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**<br>Applicant |

# Supplementary statement of evidence of Andrew Victor Shelley (Fenix)

12 March 2026

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**Supplementary statement of Andrew Victor Shelley (Fenix)**

## Introduction

1 My name is Andrew Victor Shelley.

2 I provided a statement of evidence to the Expert Panel on 23 February 2026. My qualifications and experience are set out in that statement.

3 This further statement of evidence is prepared in response to the questions raised by the Expert Panel in Minute 13. In particular, this statement addresses:

(a) Distances from the Garden City Helicopters (GCH) Touchdown and Lift-off (TLOF) area [refer Minute 13, paragraphs 20-22];

(b) CAA Advisory Circular AC139-8 and the Australian NASF Guideline H [refer Minute 13, paragraphs 23-29]; and,

(c) The DME approach [refer Minute 13, paragraphs 30-32].

4 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 my statement of evidence.

## Distances from the Garden City Helicopters TLOF

5 Included as **Attachments 1 and 2** to this statement are diagrams illustrating the GCH Aeronautical Information Publication (AIP) and arrival/departure paths from the GCH TLOF, as requested by the panel in paragraphs 20-22 of minute 13.

6 **Attachment 1** is provided for context and shows the relevant arrival and departure paths for GCH Aviation relative to existing buildings and the subject site. This diagram was created by overlaying the arrival/departure paths from the GCH AIP onto a March 2025 aerial photograph. This diagram shows:

(a) The ‘Copter West’ Departure does not start from the helipad because the GCH complex itself is an obstruction. In this instance a helicopter would need to track north on take-off until it was well clear of the GCH building, then turn west and follow the procedure.

(b) The ‘Copter East’ Arrival, as depicted in the AIP, tracks parallel to George Bellew Road, between the road to the north of the arrival track and powerlines to the south. The arrival track is closer to the road than the powerlines and passes over a number of industrial buildings. The AIP does not show the complete track of the helicopter into the helipad, with the indicated track terminating before Grays Rd. In the absence of an indication to the contrary, it is reasonable to assume that helicopters will fly a straight-ahead approach that brings them over the GCH driveway.

(c) The ‘Copter North’ arrival/departure tracks to the west of a building on the corner of George Bellew Rd and Grays Rd.

7 **Attachment 2** shows the ASI-1204 overlay of the GCH arrival and departure flight paths as provided by CIAL. The project site is shown, with Lots 71, 91, 92, 121 and 122 that are subject to new condition 21D identified in blue. Radial distances from the TLOF area are shown in white and selected key distances from the TLOF area are shown in pink.

8 The arrival and departure flight paths (in black) show:

(a) For the ‘Copter South’ and ‘Copter North’ arrival and departure paths, the Final Approach and Take-off (FATO) – which provides the starting point for establishing the obstacle limitation surfaces – is co-located with the TLOF.

(b) For the ‘Copter West’ departure and ‘Copter East’ arrival, a notional FATO exists over the driveway into the GCH complex, and the obstacle limitation surfaces begin from this location rather than the TLOF.

9 For clarity, the TLOF is the load-bearing surface where the helicopters actually touchdown and lift off; the FATO is the location where the final approach ends on an arrival and where the take-off commences on a departure. In the case of the 'Copter West' departure the helicopter would hover-taxi between the TLOF and FATO.

10 The distances marked on **Attachment 2** show:

(a) Within the southern approach pathway to the GCH heliport TLOF, the closest distance between proposed buildings on the subject site and the heliport TLOF are as follows:

(i) Lots 71, 91 and 92 are between approximately 360m and 400m from the centre of the TLOF; any buildings on these lots will be

subject to a specific aviation risk assessment by way of Condition 21D;

(ii) Lots 72, 90, and 93 are approximately 400m from the centre of the TLOF, as evident from the radial distances;

(iii) At its closest point, the building on Lot 121 is approximately 187.7m from the centre of the TLOF; any buildings on this lot will be subject to a specific aviation risk assessment by way of Condition 21D;

(iv) At its closest point, the building on Lot 122 is approximately 200m from the centre of the TLOF; any buildings on this lot will be subject to a specific aviation risk assessment by way of Condition 21D;

(v) Other buildings on the subject site are at least 200m (and generally >400m) beyond the centre of the TLOF, as evident from the radial distances.

(b) Within the northern approach pathway to the GCH heliport TLOF, the closest distance between existing buildings on other sites and the heliport TLOF are as follows:

(i) 103.2m to the southeast corner of the GCH Aviation building for the 'Copter West Departure' (noting other parts of this same building are considerably closer);

(ii) 144.9m to the nearest point where the OLS for the 'Copter East Arrival' passes over the long warehouse building to the southeast (a distribution centre for a business called 'Online Distribution');

(iii) 235.3m to the nearest part of the building to the east-southeast (a distribution centre for a business called 'Geofabrics New Zealand');

(iv) A number of other buildings are between 200m and 800m of the TLOF (and beyond), as evident from the radial distances.

## CAA Advisory Circular AC139-8

*Para 24 - Weight afforded to AC139-8*

11 Firstly, I note that AC139-8 is directed at aerodrome operators (i.e., it provides guidance for aerodrome/heliport design rather than something that applies directly to third parties developing land outside an aerodrome).

12 Notwithstanding, paragraphs 4.1-4.2 and 4.6-4.8 of my statement of evidence (23 February 2026) distinguishes the mandatory nature of Civil Aviation Rules (CAR) that must be complied with, from Advisory Circulars (AC) *"which may specify an acceptable means of compliance with the relevant CARs, and which will also provide general guidance for complying with the relevant rules"*.

13 AC139-8 also specifically states the following:

**General**

Civil Aviation Authority (CAA) Advisory Circulars (ACs) contain information about standards, practices, and procedures that the Director has found to be an **acceptable means of compliance** with the associated rule.

Consideration will be given to other methods of compliance that may be presented to the Director. When new standards, practices, or procedures are found to be acceptable they will be added to the appropriate AC.

**Purpose**

This AC describes an acceptable means of compliance with the general requirements for design and layout of heliports under Civil Aviation Rule Part 139 *Aerodromes Certification, Operation and Use*.

14 Given the context above, I consider that where compliance is achieved with AC139-8, this should be given significant weight, on the basis that the Director of CAA has established this as an acceptable means of compliance with the associated rule.

15 To the extent that compliance is not achieved with any aspect of AC139-8, I consider that limited weight should be afforded to that fact, on the basis that AC139-8 explicitly recognises that there are other methods of achieving compliance with the associated rule. Where compliance is not achieved, it is necessary to assess the merits of the alternative methods proposed.

*Para 25- Assessment against relevant requirements of AC139-8*

16 The relevant requirements of AC139-8 are those set out on page 13, section 4.1.1-4.1.4 of AC139-8.[1] An assessment of these requirements is set out in the table below, with reference to the Capture plan RC-PG125 which accurately depicts the obstacle limitation surface for the GCH 'Copter South' arrival/departure if the helicopter does not cross Grays Road. For ease of reference, a copy of Capture plan RC-PG125 is included as **Attachment 3**.

17 The assessment in the table confirms that the proposal (as governed by conditions of consent) will meet the requirements of advisory circular AC139-8.

| **AC139-8 requirements** | **Assessment of the proposal (refer Capture plan RC-PG125)** |
|---|---|
| ***4.1 Obstacle limitation surfaces and sector Approach and take-off climb surface*** | |
| *4.1.1 The heliport should have sufficient approach and take-off climb surfaces to ensure that a helicopter can conduct a landing or take off in the existing wind conditions.* | ✓ The proposal provides appropriate approach and take-off climb surfaces to the south of the GCH heliport, as detailed below in response to AC139-8 section 4.1.2.<br>✓ In addition, condition 21D provides for more detailed assessment of development of that part of the site immediately south of the GCH heliport (specifically Lots 71, 91, 92, 121, 122). |
| *4.1.2 The approach and take-off climb surface should:* | |
| *(a) extend from the edge of the safety area* | ✓ The approach and climb surface (purple lines) extends from the edge of the safety area around the helipad. |
| *(b) have an inner edge that is at least equal in length to the width or diameter of the FATO plus the safety area to either side* | ✓ The 'inner edge' of the surface is at least as wide as the width or diameter of the FATO plus the safety area to either side. |
| *(c) for day operations, have sides splaying out at 1:10 until the surface is 7 rotor diameters wide, after which they may become parallel* | ✓ For day operations, the surface has sides splaying out at 1:10 until the surface is 7 rotor diameters wide, after which they become parallel. The day |

[1] Sections 4.1.5-4.1.8 apply to helidecks, shipboard heliports, and midship heliports and are not applicable here. Sections 1, 2, 3, 5 and 6 in AC139-8 are also not relevant to, or are unaffected in any respects by, the proposal (e.g. relating to physical characteristics of heliports, visual aids, etc).

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| | surface is depicted by a thin purple line inside the thicker purple lines that depicts the surface required for night. |
| *(d) for night operations, have sides splaying out at 1:6.66 until the surface is 10 rotor diameters wide, after which they may become parallel* | ✓ For night operations, the surface has sides splaying out at 1:6.66 until the surface is 10 rotor diameters wide, after which they become parallel. The night surface is depicted by the thick purple lines. |
| *(e) have an obstacle free gradient not steeper than 1:8* | ✓ The surface has a slope of 12.5% (which is 1:8). This is depicted by the dash-dot centre line of the splayed part of the surface, and also by the labels +10m, +20m, +30m, etc annotated at the right hand side of the depicted surface. |
| *(f) terminate at an elevation of 500 feet above the inner edge which equates to 1220 m horizontally from the inner edge and* | ✓ The surface should terminate at 500 feet above the inner edge. 500 feet is 152.4m, which takes the surface beyond the southern extent of the Capture plan. |
| *(g) where a turned flight path is required —*<br>*(i) not turn below 100 feet above the inner edge elevation*<br>*(ii) not turn through more than 120°*<br>*(iii) have a turning radius, on centre line, of not less than 270 m.* | ✓ With the current 'Copter South' arrival/departure this is not relevant.<br>✓ If a turned flight path was required as a result of a further assessment per condition 21D then this condition would continue to be met. |
| ***Operational safety*** | |
| *4.1.3 A major safety consideration of a heliport is the availability of suitable approach and take-off climb surfaces. Heliports should have approach and take-off paths such that, if the helicopter is not a performance Class 1 helicopter, an autorotative landing can be conducted without any undue risk to any person on the ground.* | ✓ This has been assessed in detail in section 7 of the Navigatus assessment dated 28/11/2025 and I agree with that assessment and its conclusions.<br>✓ In addition, condition 21D now proposed provides for more detailed assessment of development of that part of the site immediately south of the GCH heliport, in a manner consistent with the 'controlled area' described in section 7.5 of the Navigatus assessment. |
| *4.1.4 The approach and take-off flight paths should be over terrain which affords emergency landing areas in relation to the* | ✓ This has been assessed in detail in section 7 of the Navigatus assessment |

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| *proposed altitude of the helicopter and its autorotative performance. Ideally the approach and take-off surfaces should be over water, or land, free of third parties and with a minimum of obstructions. Approach and take-off flight paths over residential or industrial areas, playgrounds, occupied car parks, or any other populated area should be avoided.* | dated 28/11/2025 and I agree with that assessment and its conclusions.<br>✓ In addition, condition 21D now proposed provides for more detailed assessment of development of that part of the site immediately south of the GCH heliport, in a manner consistent with the 'controlled area' described in section 7.5 of the Navigatus assessment. |

**Australian NASF Guideline H**

*Para 27 - Weight afforded to NASF Guideline H*

18 Paragraph 6.3 of my 23rd February 2026 evidence states that Guideline H is specifically concerned with protecting strategically important helicopter landing sites. As set out in the table below, the GCH heliport is not a strategically important heliport and therefore Guideline H is not strictly relevant.

19 I also note that page 1 of Guideline H clearly states that *"For the purposes of this document, a Helicopter Landing Site (HLS) is an area (not located on an aerodrome) wholly or partly used for the arrival or departure of helicopters"*. As the GCH heliport is located on an aerodrome, Guideline H (which applies to strategically important HLS) does not apply.

20 Paragraph 6.8 of my evidence otherwise notes that NASF provides guidance only and that "the New Zealand regulatory regime has protections that the Australian regime does not" (meaning its guidance is of less importance in a New Zealand context).

21 For the reasons above, I consider Guideline H is informative, but it should be afforded limited weight.

*Para 28 – Is GCH heliport a strategically important heliport*

22 Paragraph 6.3 of my evidence describes the characteristics of strategic helicopter landing sites (SHLS), as detailed in Guideline H and this is summarised in the table below. Based on this assessment, the GCH heliport is not a strategically important heliport, as defined in Guideline H.

| Guideline H SHLS Characteristics | Assessment of the GCH Heliport |
|---|---|
| *a) a HLS associated with a hospital* | × While GCH provides air rescue/ambulance operations, the GCH |

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| | site is not associated with a hospital. Within the South Island, there are 11 heliports associated with a hospital and a further eight helipads directly associated with a medical centre (see para 6.4 of my evidence). |
| *b) an elevated HLS, located within a populated area* | × The GCH heliport is not an elevated HLS, located within a populated area. |
| *c) a HLS subject to instrument flight procedures* | × The GCH heliport is not subject to instrument flight procedures. |
| *d) any other facility identified as strategic by State/Territory or Commonwealth government/authorities* | × Whilst Christchurch airport is identified as strategic infrastructure in planning documents, the GCH heliport is not identified as strategic by government/authorities. |

*Para 29 – Assessment against relevant requirements of Guideline H.*

23 Notwithstanding the conclusion above that the GCH heliport is not a strategically important heliport and therefore Guideline H is not applicable, paragraph 6.8 of my evidence notes that Carter Group's consultants have nonetheless taken account of all relevant guidelines in Guideline H and the proposed constraints (conditions) on development, including new condition 21D appropriately address these. This is summarised in the table below.

| Guideline H Guidelines | Assessment of the Proposal |
|---|---|
| *Obstacle Limitation Surfaces;* | ✓ OLS for the GCH heliport have been assessed in section 6 of the Navigatus assessment dated 28/11/2025 and I agree with that assessment and its conclusions.<br>✓ In addition, condition 21D now proposed provides for more detailed assessment of development of that part of the site immediately south of the GCH heliport. |
| *Helicopter landing site flight path;* | ✓ This has been addressed as described above with reference to the specific requirements of AC139-8 sections 4.1.1-4.1.4. |
| *Trees* | ✓ Not applicable |
| *Gaseous plumes* | ✓ Not applicable |
| *Cranes* | ✓ Whilst cranes are principally managed by way of the CAR Part 77 process, |

| | |
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| | conditions 7F and 21C otherwise address this matter. |
| *Lighting* | ✓ These matters are addressed in the Pedersen Read assessment dated 07/03/2025 and in Conditions 9-11 and 21C. |
| *Windshear and turbulence* | ✓ These matters are addressed in section 8 of the Navigatus assessment and in conditions 6 and 21D and Advice Note A. |
| *Wildlife / Bird strikes* | ✓ These matters are addressed in the PDP assessment and by way of land use condition 21C (aviation risk assessment) and subdivision conditions 109-112 (wildlife management). |

## The DME approach

24 With reference to paragraphs 30-31 of the Panel's minute, I confirm that "all aircraft will be under visual control of the pilots in the final 0.5 nautical mile (926m) of the approach, including the predicted final 85m of approach through which the (Cyrrus) modelled interference intercepts with the approach path. The DME would only be used prior to (south of) the DVOR/DME site, following which pilots will fly visually to land without using DME information".

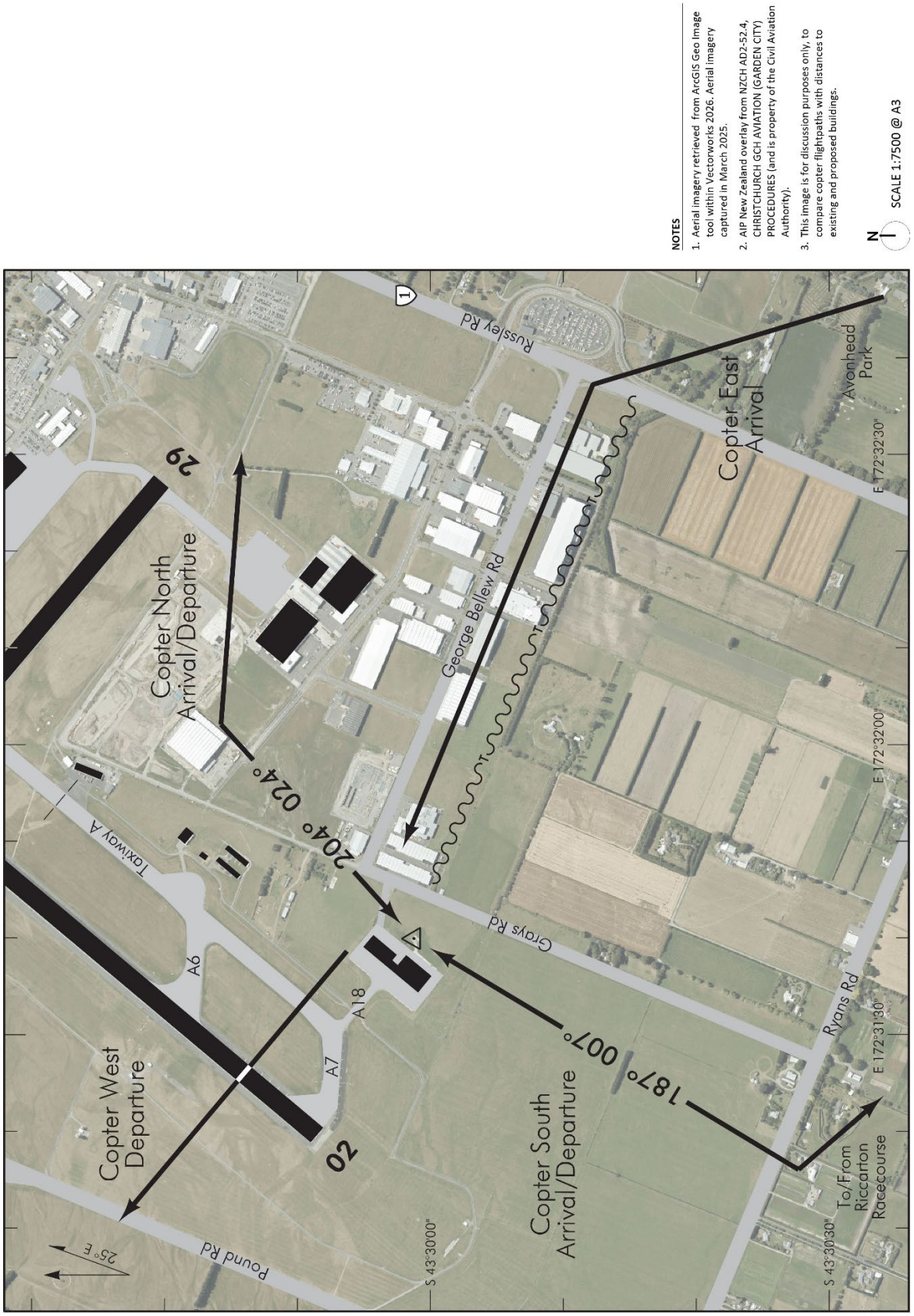
## Conclusion

25 This further statement confirms the evidence provided in my statement of evidence of 23 February 2026. Nothing in this further statement causes me to change any of the conclusions reached in that evidence.

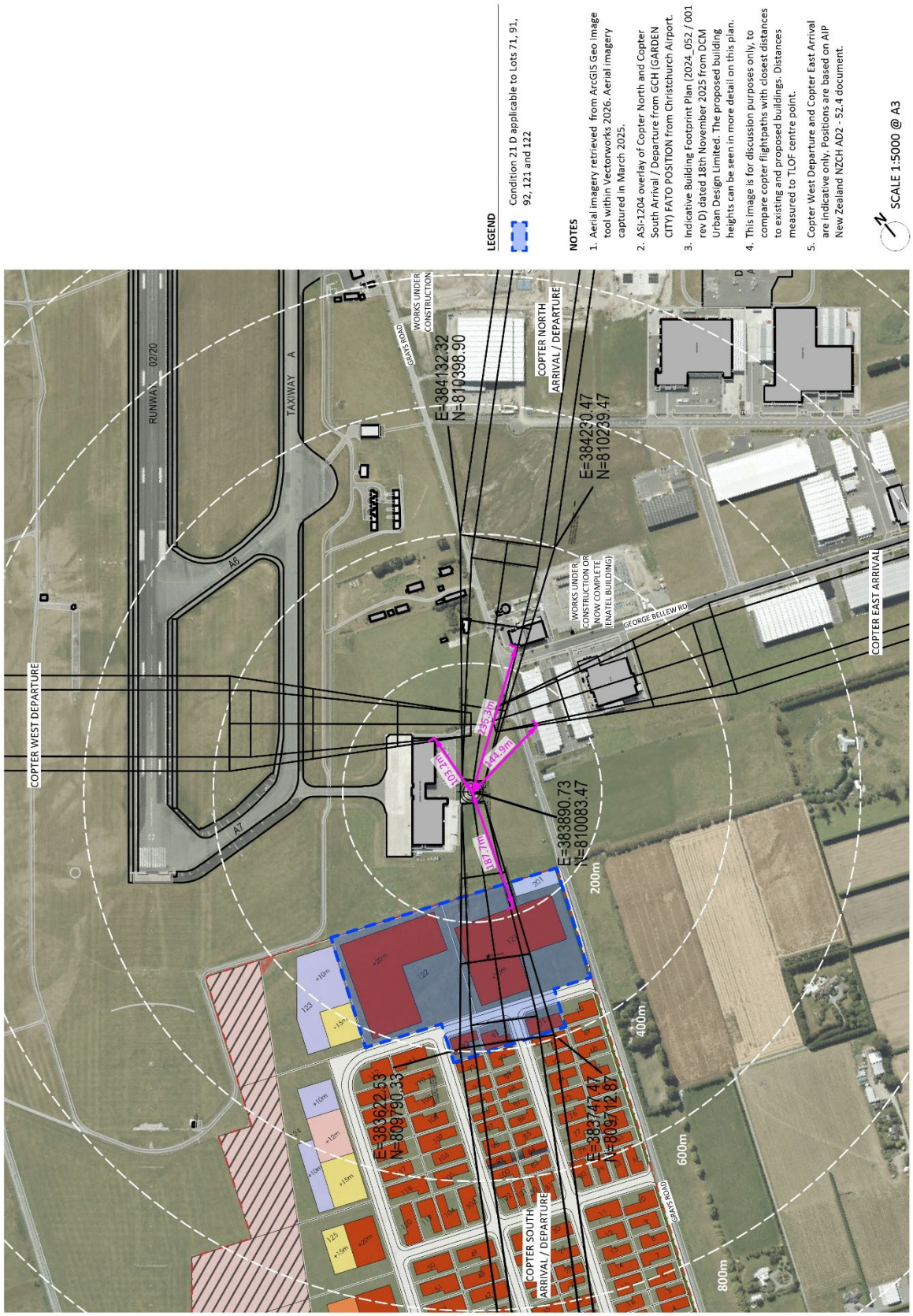
Dated this 12th day of March 2026

Andrew Victor Shelley

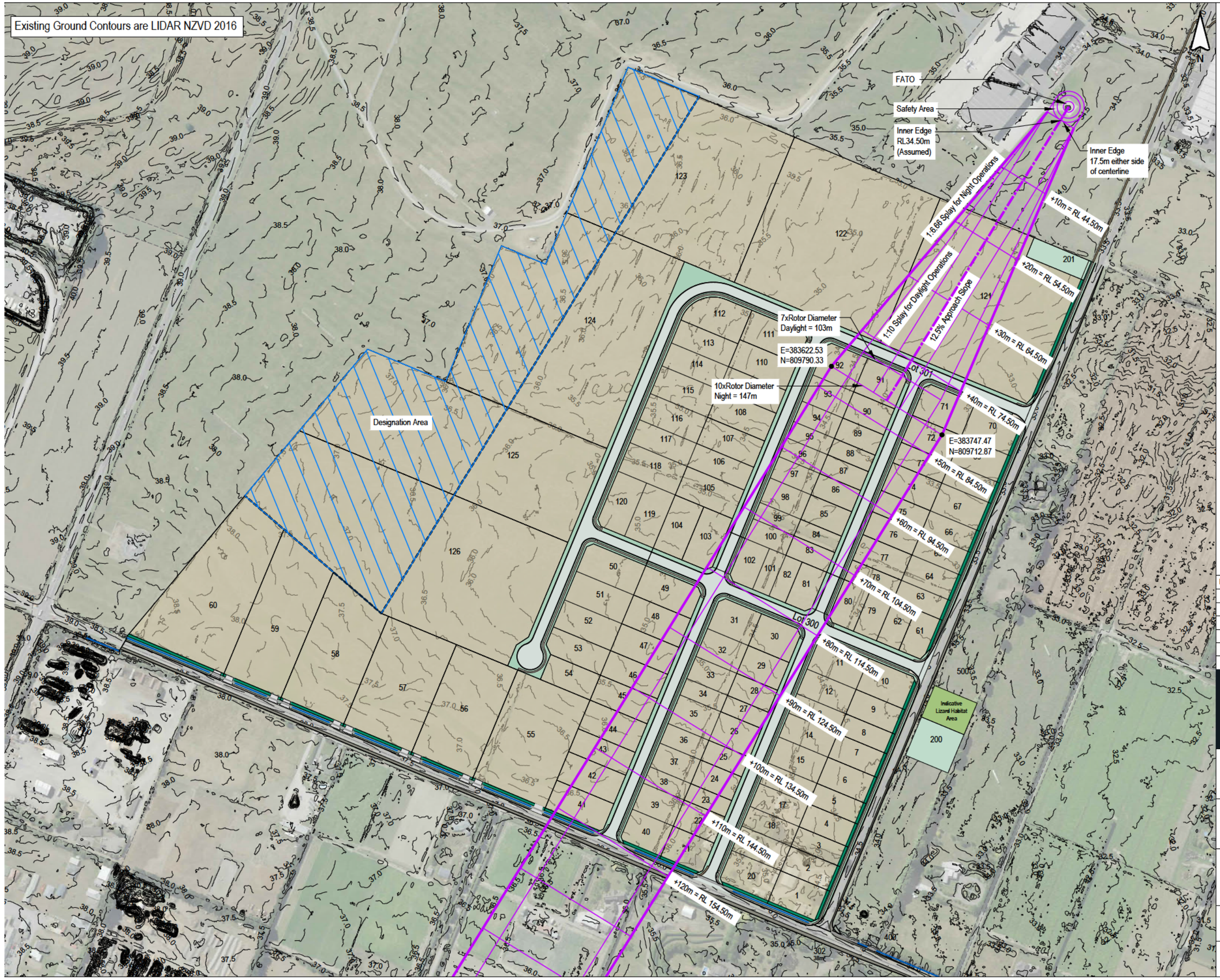
**Attachment 1:** **AIP New Zealand Overlay for GCH Aviation, on March 2025 aerial**



**Attachment 2:** **GCH Copter North/South Arrival/Departure Paths, March 2025 aerial, and existing/proposed built development**



**Attachment 3:** **Capture plan RC-PG125, GARDEN CITY HELICOPTERS PROTECTION SURFACES**






***NOTES :***

***1. SCHEME PLAN ONLY, AREAS & DIMENSIONS ARE APPROXIMATE & SUBJECT TO FINAL SURVEY.***

***2. GARDEN CITY HELICOPTER PROTECTION SURFACES INFORMATION SUPPLIED FROM CHRISTCHURCH AIRPORT PLAN ASI-1204 REV AB DATED 01/02/2018.***

| REV | DATE | REVISION DETAILS | ISSUED |
|---|---|---|---|
| A | 05/08/25 | FOR APPROVAL | TL |
| B | 07/08/25 | MINOR REVISIONS | TL |
| C | 12/08/24 | MINOR REVISIONS | TL |
| D | 06/11/25 | SW RESERVES REVISED | TL |

CAPTURE
Land Development Consultants

***CLIENT***
CARTER GROUP LIMITED

***PROJECT***
104 RYANS ROAD, HAREWOOD

***DRAWING TITLE***
GARDEN CITY HELICOPTERS PROTECTION SURFACES

| *STATUS* | *SCALE* | *SIZE* |
|---|---|---|
| FOR APPROVAL | 1:4000 | A3 |

| *PROJECT* | *DRAWING NO* | *REVISION* |
|---|---|---|
| 1252 | RC-PG125 | D |