 383m north of the Site (across Buckleys Road) and is surrounded by vegetation. The dwelling within 56 Buckleys Road is located 245m north-east of the Site (across Buckleys Road) and is also surrounded by vegetation. Approximately 1,400m² of solar panels are located

within 56 and 80 Buckleys Road which are within 25m of the road frontage (with no screening in place). Refer to **Figure D**.

- (c) Based on the above and confirmed during the Site visit, the existing pine shelterbelt was considered dense enough to not warrant additional screening. Should any notable gaps be identified, a similar approach to infilling will be undertaken as per the proposed Landscape Management Plan. Natives were not proposed in this instance due to their slow growth, shading from the existing exotic shelterbelt and neighbouring properties concerned about the visibility of the solar panels in the short term.

10.6 **324 Branch Drain Road**

- (a) As described in the submission received from 324 Branch Drain Road the owners are concerned about rural amenity values, the visual effects and have requested that the 2m high proposed planting on their northern boundary be extended by 50m to the east. I have addressed the effects on rural character above.
- (b) As illustrated in **Image 4** below, the shelterbelt north of Branch Drain Road is relatively dense. I have not visited the Kewish's property but when viewed from the Site itself, I considered it unlikely that panels will be visible through the existing shelterbelt located north of their boundary. However, I acknowledge, that should there be gaps in the shelterbelt, glimpses of the Proposal to the north may be apparent.



Image 3: View located approximately 60m north of 324 Branch Drain Road looking in a southerly direction towards the existing shelterbelt.

- (c) In response to this, a new shelterbelt is proposed (as part of the Application) and will be offset 10m from the shared property boundary to provide for maintenance access and trimming of the shelterbelt. Refer to **Figure E**. The solar panels are also setback into the Site approximately 60m to the north and approximately 638m between the dwelling and the closest solar panel to the east.
- (d) As requested, the Applicant will extend the proposed 2m high planting by 50m to the east. This change is reflected in the Revised Landscape Mitigation Plan, **Figure B**.

11 **CONSENT CONDITIONS**

- 11.1 I have reviewed the draft proposed consent conditions within the s42A report and those attached to the planning evidence of Ms Kelly and confirm that they reflect my recommendations.

12 **CONCLUSION**

- 12.1 My key conclusions are as follows:

- (a) The concerns of Mr Bigsby in his s42a report and the submitters have been addressed through the discussion and further analysis provided above.
- (b) Furthermore a 50m long extension of evergreen, exotic plant species will be planted along the shared southern Site boundary with 324 Branch Drain Road to ensure the solar arrays remain screened over time.
- (c) A 100m long, single row of 2m high exotic, shelterbelt planting is proposed west of the Wāhi Taonga site to eliminate the 'no backtracking' requirement once the planting has reached 3m in height and further reduce the potential for glare at the junction of Hanmer and Caldwells Roads.
- (d) Mr Craig's conclusions align with Ms Faulkner's¹⁷ regarding the landscape and visual effects of the Proposal. Mr Craig concludes

¹⁷ Prepared the Landscape Peer Review for SDC.

overall adverse landscape effects will be minor and the visual effects of the Proposal will be less than minor.

- (e) Mr Van der Velden agrees with the Boffa Miskell glint and glare findings and concludes that once all mitigation measures have been taken into account, the overall impact will be less than minor for both dwellings and road users.

Amanda Leigh Anthony

16 February 2024