

Before the Expert Panel

FTAA-2504-1054

Under **Fast-track Approvals Act 2024**

In the matter of an application for approvals in relation to the Ryans Road Industrial Development

By **Carter Group Limited**
Applicant

Supplementary statement of evidence of Justin Evans (Pedersen Read)

28 April 2026

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SUPPLEMENTARY STATEMENT OF EVIDENCE OF JUSTIN EVANS (PEDERSEN READ) REGARDING CONDITIONS RELATING TO LIGHTING

Introduction

- 1 My name is Justin Evans. I hold a Bachelor of Engineering (Electrical) and am a Chartered Professional Engineer. I am a Director of Pedersen Read Limited. I have experience in the design and assessment of exterior lighting, including projects within and in the vicinity of Christchurch International Airport.
- 2 I prepared the assessment of environmental effects for the artificial lighting associated with the proposed Ryans Road Industrial Development **(Project)**¹.
- 3 I have been asked by the Applicant to prepare this supplementary statement in relation to the aspects of the draft decision and draft conditions for the Project, and in particular, the comments received on the draft conditions relating to lighting from Airways Corporation of New Zealand Limited **(Airways)** and Christchurch International Airport Limited **(CIAL)**.
- 4 I confirm that I have read and considered the comments provided by Airways and CIAL in relation to lighting.
- 5 The purpose of this statement is to respond to the specific matters raised in those comments, including, where relevant, explaining amendments proposed to the draft conditions in response, and confirming whether I maintain the conclusions reached in my earlier evidence.

Code of practice for expert witnesses

- 6 I have prepared this statement of evidence in my capacity as an expert, and I acknowledge that I have read and understand the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2023. I have complied with it when preparing this statement of evidence. Other than where I state that I am relying on the evidence of another person, my evidence is 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.

¹ Appendix 15 of the Application – Assessment of Environmental Effects (Lighting) Revision: D 7/03/2025

CIAL and Airways comments

- 7 I have reviewed the comments provided by CIAL and Airways in relation to the draft lighting Conditions 9, 10, 11, 12, and 14 (land use) and condition 84 (subdivision).
- 8 In my opinion, the central theme of the comments received from CIAL and Airways is concern that the draft lighting conditions lack sufficiently specific, measurable performance criteria to control potential effects of lighting on aircraft operations. In particular, the comments note that the conditions rely primarily on consultation and the submission of lighting plans, without clearly identifying the standards or benchmarks against which those plans are to be assessed.
- 9 In response to those comments, I have recommended amendments to the lighting conditions to provide clearer, performance-based controls, while maintaining consistency with the assessments and conclusions set out in my earlier evidence.
- 10 Specifically, I recommend a more unified and performance-based approach to the control of lighting effects across the development in a **new land use consent condition (9A)**. I consider it preferable to introduce a consolidated “universal exterior lighting” condition that applies to all exterior lighting within the site with measurable performance criteria in addition to the existing conditions that require compliance with District Plan standards.
- 11 This approach would establish clear and measurable limits on key lighting parameters affecting the potential for exterior lighting to affect airway operations (such as glare, intensity, transition speeds and colour temperature), providing an objective framework against which compliance can be assessed and enforced. More stringent or targeted controls (such as restrictions within the 500-metre runway buffer, or controls specific to illuminated signage and construction lighting) can then be applied in addition to those universal parameters through the earlier proposed conditions.
- 12 In my opinion, this approach provides a consistent, transparent, and technically robust pathway to compliance. It directly addresses the aviation safety concerns raised by CIAL and Airways by focusing on the minimisation of effects to airway operations via control of measurable lighting parameters.
- 13 In addition to the above CIAL have also provided comment on the land use and subdivision construction lighting conditions, seeking no artificial construction lighting during the hours of darkness. In my view, this is not

necessary. I am satisfied that the applicant's proposed **Condition 10** (Construction Lighting) in combination with the proposed Condition 9A (Universal Exterior Lighting Condition) is appropriate and adequately addresses potential adverse effects on airways operations, while allowing for critical lighting during the hours of darkness in a limited set of circumstances, following consultation with CIAL.

- 14 For clarity, Condition 10 has been amended to refer to the universal lighting condition and to further clarify that artificial lighting shall only be operated for the minimum duration and intensity necessary for safe construction activity and must be removed immediately upon completion of the relevant works. I consider those amendments to be an appropriately precautionary response to CIAL and Airway's comments.
- 15 I have also made some minor text amendments to 9B, 10 and 11 to improve the workability and clarity of the proposed conditions and to address specific comments made by CIAL and Airways, including:
 - (a) **Condition 9B** (Glare): Comments raised by CIAL and Airways have been addressed through the proposed universal exterior lighting condition. In this context, I do not consider the additional amendments sought by CIAL and Airways to be necessary, nor do I consider that they would add material benefit in terms of addressing potential adverse lighting effects.
 - (b) **Condition 12** (Lighting within 500m runway threshold): I consider CIAL and Airways' recommendation that the condition should not be limited to loading areas to have some merit, and I have therefore recommended that Condition 12 be amended so that it now applies more broadly to outdoor areas and parking areas.
 - (c) **Condition 14** (Signs): I acknowledge CIAL and Airway's comments regarding the potential ambiguity regarding restrictions on illuminated signage within that area. In response, I have recommended that the condition refers to the universal exterior lighting condition (condition 9A). I consider this an appropriate response to deal with the matters raised.
- 16 Those proposed amended conditions are attached as **Appendix 1** to this statement, with amendments and additions underlined.
- 17 Overall, I confirm that the proposed draft conditions are appropriate and adequately mitigate the potential adverse lighting effects.

Conclusion

- 18 I consider that the amended lighting conditions appropriately respond to the issues raised by CIAL and Airways and represent a robust approach to managing potential aviation-related lighting effects.
- 19 Subject to compliance with the proposed conditions, and on the basis that the compliance with CAA and Christchurch District Plan requirements is achievable, I confirm that I maintain the conclusions reached in my earlier AEE (lighting) that the lighting effects of the Project will be **no greater than minor**.

Dated 28 April 2026



Justin Evans

APPENDIX 1: AMENDED LIGHTING CONDITIONS

Condition 9A - Universal Exterior Lighting

All lighting associated with, construction and future development on Lots 1–126, including exterior lighting, interior lighting visible from the exterior, yard lighting, façade lighting, security lighting, temporary lighting, and illuminated signs, but excluding vehicle headlights, traffic signal lights, emergency warning lights and other lighting exempt under AS/NZS 4282:2023, shall be designed, installed and operated in accordance with the requirements set out below:

1. Design requirements:

- a. All exterior luminaires shall be of flat glass / full cut-off type and shall be installed so that no light is emitted above the horizontal. Lighting shall be designed to avoid high-intensity point sources visible to aircraft.
- b. All exterior luminaires shall be installed with zero tilt (ie. aimed directly downwards) and shall have a zero upward light ratio (ULR = 0) when installed.
- c. Exterior lighting shall use a correlated colour temperature (CCT) of 3000K or less.
- d. Exterior lighting shall not flash, strobe, pulse, chase, scroll, or similar, nor change colour in a manner that may be confused with aeronautical lighting. Any dimming or switching transitions shall occur over not less than 5 seconds. In locations where operational or safety requirements necessitate lighting to activate instantly, potential effects associated with abrupt changes in luminance shall instead be mitigated through alternative measures, including the use of tinted glazing, skylight treatments, shielding, or other design measures to limit visibility of the light source from outside the site.
- e. Lighting shall, where practicable, incorporate timers, dimming controls, motion sensors, or other adaptive controls to reduce unnecessary operation outside periods of use.
- f. Lighting shall not utilise coloured lighting visible externally.
- g. Decorative lighting of facades is not permitted.
- h. All exterior lighting shall be designed, installed and operated such that the luminous intensity (I) of each luminaire does not exceed the limits specified in AS/NZS 4282:2023 for the environmental zone A2.

2. Lighting Plan:

- a. Prior to issue of building consent for development activities on lots 1 – 126 the Consent Holder for that lot shall submit to CCC (via email to rcmon@ccc.govt.nz) a site-specific Lighting Plan prepared by a suitable qualified Lighting Engineer certifying compliance with the design requirements in 1 a) to h) above.
- b. Once certified, the lighting plan for the specified lot must be implemented at all times by the owners and operators of lots 1 – 126.

Advice Note: Conditions 9B, 10, 11 and 12 must also be complied with.

Condition 9B – Glare

a. Future development and construction activities on Lots 7 – 126 for industrial purposes must comply with the District Plan Glare rules in 6.3.4.1 Permitted activities Control of Glare attached as **Appendix 1 [Schedule 4]** to this decision.

b. For the future development of Lots 7 - 126 for industrial purposes a site-specific lighting plan and assessment prepared by a suitably qualified lighting engineer must be submitted to CCC for certification prior to issue of any building consent to demonstrate compliance with NC1 and NC2 as follows:

i. Within 500m of the threshold of a runway at Christchurch International Airport, those being lots or specific portions of lots 92, 109, 110, 111, 112, 113, 114, 115, 121, 122, 123 and 124 (as shown on the Capture Land Development Plans November 2025) any activity will not result in greater than 2.5 lux spill (horizontal or vertical) on to any land outside of the Specific Purpose Airport Zone.

ii. For lots 7 - 126 assessment against NC2 to ensure non-aeronautical ground lights do not shine above the horizontal.

iii. For lots 7 – 126 the design of lighting and illuminated surfaces shall, as far as reasonably practicable in the opinion of the suitably qualified and experienced lighting engineer, avoid the use of highly reflective or specular materials, and shall minimise the reflectance of surfaces that are directly illuminated, to reduce the potential for reflected glare.

Advice note: *In accordance with Condition 21, on-going compliance with this condition (b) shall be ensured by way of a covenant pursuant to section 1082(d) of the RMA registered against the Computer Freehold Register to issue for each lot (as detailed below) of the subdivision.*

Condition 10 – Construction Lighting

a. No construction activities on Lots 1-126 requiring external artificial lighting may occur during the hours of darkness, except where:

- i. A temporary works management plan addressing construction lighting and notification protocols is prepared. [*Advice note: Such a plan should be prepared in accordance with Christchurch Airport’s “Requirements for Working at the Airport” document*]; and
- ii. Airport operator consent is obtained from Christchurch International Airport Limited; and
- iii. Any relevant Civil Aviation Authority (CAA) authorisation is obtained under Civil Aviation Rule Part 77; and
- iv. Construction lighting is operated in accordance with all requirements specified in clauses i-iv. of this condition and the Universal Exterior Lighting Condition 9A(1).

b. External artificial lighting operated in accordance with clause a. of this condition shall only be operated for the minimum duration and intensity necessary for safe construction activity and be removed immediately upon completion of the relevant works.

Advice note: *In accordance with Condition 21, on-going compliance with this condition shall be ensured by way of a covenant pursuant to section 1082(d) of the RMA registered against the Computer Freehold Register to issue for each lot (as detailed below) of the subdivision.*

Condition 11 – Control of Light Spill

a. Future development and construction activities on lots 1 – 126 for industrial purposes must comply with the District Plan Light Spill rules in 6.3.5.1 Permitted Activities Control of Light Spill and 6.3.6 Light Spill Standards by Zone for Industrial zones (permitted lux spill horizontal or vertical 20 Lux) attached as **Appendix 1 [Schedule 5]** to this decision.

Advice Note: *The light spill standards specified in Rule 6.3.5.1 require the light spill received at the point of measurement comply with the receiving zone standard, not the generating zone.*

Advice Note: *Condition 9A, 9B, 10 and 12 and 14 must also be complied with.*

Condition 12 – Lighting within 500m Runway Threshold

Future development and construction activities within 500m of the threshold of a runway at Christchurch International Airport, those being lots or specific portions of lots 92, 109, 110, 111, 112, 113, 114, 115, 121, 122, 123 and 124 (as shown on the Capture Land Development Plans), must comply with the following:

- a. No illuminated signage shall be installed within 500m of the runway.
- b. There shall be no loading areas within 500m of the runway operating outside daylight hours to avoid the need for yard lighting.
- c. Outdoor areas and parking within 500m of the runway must be designed and operated such that illumination does not exceed the PR4 standard (>1.3lux average, <2.5lux max).

Advice Note: In accordance with Condition 21, on-going compliance with this condition shall be ensured by way of a covenant pursuant to section 108(d) of the RMA registered against the Computer Freehold Register to issue for each lot (as detailed below) of the subdivision.

Condition 14 – Signs

Any signs part of the future industrial development of lots 1 – 126 must comply with the District Plan Sign Rules in 6.8.4 attached as **Appendix 1 [Schedule 7]** to this decision, as if the site were zoned Industrial General (not Rural Urban Fringe). Except that:

- a. There shall be no LED/ Digital Signs or Billboards permitted by this consent, and
- b. Freestanding signs shall not be located within or forward of the 3m wide landscape strip on the Grays Road and Ryans Road frontages, other than a single free-standing sign in association with the vehicle/ pedestrian access to the site.

Advice Note: *Illuminated signs will need to meet the ~~glare and light spill~~ requirements of Conditions 9A, 9B, 11 and 12 ~~11~~ above.*