

Emma Ensor

From: Sam Hutchings <SHutchings@greenwoodroche.com>
Sent: Friday, 15 November 2019 2:12 pm
To: Emma Ensor
Subject: FW: Pre-hearing matters relating to submission points by NZTE Operations Limited on the Proposed Waikato District Plan [GREE-DMS.FID113238]
Attachments: Figure 1 and 4 Contours.zip; Figure 3 Noise Boundaries.zip

Good afternoon Emma

As per your request, please see attached the shape files from Marshall Day in respect to the Air Noise Boundaries. As Laurel has mentioned below, if there are any issues with them you can contact her directly.

I have requested the shape files for the OLS from a separate consultant and will send those through as soon as I can.

Ngā mihi | Kind regards

Sam Hutchings | Senior Associate
Greenwood Roche

From: Laurel Smith [mailto:Laurel.Smith@marshallday.co.nz]
Sent: Friday, 15 November 2019 1:47 PM
To: Sam Hutchings
Cc: dan@nzte.net.nz
Subject: RE: Pre-hearing matters relating to submission points by NZTE Operations Limited on the Proposed Waikato District Plan [GREE-DMS.FID113238]

Hi Sam

The attached zip files have the shape files Emma has requested in NZTM 2000. Figure 3 zip file contains the noise boundaries. Figures 1 and 4 zip file contains all the contours in two decibel increments from 55 – 69 dB. If there are any issues they can contact me directly and I will resend any new files through you again.

Thanks

Laurel Smith

MARSHALL DAY 
Acoustics

84 Symonds Street, Grafton, Auckland
marshallday.com | T: 09 379 7822 | M: 021 528 735

This email is confidential. If it is not intended for you please do not read, distribute or copy it or any attachments. Please notify the sender by return email and delete the original message and any attachments.

From: Sam Hutchings
Sent: Friday, 15 November 2019 11:20 AM
To: Laurel Smith
Cc: dan@nzte.net.nz
Subject: FW: Pre-hearing matters relating to submission points by NZTE Operations Limited on the Proposed Waikato District Plan [GREE-DMS.FID113238]

Morning Laurel

I hope you are well.

We have received the attached request from the author of the TKAZ s42A report. She is after the shape files from Figure 1, Figure 3 and Figure 4 from your 8 October 2018 memo that was attached to the NZTE submission. Is it possible to please send them through so I can pass them on?

Ngā mihi | Kind regards

Sam Hutchings | Senior Associate
Greenwood Roche

From: Emma Ensor [<mailto:Emma.Ensor@waidc.govt.nz>]

Sent: Thursday, 14 November 2019 11:56 AM

To: Sam Hutchings

Subject: Pre-hearing matters relating to submission points by NZTE Operations Limited on the Proposed Waikato District Plan

Good morning Sam,

My name is Emma Ensor and I am the report author for the Section 42A report on the Te Kowhai Air Park Zone, proposed as part of the Proposed Waikato District Plan.

As part of analysing original submission points and further submission points, I require GIS information. I have detailed the information I am looking for in the attached memo.

I would appreciate it if you could read the attached memo and advise me by email as soon as possible if you are able to provide me the requested information or not and also advise me on likely timeframes for me to receive that information from you.

If you have any questions regarding the attached memo, you can either email me on emma.ensor@waidc.govt.nz or phone me on 07 824 8633 ext. 5889.

Regards Emma

Emma Ensor
Senior Planner

Waikato District Council

■ P 07 824 8633 ■ F 07 824 8091 ■ Call Free 0800 492 452

Private Bag 544, Ngaruawahia 3742

www.wakatodistrict.govt.nz



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Emma Ensor

From: Sam Hutchings <SHutchings@greenwoodroche.com>
Sent: Friday, 22 November 2019 11:04 am
To: Emma Ensor
Subject: FW: Pre-hearing matters relating to submission points by NZTE Operations Limited on the Proposed Waikato District Plan [GREE-DMS.FID113238]
Attachments: Existing OLS.shp; Proposed OLS.shp

Morning Emma

As requested, please see attached the shapefiles for the OLS in the operative plan and the proposed OLS in the proposed district plan.

Please let me know if you require any further information in respect to the OLS and Air Noise Control Boundaries.

Ngā mihi | Kind regards

Sam Hutchings | Senior Associate
Greenwood Roche

From: Emma Ensor [<mailto:Emma.Ensor@waidc.govt.nz>]
Sent: Thursday, 14 November 2019 11:56 AM
To: Sam Hutchings
Subject: Pre-hearing matters relating to submission points by NZTE Operations Limited on the Proposed Waikato District Plan

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If you have any questions regarding the attached memo, you can either email me on emma.ensor@waidc.govt.nz or phone me on 07 824 8633 ext. 5889.

Regards Emma

Emma Ensor
Senior Planner

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Emma Ensor

From: Sam Hutchings <SHutchings@greenwoodroche.com>
Sent: Friday, 22 November 2019 3:00 pm
To: Emma Ensor
Subject: FW: Pre-hearing matters relating to submission points by NZTE Operations Limited on the Proposed Waikato District Plan [GREE-DMS.FID113238]
Attachments: Existing OLS.shx; Proposed OLS.dbf; Proposed OLS.shx; Existing OLS.dbf

Hi Emma

Please see the attached shapefiles as requested. BBO's GIS tech was away today, so if these don't work then let me know and we can try again Monday.

Have a good weekend.

Ngā mihi | Kind regards

Sam Hutchings | Senior Associate
Greenwood Roche

From: Andrew McFarlane [mailto:amcfarlane@bbo.co.nz]
Sent: Friday, 22 November 2019 1:42 PM
To: Sam Hutchings
Subject: FW: Pre-hearing matters relating to submission points by NZTE Operations Limited on the Proposed Waikato District Plan [GREE-DMS.FID113238]

Andrew McFarlane Senior Planner
BA (Hons), MSC, DipTP, Assoc NZPI, MRTPI, RMLA
Bloxam Burnett & Olliver Ltd
A Level 4, 18 London Street, PO Box 9041, Hamilton 3240
D +64 7 834 6767 R +64 7 838 0144 M +64 27 500 3005
E amcfarlane@bbo.co.nz W www.bbo.co.nz

If you wish to send us a large file, please click the following link:
<https://www.sendthisfile.com/f.jsp?id=ZvpHtFnfWMEbwnNYas5VPrAR>

From: Sam Hutchings <SHutchings@greenwoodroche.com>
Sent: Friday, November 22, 2019 11:52 AM
To: Andrew McFarlane <amcfarlane@bbo.co.nz>
Subject: FW: Pre-hearing matters relating to submission points by NZTE Operations Limited on the Proposed Waikato District Plan [GREE-DMS.FID113238]

Hi Andrew

Emma at the Council has come back to me. Apparently they need some extensions to the files? Is it possible to get your team to send these through?

Ngā mihi | Kind regards

Sam Hutchings | Senior Associate
Greenwood Roche

From: Emma Ensor [<mailto:Emma.Ensor@waidc.govt.nz>]

Sent: Friday, 22 November 2019 11:48 AM

To: Sam Hutchings

Subject: RE: Pre-hearing matters relating to submission points by NZTE Operations Limited on the Proposed Waikato District Plan [GREE-DMS.FID113238]

Good morning Sam,

I forwarded your earlier email onto Council's GIS staff. They have reviewed what was sent through. They have advised me of the following:

I tried to open one, but I'm getting an error. I think it's a simple fix though - it looks like these shapefiles are missing their companion files. For each shapefile we need the following file extensions too (to go with the .shp):

.dbf

.prj

.sbx

.shx

Are you able to provide the above to me please in relation to your email below?

Regards Emma

Emma Ensor
Senior Planner

Waikato District Council

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Private Bag 544, Ngaruawahia 3742

www.waikatodistrict.govt.nz



Please consider the environment before printing this e-mail

From: Sam Hutchings [<mailto:SHutchings@greenwoodroche.com>]

Sent: Friday, 22 November 2019 11:04 a.m.

To: Emma Ensor

Subject: FW: Pre-hearing matters relating to submission points by NZTE Operations Limited on the Proposed Waikato District Plan [GREE-DMS.FID113238]

Morning Emma

As requested, please see attached the shapefiles for the OLS in the operative plan and the proposed OLS in the proposed district plan.

Please let me know if you require any further information in respect to the OLS and Air Noise Control Boundaries.

Ngā mihi | Kind regards

Sam Hutchings | Senior Associate
Greenwood Roche

From: Emma Ensor [<mailto:Emma.Ensor@waidc.govt.nz>]

Sent: Thursday, 14 November 2019 11:56 AM

To: Sam Hutchings

Subject: Pre-hearing matters relating to submission points by NZTE Operations Limited on the Proposed Waikato District Plan

Good morning Sam,

My name is Emma Ensor and I am the report author for the Section 42A report on the Te Kowhai Air Park Zone, proposed as part of the Proposed Waikato District Plan.

As part of analysing original submission points and further submission points, I require GIS information. I have detailed the information I am looking for in the attached memo.

I would appreciate it if you could read the attached memo and advise me by email as soon as possible if you are able to provide me the requested information or not and also advise me on likely timeframes for me to receive that information from you.

If you have any questions regarding the attached memo, you can either email me on emma.ensor@waidc.govt.nz or phone me on 07 824 8633 ext. 5889.

Regards Emma

Emma Ensor
Senior Planner

Waikato District Council

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Emma Ensor

From: Sam Hutchings <SHutchings@greenwoodroche.com>
Sent: Friday, 29 November 2019 12:10 pm
To: Emma Ensor
Subject: FW: question regarding GIS shapefile information for proposed Te Kowhai Airpark [GREE-DMS.FID113238]

Hi Emma

Please see below the response to your further GIS questions.

Anything else just let me know.

Ngā mihi | Kind regards

Sam Hutchings | Senior Associate
Greenwood Roche

From: Jennifer Dabney [mailto:jdabney@bbo.co.nz]
Sent: Thursday, 28 November 2019 2:17 PM
To: Sam Hutchings
Cc: Andrew McFarlane
Subject: RE: question regarding GIS shapefile information for proposed Te Kowhai Airpark [GREE-DMS.FID113238]

Hi Sam,

The elevations are all in New Zealand Vertical Datum (NZVD) 2016, established with heights retrieved from LINZ's geodetic database on 28 March 2018.

With thanks,
Jen

Jennifer Dabney Civil Engineer
BEngTech (Civil), MEngNZ
Bloxam Burnett & Olliver Ltd
A Level 4, 18 London Street, PO Box 9041, Hamilton 3240
D +64 7 834 6768 R +64 7 838 0144
E jdabney@bbo.co.nz W www.bbo.co.nz

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<https://www.sendthisfile.com/f.jsp?id=ZvpHtFnfWMEbwnNYas5VPrAR>

From: Andrew McFarlane
Sent: Thursday, 28 November 2019 12:43 PM
To: Jennifer Dabney
Subject: FW: question regarding GIS shapefile information for proposed Te Kowhai Airpark [GREE-DMS.FID113238]

Hi Jen

A residual question regarding Te Kowhai's OLS ... are you able to confirm with Sam as per query below?

Many thanks

Andrew McFarlane Senior Planner

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If you wish to send us a large file, please click the following link:
<https://www.sendthisfile.com/f.jsp?id=ZvpHtFnfWMEbwnNYas5VPrAR>

From: Sam Hutchings <SHutchings@greenwoodroche.com>
Sent: Wednesday, November 27, 2019 9:12 AM
To: Andrew McFarlane <amcfarlane@bbo.co.nz>
Subject: FW: question regarding GIS shapefile information for proposed Te Kowhai Airpark [GREE-DMS.FID113238]

Morning Andrew

Sorry a further GIS question for your team. Can you please find out the reference level the elevation data is measured from?

Thanks

Ngā mihi | Kind regards

Sam Hutchings | Senior Associate
Greenwood Roche

From: Emma Ensor [<mailto:Emma.Ensor@waide.govt.nz>]
Sent: Wednesday, 27 November 2019 9:08 AM
To: Sam Hutchings
Subject: question regarding GIS shapefile information for proposed Te Kowhai Airpark

Good morning Sam,

Thank you for the GIS existing OLS and proposed OLS shape files that you have provided me with in relation to the proposed Te Kowhai Airpark.

My colleague in our GIS team has requested that I ask you if you could please confirm by return email what reference level the elevation data embedded in the shapefile is measured from (e.g. Moturiki datum or ground level?) for both the existing OLS and the proposed OLS GIS information.

I understand that once we have that information we can then tell our software how to load the files so they show up in the correct location.

Regards Emma

Emma Ensor
Senior Planner

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Emma Ensor

From: Sam Hutchings <SHutchings@greenwoodroche.com>
Sent: Friday, 17 January 2020 3:23 pm
To: Emma Ensor
Subject: Re: Pre-hearing matters NZTE Operations Limited - Obstacle Limitation Surface issue [GREE-DMS.FID113238]
Attachments: Revised Appendix 9 - 17 Jan 2020.docx; Letter to Emma Ensor WDC re OLS compliance 15 Jan 20.docx; Te Kowhai OLS Shapefile.msg; FW_ Te Kowhai OLS Shapefile.msg; Proposed OLS Sent Nov19.zip; OLS Shapefile.jpg

Good afternoon Emma

The technical team at BBO, along with NZTE's aviation expert Dave Park, have provided a response to your memorandum set out in the attached documents and below.

To answer your questions, in summary:

1. The coordinates at paragraph 2 of Appendix 9 are correct, but the text in section 3 of Appendix 9, while not technically incorrect, could more accurately reflect the fact that the approach and take off surfaces are inset about 40m inwards from the end of the runway strip (in order to ensure sufficient clearance of the fence). As such we do not consider the suggested amendments to Appendix 9 to substantively alter its contents. The amendments are intended to more accurately describe the OLS, not change how the OLS was originally intended during the district plan development.
2. The Proposed District Plan map is incorrect as the wrong shapefile has been used when creating the planning map. As set out below (and shown attached), the correct shapefile was sent to the Council in March 2018. As a result of the correct file not being used there are two errors shown on the map:
 - a. the map shows the inner horizontal surface of the OLS as 2000m, not 2500m as described in Appendix 9; and
 - b. the map incorrectly shows the transitional side surface without tapering in to the correct height contours.
3. The runway strip approach and take of surface points of the OLS have been correctly mapped on the notified version of the Proposed District Plan map.

Based on this information from the technical experts, amendments will be required to the Proposed District Plan map. We also consider that amendments can be made to Appendix 9 to more appropriately describe the OLS.

This raises some procedural issues. While the distance and height of the horizontal surface of the OLS is unlikely to cause concern for individual property owners, the correct radius of 2500m extends over properties that were not previously covered by the notified version of the plan. We consider that the appropriate course of action will be for the Council to re-notify the correct version of the OLS to the limited extent of the properties not previously covered by the smaller radius. As part of this process, the suggested amendments to Appendix 9 to provide a more accurate description of the OLS should also be notified.

Please advise how you wish to proceed from here.

Hi Emma,

Andrew McFarlane has asked me to review your memo and respond accordingly. I have copied your memo in italics below for clarity.

Upon review of the Proposed District Plan obstacle limitation surface map layer against the text in section 3 of Appendix 9, it appears that the Proposed District Plan obstacle limitation surface map layer may be mapped incorrectly with respect to the location of the approach surface starting point locations.

The approach surface starting point locations are supposed to be located "at the end of the runway strip". However, the Proposed District Plan map at present may in fact be showing the approach surface starting points at the ends of the runway, rather than the ends of the runway strip.

Can you please review the Proposed District Plan airport obstacle limitation surface as currently mapped and review the appropriate text within Appendix 9 of the Proposed District Plan?

I would be grateful for your comments, including on these points:

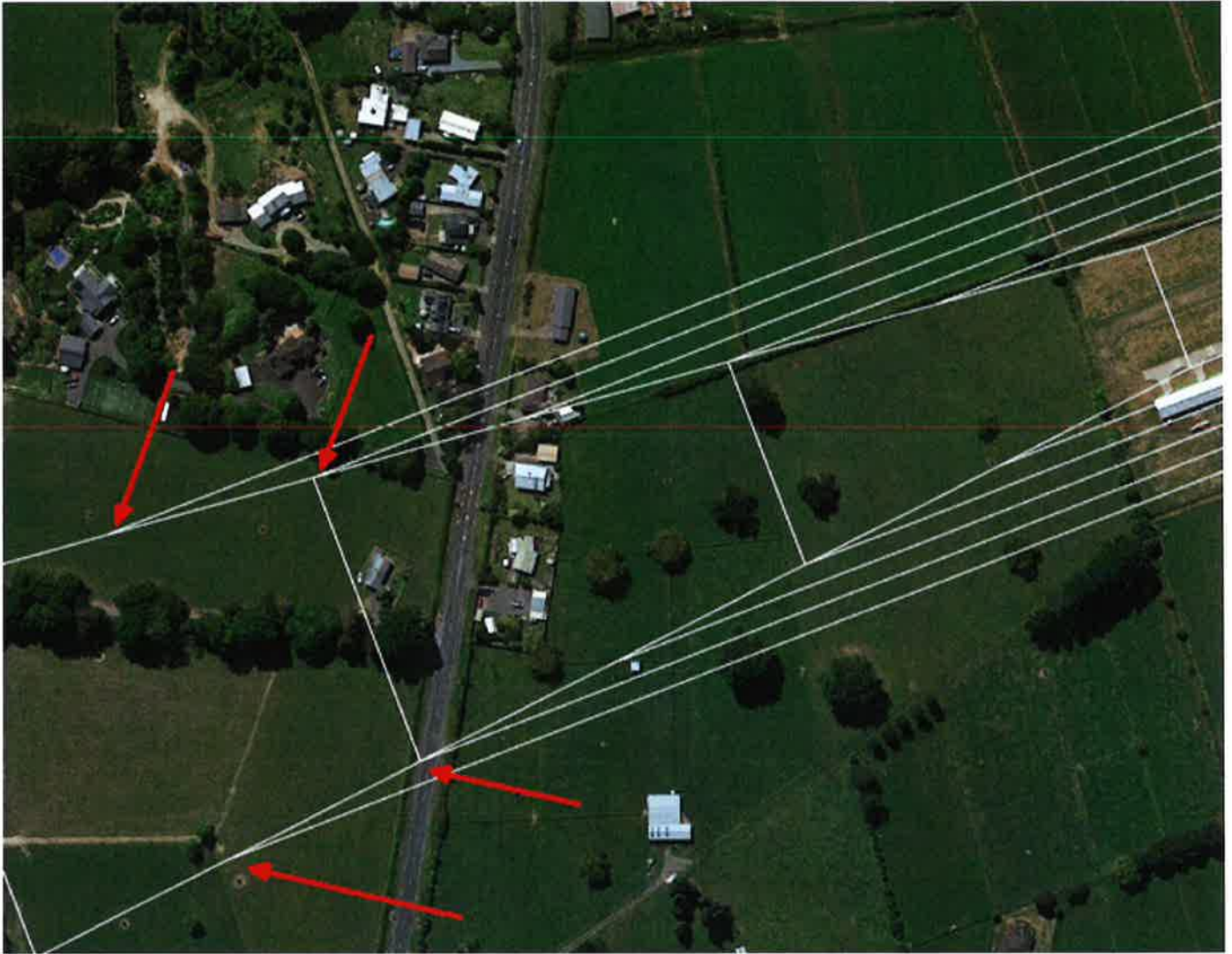
1. Whether or not the text in Appendix 9 in the Proposed District Plan relating to the Obstacle Limitation Surface is worded as originally intended during district plan development.
2. Whether or not the Obstacle Limitation Surface as currently mapped on the Proposed District Plan is mapped correctly to reflect the Appendix 9 wording.
3. Whether or not the approach and take-off surface starting points have been correctly mapped on the Proposed District Plan map.

Upon reviewing the proposed district plan map, I can confirm that:

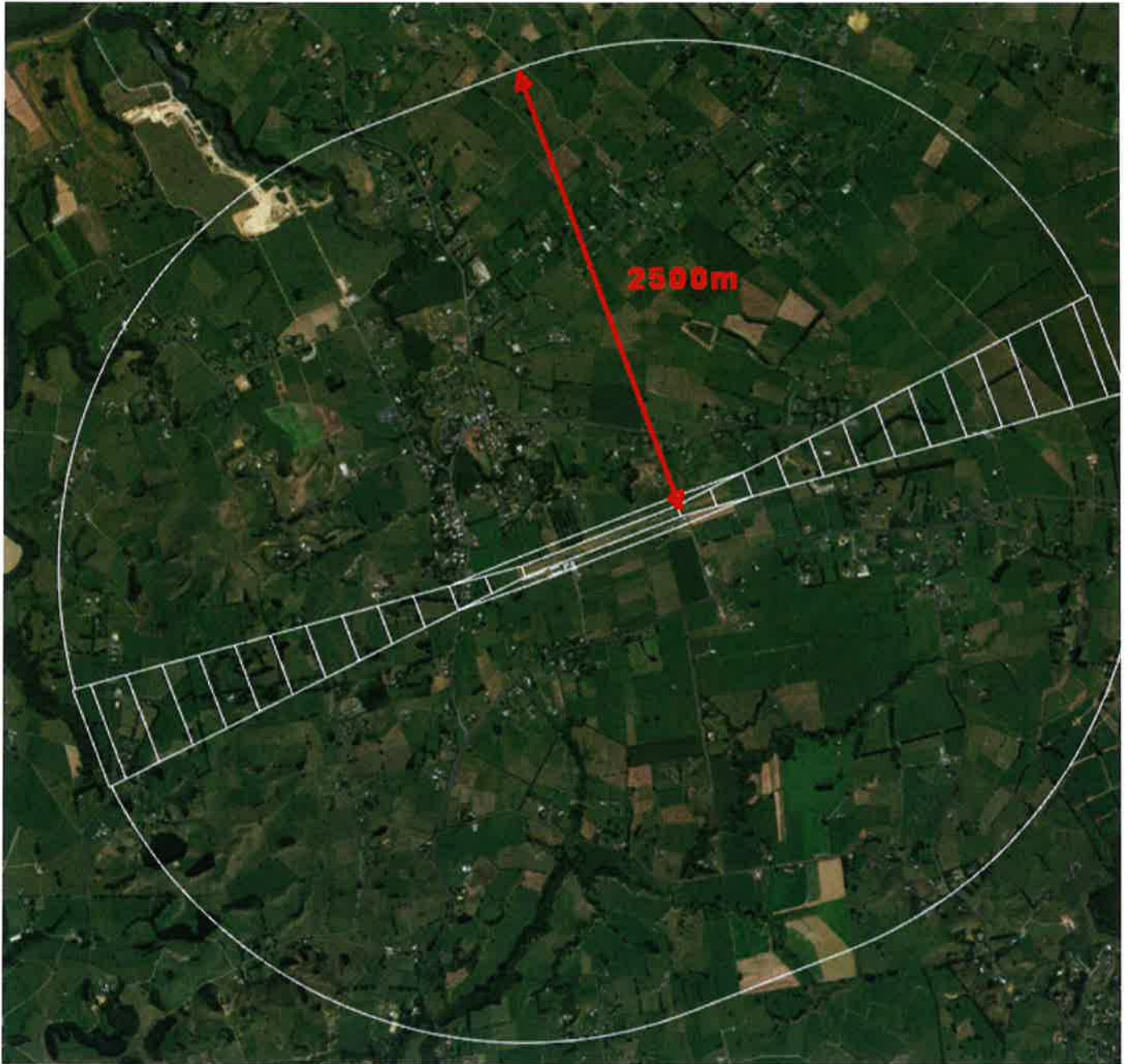
- The wording needs to be amended to describe the OLS using terminology that more appropriately reflects the relevant CAA standards and to more accurately describe the location and shape of the OLS.
 - Please see the attached file 'Revised Appendix 9 – 17 Jan 2020.docx' with the changes.
 - The Approach and Take-Off Surfaces begin approximately 40m inwards from the ends of the runway strip (exact values within the document). This is to clear the fences at the end. This does not change the location of the runway strip – the coordinates shown in the chart of Appendix 9, Section 2 are correct. This space can still be used start of take-off and the end of landing, as confirmed by Aviation Consultant Dave Park in the attachment 'Letter to Emma Ensor...'
- The map is incorrect, however not as mentioned in point 3.
 - The starting points for the OLS are shown correctly, as are the take-off and approach fans on both ends. The transitional side surface and the oval representing the inner horizontal surface are incorrect.
 - This one shown on the proposed planning maps is not consistent with the shape file that was sent to Council in March 2018.
 - An early version was generated in February 2018 which is what is shown. This incorrectly shows the transitional surface without tapering in, and also shows the inner horizontal surface extending to 2000m instead of 2500m. (shown below)
 - An updated version noting both of those changes was sent to Kevin Stokes at council in March 2018, and specifically notes in the email the tweaked transitional sides and the horizontal surface extending to 2500m. At the time, these shape files were generated in Mount Eden 2000 coordinates. Two emails titled 'Te Kowhai OLS Shapefile.msg' are attached – the first with the file (without the horizontal surface however) and one twenty minutes later with the horizontal surface following verbal instructions to include it. (shown below)
 - Another shapefile was sent on Council's request on 22 November 2019. This one was generated in the requested NZTM coordinates, and also includes the strip ends (the ones to Kevin did not show the extent of the runway strip, only up to the OLS Commencement points). The GIS files are include in an attached zip file, and also the portion included shown below.

February 2018 Version, with horizontal surface at 2000m instead of 2500m and the sides not tapered to meet the equivalent height in the take-off/approach fan:





March 2018 version, with corrected 2500m horizontal surface and tapered transitional sides, which align with the equivalent height in the approach/take-off fan:





And finally the November 2019 version with showing the entire strip, not just from the OLS fan start, otherwise equivalent to the March 2018 version:



I trust this clarifies the position of the runway strip and the OLS relative to the strip.

With thanks,
Jen

Jennifer Dabney Civil Engineer
BEngTech (Civil), MEngNZ
Bloxam Burnett & Olliver Ltd
A Level 4, 18 London Street, PO Box 9041, Hamilton 3240
D +64 7 834 6768 R +64 7 838 0144
E jdabney@bbo.co.nz W www.bbo.co.nz

If you wish to send us a large file, please click the following link:
<https://www.sendthisfile.com/f.jsp?id=ZvpHtFnfWMEbwnNYas5VPrAR>

Ngā mihi | Kind regards

Sam Hutchings | Senior Associate
Greenwood Roche

From: Emma Ensor [<mailto:Emma.Ensor@waidc.govt.nz>]
Sent: Wednesday, 8 January 2020 4:04 PM
To: Sam Hutchings
Subject: Pre-hearing matters NZTE Operations Limited - Obstacle Limitation Surface issue

Good afternoon Sam,

It is Emma Ensor here from Waikato District Council.

Upon further review of the Proposed District Plan airport obstacle limitation surface information as it relates to Te Kowhai aerodrome, it appears that the Proposed District Plan obstacle limitation surface map layer may be mapped incorrectly with respect to the location of the approach surface starting point locations. Please refer to attached document for additional information.

If you are able to provide me with a response to my request as soon as possible I would appreciate it.

Regards Emma

Emma Ensor
Senior Planner

Waikato District Council

■ P 07 824 8633 ■ F 07 824 8091 ■ Call Free 0800 492 452

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Appendix 9: Te Kowhai Airfield



Formatted: Left: 0.88 cm, Right: 1.76 cm, Top: 1.13 cm, Bottom: 0.49 cm, Width: 21 cm, Height: 29,7 cm

1 Introduction

This appendix is referred to in the Residential, Village and Rural Zone building rules. The safe operation of aircraft using the Te Kowhai Aerodrome requires that each runway should be provided with take-off climb and approach, and transitional and inner horizontal surfaces such that aeroplanes taking off or landing have a clear obstacle free surface in which to take-off, land and circle for approach. The Civil Aviation Authority of New Zealand has adopted specifications defining these surfaces about and above an Aerodrome which, in the interests of safe flight, should not be penetrated by obstacles. These surfaces are known as obstacle limitation surfaces (OLS) and are defined in terms of distances from the runway and heights relative to the runway for protection of aircraft in the vicinity of the aerodrome.

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The runway is on the following land: Lot 1 DP 434641, Section 8 SO 495676 (Certificates of Title 530701, 755892).

2 Runway and Associated Runway Strip

The runway and associated runway strip is defined as follows:

- (a) Runway: the runway is 923.8 metres long and 18 metres wide.
- (b) Runway strip: the runway is contained within the runway strip. The strip is 983.8 metres long and 60 metres wide.
- (c) The coordinates and elevations of the four corners of the strip in terms of Mount Eden Circuit New Zealand Geodetic Datum 2000 and Moturiki datum are as follows:

Deleted:

mN	mE	Elevation
703839.64	434543.48	25.2
703783.55	434564.78	25.2
704132.77	435484.50	26.6
704188.86	435463.20	26.6

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3 Obstacle Limitation Surfaces

The OLS associated with this runway strip are defined as follows:

3.1 Approach and Take-off Surfaces

There is a combined approach and take-off surface at each end of the runway strip. Each approach and take-off surface is a truncated fan originating from a 60 metres wide base centred 37.48m inwards from the western end of the runway strip and 39.6m inwards from the eastern end of the runway strip. The surfaces extend either side of the extended centre line of the runway strip for a horizontal distance of 2500metres (2.5kilometres). Each surface rises upwards and outwards at a gradient of 1 vertical to 40 horizontal (1:40); the sides of the surfaces splay from their bases outwards at a rate of 1 to 10 (1:10). The base of the western surface commences at a height of 25.2metres above Moturiki Datum and the base of the eastern surface commences at a height of 26.6metres above Moturiki Datum.

3.2 Transitional Side Surfaces

The transitional side surfaces rise upwards and outwards from the sides of the runway strip and each approach/take-off surface at a gradient of 1 vertical to 5 horizontal (1:5) to a height of 36.6metres above Moturiki Datum. The surfaces then rise vertically from 36.6 metres to 71.6 metres above Moturiki Datum. The height contours of the transitional surface bend inwards from the planes of the approach and take-off OLS bases to meet the corresponding height contours of the approach and take-off OLS.

3.3 Inner horizontal surface

The 'inner horizontal' surface extends outwards from the runway centre line and ends of the runway strip out to a distance of 2500m at a height of 71.6m above the Moturiki Datum.

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ASTRAL LIMITED
AVIATION TECHNICAL AND ENVIRONMENTAL CONSULTANTS

*P O Box 801
Wanaka 9343
New Zealand
15 January 2020*

Emma Ensor
Senior Planner
Waikato District Council
Private Bag 544
Ngaruawahia 3742

Dear Emma

Te Kowhai Aerodrome Obstacle Limitation Surfaces

I have been requested by Dan Readman, on behalf of the owners of Te Kowhai Aerodrome, to provide Waikato District Council with a brief statement regarding the compliance of the proposed obstacle limitation surfaces (OLS) for the aerodrome with Civil Aviation Authority design standards.

I can advise you that the OLS as depicted in the shape file you are being provided with as part of this data package are compliant with the relevant design CAA standards set down in CAA Advisory Circular AC139-7 "Aerodrome Standards and Requirements—Aeroplanes at or below 5700 kg MCTOW—Non Air Transport Operations", Revision 4 dated 18 Dec 2009.

In particular, this Advisory Circular requires at paragraph 3.1.2 that the OLS origins for the take-off climb/approach surface take account of fencing across the end of the runway strip such that the fences do not penetrate the OLS. To meet this requirement at Te Kowhai the OLS have been displaced 37.48m inwards on the west end and 39.60m inwards on the east end from the runway strip ends to account for the 1:40 OLS gradient over the 1m high fences near each end of the strip.

The runway strip and runway itself can extend closer to the fences, but the use of the sections of runway between the OLS locations and the fences is limited to the start of take-off roll and the end of the landing roll.

The landing threshold would need to be displaced inwards from the fences in accordance with the OLS displacement. This is an operational compliance issue that would be achieved by marking the threshold locations for pilots to see on approach and depicting them on the plan of the aerodrome contained in the CAA "Aeronautical Information Publication" (AIP). The take-off and landing length information contained in the AIP would also reflect the displaced locations of the OLS.

This is standard practice at NZ and overseas aerodromes with displaced runway thresholds and is consistent with international best practice.

Yours sincerely

Dave Park
Director

Astral Limited

phone: +64-21- 902-748

e-mail dave.park@astral.co.nz

Web www.astral.co.nz



Emma Ensor

From: Jennifer Dabney
Sent: Thursday, 22 March 2018 3:22 pm
To: kevin.stokes@waidc.govt.nz
Cc: Andrew McFarlane
Subject: Te Kowhai OLS Shapefile
Attachments: ols shape no hz.shp

Hi Kevin,

I've just spoken with Andrew McFarlane about the shapefile. The one sent previously included the horizontal surface, which is a horizontal surface sitting 45m above the aerodrome level, extending to 2500m from the runway – the large oval. This is also noted in the District Plan document Andrew sent in prior. Andrew is just trying to confirm with Dan Readman from Te Kowhai if this is necessary.

I also note the transitional surface has been tweaked slightly in the above image as well (the sides of the transitional surface taper in) – this was something Dan found out quite late from CAA, when we discovered points of the transitional surface were more restrictive than the approach/take-off fan beside it.

Let Andrew or I know if you have any queries.

With thanks,
Jen

Jennifer Dabney Civil Engineer
BEngTech (Civil), MEngNZ
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D +64 7 834 6768 R +64 7 838 0144
E jdabney@bbo.co.nz W www.bbo.co.nz

If you wish to send us a large file, please click the following link:
<https://www.sendthisfile.com/f.jsp?id=ZvpHtFnfWMEbwnNYas5VPrAR>

Emma Ensor

From: Jennifer Dabney
Sent: Thursday, 22 March 2018 3:39 pm
To: kevin.stokes@waidc.govt.nz
Cc: Dan Readman; Andrew McFarlane
Subject: FW: Te Kowhai OLS Shapefile

Hi Kevin,

Andrew phoned just as I sent the last one – apologies for the multiple emails. Here is the latest shapefile; this includes the inner horizontal surface and the tweaked transitional surface.

Link below.

With thanks,
Jen

admin@bbo.co.nz has sent you a file that will EXPIRE in 8 days.
To view and download your files, visit:
<https://www.sendthisfile.com/ZfMdhE7NWy0jGd3ggWgkwBiN>

From: Jennifer Dabney
Sent: Thursday, 22 March 2018 3:22 p.m.
To: 'kevin.stokes@waidc.govt.nz' <kevin.stokes@waidc.govt.nz>
Cc: Andrew McFarlane <amcfarlane@bbo.co.nz>
Subject: Te Kowhai OLS Shapefile

Hi Kevin,

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With thanks,
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If you wish to send us a large file, please click the following link:
<https://www.sendthisfile.com/f.jsp?id=ZvpHtFnfWMEbwnNYas5VPrAR>

Emma Ensor

From: Sam Hutchings <SHutchings@greenwoodroche.com>
Sent: Friday, 23 October 2020 1:17 pm
To: Emma Ensor
Subject: RE: Pre-hearing matters NZTE Operations Limited - request for clarification regarding aircraft noise [GREE-DMS.FID113238]
Attachments: Ops Flt for Future Noise Boundaries.xlsx

Hi Emma

Thanks for sending that through. I have got Laurel Smith, our noise expert at Marshall Day, to take a look. Without delving too deeply into it, she has noted that T&T have used a quieter aircraft in its model but have not provided any justification for doing so. She has provided the attached file which sets out the model input used by Marshall Day.

Before we provide more detailed comments on the difference between the two variants, can you please request that T&T run its model again with the same inputs used by Marshall Day? Then we will be in a better position to provide comments on your indication that you are favouring T&T's Air Noise Control Boundaries.

If you could please get back to me as soon as possible on this that would be greatly appreciated. That way we can still work towards your November 4 deadline so as to not delay the Section 42A report.

Ngā mihi | Kind regards

Sam Hutchings | Senior Associate
Greenwood Roche

From: Emma Ensor [mailto:Emma.Ensor@waidc.govt.nz]
Sent: Tuesday, 20 October 2020 1:54 PM
To: Sam Hutchings
Subject: Pre-hearing matters NZTE Operations Limited - request for clarification regarding aircraft noise

Good afternoon Sam,

Please refer to the attached memos regarding a request for clarification regarding noise matters associated with the Te Kowhai Airpark.

I would appreciate any comments being provided to me as soon as possible (by no later than 4 November 2020).

If you have any questions regarding the attached, please contact me either by phone on 027 206 4374 or by email on emma.ensor@waidc.govt.nz

Regards Emma

Emma Ensor
Senior Planner

Waikato District Council
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INM Equiv	ACFT_ID	OP_TYPE	PROF_ID1	PROF_ID2	RWY_ID	TRK_ID1	OPS_DAY
GASEPF	CPL_PPL	A	STANDARD	1	23	STR	0.972328
GASEPF	CPL_PPL	A	STANDARD	1	05	STR	0.523561
GASEPF	CPL_PPL	D	STANDARD	1	23	STR	0.972328
GASEPF	CPL_PPL	D	STANDARD	1	05	STR	0.523561
GASEPF	CPL_PPL	T	STANDARD	1	23	LH	0.416712
GASEPF	CPL_PPL	T	STANDARD	1	05	RH	0.224383
CNA206	HUCOM	A	STANDARD	1	23	STR	5.208904
CNA206	HUCOM	A	STANDARD	1	05	STR	2.804795
CNA206	HUCOM	D	STANDARD	1	23	STR	5.208904
CNA206	HUCOM	D	STANDARD	1	05	STR	2.804795
CNA206	HUCOM	T	STANDARD	1	23	LH	0
CNA206	HUCOM	T	STANDARD	1	05	RH	0
GASEPV	ITINRNT	A	STANDARD	1	23	STR	3.241096
GASEPV	ITINRNT	A	STANDARD	1	05	STR	1.745205
GASEPV	ITINRNT	D	STANDARD	1	23	STR	3.241096
GASEPV	ITINRNT	D	STANDARD	1	05	STR	1.745205
GASEPV	ITINRNT	T	STANDARD	1	23	LH	1.389041
GASEPV	ITINRNT	T	STANDARD	1	05	RH	0.747945
GASEPV	MUCOM	A	STANDARD	1	23	STR	3.241096
GASEPV	MUCOM	A	STANDARD	1	05	STR	1.745205
GASEPV	MUCOM	D	STANDARD	1	23	STR	3.241096
GASEPV	MUCOM	D	STANDARD	1	05	STR	1.745205
GASEPV	MUCOM	T	STANDARD	1	23	LH	1.389041
GASEPV	MUCOM	T	STANDARD	1	05	RH	0.747945
GASEPV	RESIDENT	A	STANDARD	1	23	STR	4.817079
GASEPV	RESIDENT	A	STANDARD	1	05	STR	2.593812
GASEPV	RESIDENT	D	STANDARD	1	23	STR	4.817079
GASEPV	RESIDENT	D	STANDARD	1	05	STR	2.593812
GASEPV	RESIDENT	T	STANDARD	1	23	LH	2.064462
GASEPV	RESIDENT	T	STANDARD	1	05	RH	1.111634
GASEPV	RESIDENT	V	TAXI_CD	1	OVF	RWAY	53.78616
GASEPV	RESIDENT	V	TAXI_IH	1	OVF	CENTRE	6.352192
GASEPV	RESIDENT	V	TAXI_CB	1	OVF	SW	6.352192
GASEPV	RESIDENT	V	TAXI_DG	1	OVF	SE	6.352192
GASEPV	RESIDENT	V	TAXI_CA	1	OVF	SWSHORT	6.352192
GASEPV	RESIDENT	V	TAXI_DE	1	OVF	SESHORT	6.352192

Emma Ensor

From: Sam Hutchings <SHutchings@greenwoodroche.com>
Sent: Wednesday, 4 November 2020 4:18 pm
To: Emma Ensor
Subject: RE: Additional response from Tonkin and Taylor regarding proposed noise information associated with Te Kowhai airfield [GREE-DMS.FID113238]

Dear Emma

Thank you for your memorandum dated 20 October 2020 and the memorandums from Tonkin and Taylor (T&T) dated 15 October and 30 October 2020.

NZTE Operations Limited (NZTE) and Marshall Day Acoustics (MDA) have reviewed the latest Air Noise Control Boundaries (ANCB) produced by T&T in its 30 October memorandum and are pleased to note that the ANCB's generally align with those produced by MDA through the submission process on Stage 1 of the proposed Waikato District Plan (pWDP). This means that both MDA and T&T have reached same conclusion that the ANCB's produced by MDA are appropriate for the Te Kowhai Aerodrome (Aerodrome).

As you are aware the operative plan has one small 65dB Ldn ANCB that does not provide any control on aircraft noise or numbers, nor does it provide any protection for the Aerodrome, as an established piece of infrastructure, in respect to reverse sensitivity effects from surrounding land development. The ANCB's proposed by MDA for the pWDP sought to create these controls and bring the Aerodrome up to the industry standard by being generally in accordance with New Zealand Standard NZS 6805:1992 "Airport Noise Management and Land Use Planning" (Noise Standard). As you would have seen, the Noise Standard and MDA's memorandum dated 8 October 2018 recommend a prohibited activity status for new noise sensitive activities within the 65dB Ldn noise contour. In considering that recommendation NZTE has balanced the impact on the community with the protection of the Aerodrome and as a result has elected to pursue a rule framework that does not prohibit development within the 65dB Ldn noise contour as was recommended by MDA and the Noise Standard.

These ANCB's were generated using aircraft movement data based on the type of aircraft that are currently stored at and use the Aerodrome as well as the likely aircraft that will utilise the Aerodrome following the establishment of the Te Kowhai Airpark. The resulting ANCB represents a contour that appropriately strikes the balance between the right of the Aerodrome to protect its operations and the impact on the surrounding community. NZTE has not sought to provide a fanciful scenario for the sake of enabling unfettered aircraft use at the Aerodrome, it has sought expert advice and adopted a realistic solution with the least community impact possible without unduly restricting its operations now and into the future.

Given both MDA and T&T ANCB's align, the ANCB's produced by MDA clearly represent industry standard and are suitable for the Aerodrome. Therefore NZTE considers that the MDA ANCB's should be recommended for approval to the Panel in your report.

Please advise if you have any questions about the above or require any further information in order to write your report.

Ngā mihi | Kind regards

Sam Hutchings | Senior Associate
Greenwood Roche

From: Emma Ensor [mailto:Emma.Ensor@waidc.govt.nz]
Sent: Friday, 30 October 2020 3:47 PM
To: Sam Hutchings
Subject: Additional response from Tonkin and Taylor regarding proposed noise information associated with Te Kowhai airfield

Good afternoon Sam,

The additional information you provided by Marshall Day was forwarded to Tonkin and Taylor. They have re-run the modelling and have provided me with the attached memo.

If you have any additional comments you want to provide me after reviewing the attached memo, then I would appreciate receiving them by end of day on Wednesday the 4th of November.

Regards Emma

Emma Ensor
Senior Planner

Waikato District Council

■ P 07 824 8633 ■ F 07 824 8091 ■ Call Free 0800 492 452

Private Bag 544, Ngaruawahia 3742

www.waikatodistrict.govt.nz



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