From: <u>Kate Bonifacio</u>
To: <u>Tracey Morse</u>

Subject: RE: Darfield Solar - Proposed Conditions CRM:0093177760

Date: Tuesday, 4 March 2025 4:11:48 pm

Attachments: image001.png image002.jpg

Some things just stay with you! I think this correspondence would be sufficient as a record.

Thank you for your help Tracey,

Cheers Kate

From: Tracey Morse <tracey@nzcleanenergy.nz>

Sent: Monday, 3 March 2025 3:28 pm

To: Kate Bonifacio < Kate.Bonifacio@nzta.govt.nz>

Subject: RE: Darfield Solar - Proposed Conditions CRM:0093177760

Awesome – all those years spent as a council planner drafting conditions are still coming in useful. How did you want that formalised? Or are you comfortable with this correspondence history being sufficient? Happy to do whatever makes it easiest for you.

Tracey Morse BSc BSocSc(Hons) MNZPI Senior Planner NZ Clean Energy

www.nzcleanenergy.nz tracev@nzcleanenergy.nz



Please note that I work flexible hours, which includes sending emails outside of normal office hours. There is no need to respond to my emails outside of your working hours.

From: Kate Bonifacio < <u>Kate.Bonifacio@nzta.govt.nz</u>>

Sent: Monday, 3 March 2025 3:15 pm

To: Tracey Morse < tracey@nzcleanenergy.nz>

Subject: RE: Darfield Solar - Proposed Conditions CRM:0093177760

Perfect thank you!

From: Tracey Morse < tracey@nzcleanenergy.nz>

Sent: Monday, 3 March 2025 3:12 pm

To: Kate Bonifacio < Kate.Bonifacio@nzta.govt.nz>

Subject: RE: Darfield Solar - Proposed Conditions CRM:0093177760

Hi Kate.

We could definitely alter the wording to more clearly articulate that – does the addition of the **highlighted text** work for you? This aligns with what is described in the glint and glare analysis report, so it just follows the theme that the previous additional text sought to address of clarifying the key actions from that and the further information.

Glint and Reflectivity

Condition 22 - Glint and Glare Adaptive Management Plan

The Consent Holder must prepare and implement a Glint and Glare Adaptive Management Plan (GGAMP) to address any substantiated adverse glint and glare impacts on affected parties and/or the surrounding road network as identified in the Glint and Glare Analysis Report (dated 25 June 2024). The GGAMP must include the following:

- (a) Details of screening to be established in line with the Glint and Glare Analysis
 Report (dated 25 June 2024) as updated by the memo: Darfield Agrivoltaic
 Development: Request for Additional Information (S92) Response, Mansergh
 Graham, Dated 9 December 2024. For the avoidance of doubt, temporary
 screening is required to be in place prior to panel tracking operations
 commencing and erected and regularly maintained to a height of 3 metres to
 mitigate effects of "Yellow glare" until such time as the mitigation screening
 vegetation growth reaches a minimum height of 3m.
- (b) Contact Information: The GGAMP must provide contact details for the Consent Holder and their agent responsible for addressing glint and glare complaints, ensuring that affected parties have a direct line of communication for reporting issues.
- (c) Reporting Procedures: The plan must include procedures for reporting glint and glare issues by affected parties, <u>including Road Controlling Authorities and KiwiRail for any road or rail network affected by "Yellow glare" or "Green glare"</u>. This includes:
 - i. The process for lodging a complaint.
- ii. The timeline within which the Consent Holder must acknowledge receipt of the complaint.
 - iii. A detailed timeline for the investigation and response process, ensuring that any substantiated glare issues reported are addressed promptly and effectively within a specified timeframe.
 - iv. Adaptive Management Strategies: The GGAMP should detail a range of possible mitigation solutions to address reported glint and glare issues. These solutions may include but are not limited to, physical alterations to the solar farm setup, installation of screening or landscaping to block or diffuse glare, and adjustments to the operational procedures of the solar farm (such as tracking management).
- (d) Monitoring and Evaluation: The Consent Holder must implement a monitoring regime to assess the effectiveness of the mitigation measures implemented under the GGAMP, including any road or rail network affected by "Yellow glare" or "Green glare". This includes feedback from affected parties on the resolution of reported glare issues.
- (e) Duration of the Plan: Unless otherwise authorised by the Consent Authority, the GGAMP must be implemented for whichever is the greater duration of the following:

- i. A period of three years following the mitigation planting obtaining the minimum 3m height; Or
- ii. For a year following any remedial action undertaken.

 During this period, the Consent Holder is obligated to respond to and manage glint and glare complaints as per the procedures outlined in the GGAMP.
- (f) Review and Reporting: The Consent Holder must submit an Annual Report to the Consent Authority if requested, summarising the glint and glare complaints received, actions taken, and the effectiveness of the mitigation measures implemented. The Annual Report may also recommend whether ongoing management of glint and glare issues is required along with any relevant supporting information.

Advice Note

An adaptive management plan offers a flexible and responsive approach to managing glint and glare that may arise from the approved agrivoltaic activity, recognising the inherent challenges and uncertainties in accurately predicting glare impacts ahead of time. This approach allows for real-time monitoring and addressing of actual impacts as they occur, rather than relying solely on predictive models that may not fully capture the dynamic and variable nature of sunlight and its interactions with the environment. By focusing on adaptive measures, the plan can more efficiently respond to affected parties' concerns, ensuring that mitigation strategies are directly tailored to the specific conditions and experiences of those impacted.

Tracey Morse BSc BSocSc(Hons) MNZPI Senior Planner NZ Clean Energy www.nzcleanenergy.nz tracey@nzcleanenergy.nz



Please note that I work flexible hours, which includes sending emails outside of normal office hours. There is no need to respond to my emails outside of your working hours.

From: Kate Bonifacio < <u>Kate.Bonifacio@nzta.govt.nz</u>>

Sent: Monday, 3 March 2025 3:02 pm

To: Tracey Morse < tracey@nzcleanenergy.nz>

Subject: RE: Darfield Solar - Proposed Conditions CRM:0093177760

Good Afternoon Tracey,

I am wondering if we need to clarify how long the temporary screening needs to be in place for, ie: until such time the plantings meet 3m in height, or is this further defined/discussed in the GGAMP. Also we need to ensure this is in place prior to the panels tracking I am thinking....

Kind Regards Kate

From: Tracey Morse < tracey@nzcleanenergy.nz>

Sent: Monday, 3 March 2025 2:45 pm

To: Kate Bonifacio < <u>Kate.Bonifacio@nzta.govt.nz</u>>

Cc: Andrew Brown (andrew.brown@mitchelldaysh.co.nz)

<andrew.brown@mitchelldaysh.co.nz>; Don McKenzie <don@dmconsulting.co.nz>

Subject: RE: Darfield Solar - Proposed Conditions CRM:0093177760

You don't often get email from tracey@nzcleanenergy.nz. Learn why this is important Kia ora Kate,

I can confirm that these two requested conditions align with conditions in our application / that have come through from SDC as a result of our comms to date, as follows (taken from a set of draft conditions received from SDC on 27/02/2025 for our comment – both of which we will be accepting):

New Condition – Rural Vehicle Movements

xxx. Prior to the commencement of construction on the site, the Consent Holder shall upgrade the SH73/Homebush Road intersection to include seal widening on the western side of SH1, in accordance with NZTA Planning Policy Manual Diagram E, at the expense of the Consent Holder.

Advice note: Separate to any requirements under the Resource Management Act 1991, there may be other legislative requirements that regulate works within the State Highway corridor. Further advice should be sought from NZTA.

Glint and Reflectivity

Condition 22 - Glint and Glare Adaptive Management Plan

The Consent Holder must prepare and implement a Glint and Glare Adaptive Management Plan (GGAMP) to address any substantiated adverse glint and glare impacts on affected parties and/or the surrounding road network as identified in the Glint and Glare Analysis Report (dated 25 June 2024). The GGAMP must include the following:

- (a) Details of screening to be established in line with the Glint and Glare Analysis
 Report (dated 25 June 2024) as updated by the memo: Darfield Agrivoltaic Development:
 Request for Additional Information (S92) Response, Mansergh Graham, Dated 9
 December 2024. For the avoidance of doubt, temporary screening is required to a
 height of 3 metres to mitigate effects of "Yellow glare".
- (b) Contact Information: The GGAMP must provide contact details for the Consent Holder and their agent responsible for addressing glint and glare complaints, ensuring that affected parties have a direct line of communication for reporting issues.
- (c) Reporting Procedures: The plan must include procedures for reporting glint and glare issues by affected parties, <u>including Road Controlling Authorities and KiwiRail for any road or rail network affected by includes:</u>

 "Yellow glare" or "Green glare". This includes:
 - i. The process for lodging a complaint.
- ii. The timeline within which the Consent Holder must acknowledge receipt of the complaint.

- iii. A detailed timeline for the investigation and response process, ensuring that any substantiated glare issues reported are addressed promptly and effectively within a specified timeframe.
 - iv. Adaptive Management Strategies: The GGAMP should detail a range of possible mitigation solutions to address reported glint and glare issues. These solutions may include but are not limited to, physical alterations to the solar farm setup, installation of screening or landscaping to block or diffuse glare, and adjustments to the operational procedures of the solar farm (such as tracking management).
- (d) Monitoring and Evaluation: The Consent Holder must implement a monitoring regime to assess the effectiveness of the mitigation measures implemented under the GGAMP, including any road or rail network affected by "Yellow glare" or "Green glare". This includes feedback from affected parties on the resolution of reported glare issues.
- (e) Duration of the Plan: Unless otherwise authorised by the Consent Authority, the GGAMP must be implemented for whichever is the greater duration of the following:
- i. A period of three years following the mitigation planting obtaining the minimum 3m height; Or
- ii. For a year following any remedial action undertaken.

 During this period, the Consent Holder is obligated to respond to and manage glint and glare complaints as per the procedures outlined in the GGAMP.
- (f) Review and Reporting: The Consent Holder must submit an Annual Report to the Consent Authority if requested, summarising the glint and glare complaints received, actions taken, and the effectiveness of the mitigation measures implemented. The Annual Report may also recommend whether ongoing management of glint and glare issues is required along with any relevant supporting information.

Advice Note

An adaptive management plan offers a flexible and responsive approach to managing glint and glare that may arise from the approved agrivoltaic activity, recognising the inherent challenges and uncertainties in accurately predicting glare impacts ahead of time. This approach allows for real-time monitoring and addressing of actual impacts as they occur, rather than relying solely on predictive models that may not fully capture the dynamic and variable nature of sunlight and its interactions with the environment. By focusing on adaptive measures, the plan can more efficiently respond to affected parties' concerns, ensuring that mitigation strategies are directly tailored to the specific conditions and experiences of those impacted.

I trust that is sufficient to ensure NZTA's concerns are addressed within the application, although I'm happy to discuss if you'd like any alternative resolution.

Ngā mihi,

Tracey Morse BSc BSocSc(Hons) MNZPI Senior Planner NZ Clean Energy www.nzcleanenergy.nz tracey@nzcleanenergy.nz



Please note that I work flexible hours, which includes sending emails outside of normal office hours. There is no need to respond to my emails outside of your working hours.

From: Don McKenzie < don@dmconsulting.co.nz >

Sent: Monday, 3 March 2025 9:06 am

To: Kate Bonifacio < Kate.Bonifacio@nzta.govt.nz >

Cc: Tracey Morse < tracey@nzcleanenergy.nz; Andrew Brown

(andrew.brown@mitchelldaysh.co.nz) <andrew.brown@mitchelldaysh.co.nz>

Subject: RE: Darfield Solar - Proposed Conditions CRM:0093177760

Kate

This works for me. I have just copied in Tracey and Andrew from the Applicant team to make sure the glare/glint planting/screening is consistent with what has been discussed previously.

Regarding the shoulder widening - is there any push-back you and NZTA can make with respect to that odd extra temporary speed limit suggestion that came through from Mat Collins?

Kind regards | Ngā mihi

Don

E: don@dmconsulting.co.nz

From: Kate Bonifacio < Kate.Bonifacio@nzta.govt.nz >

Sent: Monday, 3 March 2025 8:59 am

To: Don McKenzie < don@dmconsulting.co.nz>

Subject: Darfield Solar - Proposed Conditions CRM:0093177760

Good Morning Don,

Please see suggested condition wording, changes/amendments are welcomed,

Traffic Condition

The sealed shoulder widening approach to Homebush Road on State Highway 73 is to be upgraded as per the NZ Transport Agency Planning Policy Manual Diagram E and as agreed with the NZ Transport Agency Safety and Network Management Team.

Glint and Glare Condition

Temporary screening to a minimum height of 3m shall be erected prior to the tracking activity of the panels commencing, and subject to regular maintenance until such time as the above mitigation planting achieves the minimum height of 3m; and

Kind Regards Kate

From: Don McKenzie < don@dmconsulting.co.nz >

Sent: Friday, 28 February 2025 3:00 pm

To: Kate Bonifacio < <u>Kate.Bonifacio@nzta.govt.nz</u>> **Cc:** Tracey Morse < <u>tracey@nzcleanenergy.nz</u>> **Subject:** RE: Darfield Solar - Proposed Conditions

Kate

That would be appropriate from a traffic point of view as the Diagram E is what we had used to formulate the "sketch" I sent previously.

I hope you and James might be able to assist with pushing back on the TSL matter raised by Council below (almost on your behalf) given there is agreement from your perspective on the removal of the 80 vph cap.

Kind regards | Ngā mihi

Don

E: don@dmconsulting.co.nz

From: Kate Bonifacio < <u>Kate.Bonifacio@nzta.govt.nz</u>>

Sent: Friday, 28 February 2025 2:56 pm

To: Don McKenzie < don@dmconsulting.co.nz > **Subject:** RE: Darfield Solar - Proposed Conditions

Hi Don,

Great timing -I was about to email you about this! I am thinking about the wording of a condition requiring the type E shoulder widening now that there is agreement to remove the requirement for the 80 veh/hr cap that had previously been agreed between NZTA and the developer. Any thoughts?

Kind Regards Kate

From: Don McKenzie <don@dmconsulting.co.nz>

Sent: Friday, 28 February 2025 2:50 pm

To: James Long James.Long@nzta.govt.nz>; Kate Bonifacio <Kate.Bonifacio@nzta.govt.nz>

Cc: Tracey Morse < tracey@nzcleanenergy.nz **Subject:** Darfield Solar - Proposed Conditions

Hope Friday afternoon is going OK?

We are getting towards the pointy bit of the consent agreement with Selwyn District Council. There is one condition proposed (probably coming from Mat Collins) that is talking about temporary speed limits through the intersection during the course of the project (ongoing and relating to periods when right turn volumes into Homebush Road exceed a certain level). I'd like to get your take on the requirement for this as a traffic management measure throughout the construction period. We are not quite sure whether SDC is seeking during the works period at the intersection or throughout the solar farm construction period. I had recollections of our latest meeting saying that a TSL was not supported by NZTA and wasn't required if the additional sealed should was implemented (as now proposed).

The suggested CTMP condition wording is as follows. Bold text is that suggested/added by Council. Of concern is 8(d).

Condition 8

The CTMP shall include, but not be limited to:

- (a) Construction traffic routes;
- (b) Measures to control the numbers of vehicles turning right into Homebush Road off SH 73
- such that they do not exceed 80 vehicles per hour
- (c) Measures to manage traffic at the Homebush Road railway crossing;
- (d) Nature and duration of any temporary traffic management proposed <u>including</u> the ongoing use of temporary warning signage and a temporary speed reduction on SH73 to 80 km/hr near the SH73/Homebush Road intersection, to be operational at times when the number of right turning vehicles exceeds 35 vehicles per hour. It is noted that any such traffic management measures would be subject to the approval of NZTA; and
- (e) Measures to prevent, monitor and remedy tracking of debris onto public roads and dust onto sealed sections; **and**
- (f) provision of sufficient onsite access and manoeuvring space, and parking spaces.

New Advice Note - Homebush Road Rail Crossing

Advice note: Separate to any requirements under the Resource Management Act 1991, there may be other legislative requirements that regulate access or crossing rights or rail infrastructure, including the Homebush Road level rail crossing. Further advice should be sought from KiwiRail.

Look forward to any thoughts.

Kind regards | Ngā mihi

Don



Email: don@dmconsulting.co.nz

This message, together with any attachments, may contain information that is classified and/or subject to legal privilege. Any classification markings must be adhered to. If you are not the intended recipient, you must not peruse, disclose, disseminate, copy or use the message in any way. If you have received this message in error, please notify us immediately by return email and then destroy the original message. This communication may be accessed or retained by NZ Transport Agency Waka Kotahi for information assurance purposes.

This message, together with any attachments, may contain information that is classified and/or subject to legal privilege. Any classification markings must be adhered to. If you are not the intended recipient, you must not peruse, disclose, disseminate, copy or use the message in any way. If you have received this message in error, please notify us immediately by return email and then destroy the original message. This communication may be accessed or retained by NZ Transport Agency Waka Kotahi for information assurance purposes.

This message, together with any attachments, may contain information that is classified and/or subject to legal privilege. Any classification markings must be adhered to. If you are not the intended recipient, you must not peruse, disclose, disseminate, copy or use the message in any way. If you have received this message in error, please notify us immediately by return email and then destroy the original message. This communication may be accessed or retained by NZ Transport Agency Waka Kotahi for information assurance purposes.

This message, together with any attachments, may contain information that is classified and/or subject to legal privilege. Any classification markings must be adhered to. If you are not the intended recipient, you must not peruse, disclose, disseminate, copy or use the message in any way. If you have received this message in error, please notify us immediately by return email and then destroy the original message. This communication may be accessed or retained by NZ Transport Agency Waka Kotahi for information assurance purposes.

This message, together with any attachments, may contain information that is classified and/or subject to legal privilege. Any classification markings must be adhered to. If you are not the intended recipient, you must not peruse, disclose, disseminate, copy or use the

message in any way. If you have received this message in error, please notify us immediately by return email and then destroy the original message. This communication may be accessed or retained by NZ Transport Agency Waka Kotahi for information assurance purposes.