

Before Independent Hearing Commissioners  
at Christchurch

CRC192408, CRC192409, CRC192410, CRC192411, CRC192412,  
CRC192413, CRC192414, and RC185627

---

*under:* the Resource Management Act 1991

*in the matter of:* Application by Fulton Hogan Limited to establish a  
quarry

*by:* **Christchurch International Airport Limited**  
*Submitter*

Statement of Rhys Boswell on behalf of Christchurch International  
Airport Limited

---

Dated: 14 October 2019

---

REFERENCE: J M Appleyard (jo.appleyard@chapmantripp.com)  
A Hill (amy.hill@chapmantripp.com)

**Chapman Tripp**  
T: +64 3 353 4130  
F: +64 3 365 4587

60 Cashel Street  
PO Box 2510, Christchurch 8140  
New Zealand

www.chapmantripp.com  
Auckland, Wellington,  
Christchurch



## **INTRODUCTION**

- 1 My name is Rhys Duncan Boswell.
- 2 I am the General Manager of Strategy and Sustainability at Christchurch International Airport Limited (*CIAL*). I have held this role since 2009.
- 3 I have been employed by CIAL in a variety of management and planning roles since March 2000.
- 4 My qualifications include a Bachelor of Arts and a Master of Regional and Resource Planning from the University of Otago.
- 5 I have been authorised by CIAL to provide evidence on its behalf.

## **OVERALL CIAL POSITION**

- 6 CIAL's overall position is one of neutrality, subject to the imposition of conditions to manage various risks that the Application will potentially pose to operations at Christchurch International Airport (*the Airport / CIA*). I explain the reasons for CIAL's position and comment on the conditions offered in the section entitled 'Reasons' below.
- 7 My colleague and I have met directly with representatives of Fulton Hogan twice to discuss the concerns raised in CIAL's submission, most recently on 3 October 2019. Fulton Hogan has provided further information relevant to CIAL's concerns and has also offered several conditions in response to CIAL's submission and our discussions.
- 8 In light of the further information provided and the conditions offered to address risks to airport operations, CIAL's concerns have been largely resolved. I discuss a few outstanding matters in this evidence.

## **OVERVIEW OF CIAL**

- 9 CIA is the largest airport in the South Island and the second-largest in the country. It connects Canterbury and the wider South Island to destinations in New Zealand, Australia, Asia and the Pacific.
- 10 There are approximately 6,000 people who call the Airport campus their place of employment – this includes 300 people directly employed by CIAL.
- 11 Airports have a strong multiplier effect on the economies they serve. Independent estimates indicate that for every \$1 Christchurch Airport earns, the wider South Island economy earns \$50.<sup>1</sup> In 2017 the Airport was estimated to contribute \$2.6 billion to the GDP of the Canterbury region.<sup>2</sup>

---

<sup>1</sup> "The shape of Christchurch in 2025, Christchurch International Airport and three economic growth scenarios" BERL, May 2014

<sup>2</sup> BERL. Christchurch International Airport. December 2017.

Ministry for Business, Innovation and Employment research reports that one international airline passenger into Christchurch generates 12.3 commercial bed nights across New Zealand and 9.9 commercial bed nights into the South Island.<sup>3</sup>

- 12 Just under 7 million travelling passengers per year and their associated meeters and greeters currently pass through the Airport.<sup>4</sup> Combined Airport activities see between 25,000 and 30,000 people visiting the Airport every day. CIA is home to several international Antarctic science programmes and their associated facilities. The Airport is also the primary air freight hub for the South Island, playing a strategic role in New Zealand's international trade as well as the movement of goods domestically. On that basis, the Airport is a significant physical and economic resource in national, regional and local terms.
- 13 CIAL operates the Airport, with ownership shared between Christchurch City Holdings Limited (75%) and the New Zealand Government (25%). The company is responsible for the efficient, safe and secure operation of the Airport.
- 14 CIAL owns the airport terminal and the airfields, and approximately 859 hectares of land, including the property of the Antarctic Centre. CIAL's wider interests (including land leased by CIAL) total some 1052 hectares. 693 hectares of CIAL's landholdings are within the Special Purpose Airport Zone (SPAZ). CIAL works closely with many other businesses on the airport campus including passenger airlines, the Airways Corporation, the US Antarctic Program, air cargo operators, warehousing and aviation specialists, rental car companies, retail and food outlets.
- 15 The most recent revision of the Airport Master Plan (2016) identifies expected growth levels to 2040:
  - 15.1 Passenger Movements to grow from 2018 levels of 6.9 Million (5.1 Million Domestic; 1.8 Million International) to 11.7 Million in 2040 (7.6 Million Domestic; 4.1 Million International);
  - 15.2 Passenger Aircraft Movements to grow from 2018 levels of 72,000 movements (61,000 Domestic; 11,000 International) to 111,000 in 2040 (90,000 Domestic; 21,000 International); and;
  - 15.3 Cargo Aircraft Movements to grow from 2018 levels of 3,100 movements to 4,200 in 2040. It must be noted that in addition to these cargo specific aircraft movements, the clear majority of air cargo to and from Christchurch is carried in the belly hold of

---

<sup>3</sup> International Visitor Survey, Ministry for Business, Innovation and Employment (MBIE) 2018

<sup>4</sup> Total achieve in 2018 calendar year.



commercial passenger aircraft (see domestic and international movement growth above).

#### **REASONS FOR CIAL'S POSITION**

- 16 As discussed in more detail below, CIAL's concerns in its submission all relate to potential impacts that the proposed quarry could have on airport operations.
- 17 As a general comment, the condition offered which requires Fulton Hogan to give CIAL the opportunity to participate in the development and review of management plans is something that CIAL strongly supports. We find that communicating with operators and businesses in the vicinity of the airport is one of the best ways to make sure that activities such as quarries are managed with airport operations in mind. This also allows us to proactively address any course of action proposed by Fulton Hogan in terms of its day-to-day management of the quarry that could affect airport operations.
- 18 The Applicant has also proposed a condition to provide CIAL with emergency contact details to enable prompt contact with CIAL for any issues that may require urgent action to prevent conflict with airport operations (including but not limited to bird management, dust generation, and glare from lighting). CIAL strongly supports this condition – it is an essential way to manage any potential unforeseen issues that could arise in the future.

#### **Bird strike risk**

- 19 Bird strike risk management is a major concern for CIAL. Bird strike is a significant risk both economically and socially for the Airport, airlines, their passengers and the city of Christchurch.
- 20 'Bird strike' refers to a collision between birds and aircraft. These incidents occur on and in the vicinity of airports. During take-off and landing aircraft fly at lower elevations. Many bird species fly at similar elevations and this can lead to bird strike. Large, flocking or high flying birds pose the most significant risk of a strike.
- 21 The cost of even minor bird strike damage, or suspected damage can be significant. In more serious bird strike cases the damage can be catastrophic.
- 22 The New Zealand Civil Aviation Authority (CAA) deals with the issue of bird strike hazard management through Civil Aviation rule 139.71 and various guidance documents.
- 23 Rule 139.71 states:

### Wildlife Hazard Management

*Each applicant for the grant of an aerodrome operating certificate shall, where any wildlife presents a hazard to aircraft operations at their aerodrome, in areas within their authority, establish an environmental management programme to minimise or eliminate any such wildlife hazard.*

- 24 Under the CAA rules, CIAL must hold a current aerodrome operating certificate to operate as an airport. An important part of the certification process is the preparation of operating manuals required to implement quality assurance principles for airport operations. CAA rules require CIAL to actively work to minimise the threat and incidence of bird strike. To ensure continued compliance with the CAA Rules, CIAL carries out regular audits of the Airport and its management processes including bird hazard management.
- 25 Any bird on the Airport and beyond the Airport is a potential hazard. CIAL is taking all practical steps to manage bird strike hazard on its own land or the land it manages. This includes employing several full time Wildlife Control Officers. However, it must also find ways to manage the risk which arises from land use activities and proposed developments on land surrounding the airport not owned or managed by CIAL. Such developments have the possibility of cumulatively increasing bird numbers and bird activity. This is of major concern, especially if such developments result in birds flying across the airport or the flight paths of aircraft on approach or taking-off from the Airport.
- 26 CIAL has a policy of consistently seeking involvement in the decision making process for risk-elevating developments in location close to its flight paths. CIAL believes it is essential to minimise the development of new pest bird species habitat because retrospective measures are much more difficult to implement.
- 27 Certain land uses are known to attract birds. When these land uses occur on or around airports, birds can migrate onto the airport itself or across flight paths, thus increasing the risk of collision. Quarries can result in several land uses that (if not properly mitigated and managed) attract birds and can therefore result in an increase in bird strike risk:
  - 27.1 The creation of wash water ponds and other areas of water to support quarrying activity;
  - 27.2 Ponding in the pit of the quarried area, particularly when stormwater is unable to drain away quickly;
  - 27.3 Re-grassing of bunds – some species of grass can be attractive to birds as it is a food source;



- 27.4 Refuse or waste bins – these can attract scavenging birds or rodents (which in turn can attract birds that feed on rodents); and
- 27.5 Site rehabilitation – this can involve creation of water features or planting vegetation that is attractive to birds. It can also result in a new land use being established on the quarry site which might increase the risk of bird strike at the Airport.
- 28 In its response to further information request of August 2019, Fulton Hogan commented on the bird strike management rules in the Christchurch District Plan. I was involved in the hearings for the Christchurch District Plan which resulted in those rules being put in place. CIAL originally sought a package of rules for management areas at 3km, 8km and 13km from the runway. While we were ultimately unsuccessful in getting the rules package that we sought, that does not change CIAL’s approach to this issue.
- 29 CIAL’s expert advisers have recommended that activities which pose a bird strike risk should be managed out to 13km from the airport and so this is the stance that CIAL continues to take in planning processes.<sup>5</sup>
- Wash water ponds and other open water storage*
- 30 The original application for the Roydon Quarry proposed the creation of ponds for the discharge of aggregate wash water.<sup>6</sup>
- 31 Creation of wash water ponds at the site would be of significant concern to CIAL, as new standing waterbodies have the potential to increase bird strike risk at the Airport. This is something that I have discussed with Fulton Hogan and its representatives.
- 32 Fulton Hogan has since confirmed that it has now determined the quarry will not warrant the need for wash water ponds.<sup>7</sup> This amendment to the application is also noted in the s42A reports prepared by Mr Henderson for the Selwyn District Council (at [129]) and by Ms Goslin for Environment Canterbury (at [78]). CIAL is pleased that this amendment was made to the application.
- 33 Ms Goslin’s s42A Report comments at [80] that Fulton Hogan has proposed that wash water from truck washing activity may be diverted to infiltration ponds. However, Mr Bligh’s evidence states that water from truck washing

---

<sup>5</sup> See the evidence of Phillip Shaw presented before the Independent Hearings Panel, available online at <http://www.chchplan.ihp.govt.nz/wp-content/uploads/2015/07/2348-CIAL-Evidence-of-Phil-Shaw-17-2-2016.pdf>.

<sup>6</sup> Fulton Hogan Limited *Resource Consent Application to Establish 'Roydon Quarry', Templeton*, November 2018, at 4.1, 5.3.1 and 6.2.3.4.

<sup>7</sup> Fulton Hogan Limited *Roydon Quarry Proposal (Reference CRC192408-192414, RC185627) - Response to additional Requests for Further Information August 2019*, page 8.

will be collected in holding tanks and does not state that ponds will be a part of this process.<sup>8</sup>

- 34 I want to confirm that any pond or open water storage of any description on the quarry site would potentially increase bird strike risk at the Airport and so would be just as much of a concern to CIAL. Fulton Hogan has reassured me verbally that there will be no open water storage or water ponds of any kind on the site. Provided this continues to be the case, and the further issues related to bird strike risk (discussed below) are also implemented, CIAL is satisfied that the risk can be appropriately managed in this case.

*Selwyn District Council land use consent proposed conditions*

- 35 Fulton Hogan has proposed conditions relating to airport operations and bird strike risk management in the land use consent RC185627 (conditions 50 to 54).<sup>9</sup> CIAL generally supports those proposed conditions.
- 36 A minor amendment is needed to the wording of the condition which enables site visits for bird monitoring, management and risk mitigation purposes. The condition as worded reflects an older practice by CIAL whereby we contracted Ornithological or Pest Control Management specialists. CIAL has in-house wildlife control capacity and seeks the condition reflect that, as follows:

*Subject to prior contact with the on-site operations managers, CIAL's planning staff and/or Wildlife Management Officer may arrange visits to the site, or may arrange for visits by Ornithological or Pest Management Consultants and their staff who are engaged by CIAL from time to time, for the purposes of pest bird monitoring or management and to assess and make recommendations that relate to the mitigation of bird strike risk.*

- 37 I mentioned above that site rehabilitation is a concern for CIAL. Fulton Hogan has proposed a Quarry Rehabilitation Plan (QRP) (draft attached to the AEE). But the draft QRP does not have any provisions which address bird strike risk management. It is critical that the QRP and conditions of consent made it clear that:
- 37.1 the vegetation to be planted on the rehabilitated site should be selected in consultation with CIAL to make sure it does not attract birds;
- 37.2 the final land use will not be an activity that increases the risk of bird strike at the Airport;

---

<sup>8</sup> At [91] and [92].

<sup>9</sup> The numbering of these conditions is taken from the set attached to Mr Bligh's evidence.



- 37.3 any grass that is sown will be a variety that is low-seed producing (such as the Avanex variety, or similar) so that it does not attract birds; and
- 37.4 the final rehabilitated site will be free draining and will not have any surfaces that allow stormwater to pond for longer than 48 hours.

38 I was concerned to see that Mr Mthamo's evidence on rehabilitation does not discuss the need to make sure the final rehabilitated site does not increase the risk of bird strike at the Airport. The QRP should contain a requirement to consult with CIAL on the final land use and rehabilitation activity planned to make sure it will not pose a risk to airport operations. During our discussions, Fulton Hogan has offered to involve CIAL in consultation around rehabilitation. CIAL wishes to have that offer formally recorded in either the Quarry Rehabilitation Plan itself or in the conditions of consent.

*Environment Canterbury consents proposed conditions*

39 There are conditions proposed for the consents sought from Environment Canterbury that are relevant to bird strike risk:

- 39.1 There are various conditions relating to grassing bunds and other areas of exposed ground to mitigate dust in consent CRC192410 (conditions 13 to 15). CIAL supports the dust management activities proposed, but it is important that the grass used is a variety that is low-seed-producing so that it does not attract birds. It is important that requirement is specified in the condition. I understand from my most recent discussions with Mr Chittock that Fulton Hogan is prepared to offer this condition;
- 39.2 Proposed condition 3 for CRC192411 and CRC192412 requires that all stormwater detention basins are 'dry ponds' where no ponding occurs for more than 48 hours. This limit to retention times is important from a bird strike management perspective and CIAL strongly supports that condition. CIAL also seeks that any swales are planted with low-seed producing grass;
- 39.3 Proposed conditions 6 to 10 for CRC192408 and CRC192409 relating to maintenance of a 1m excavation distance between the base of the quarry floor and the highest recorded groundwater level at the site is also relevant to bird strike risk management as it will avoid ponding on the quarry floor. The same condition is also proposed in the land use consent conditions (conditions 23 and 25). CIAL supports retention of this condition.

**Dust**

40 Dust from quarry activities, particularly in combination with other quarrying occurring around Christchurch City, has the potential to adversely affect pilot visibility.



- 41 Mr Cudmore has stated at paragraphs [156] to [160] of his evidence that he is not aware of existing quarries causing any material visibility effects for pilots and that he does not expect any impairment of pilot visibility due to the proposed Roydon Quarry will occur.
- 42 There is substantial quarrying activity occurring in the vicinity of the Airport. There are also other activities which create dust in Northwest Christchurch, such as large construction projects. On windy days the dust from those activities in combination can have major impacts on visibility – it can look like fog. I have attached a picture to this evidence which demonstrates this (**Attachment 1**). It is essential that any new quarries do not add to those effects.
- 43 In the case of this application, having had the opportunity to discuss CIAL's concerns with Fulton Hogan, I am satisfied that the dust suppression proposed will address CIAL's core concerns and avoid effects on airport operations.

#### **Lighting**

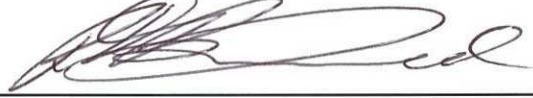
- 44 The Roydon Quarry site aligns with the centreline of the 02/20 Runway (the main runway at Christchurch International Airport, running northeast to southwest). The site also lies directly underneath flight paths used by aircraft arriving and departing from the Airport. It is essential that lighting along these approach and departure paths does not create spill or glare for pilots or affect navigation to the Airport runways.
- 45 I discussed these concerns with representatives from Fulton Hogan and agreed the scope of an assessment of lighting and glare effects with Fulton Hogan. The assessment was done by Pedersen Read and a copy of that assessment was provided to me and is contained in the response to request for further information provided by Fulton Hogan in August 2019.
- 46 The assessment found that *"With the proposed use of 'flat glass' luminaires with LED luminaires in the proposed locations it is anticipated there should be no issues to aircraft passing over the quarry or to air traffic controllers in the Christchurch Airport control tower."* I am satisfied that as long as the lighting on the site is done according to the recommendations in the assessment report and in line with the lighting plan that accompanied those recommendations, the risk to airport operations will be low.

#### **CONCLUSION**

- 47 CIAL's primary interest in the application is to ensure the safe operation and development of the Airport. CIAL considers that this outcome will only be achieved if appropriate conditions are put in place as outlined above. The conditions proposed in CIAL's submission are designed to achieve this outcome. They promote communication between Fulton Hogan and CIAL and are designed to mitigate any potential issues.

- 48 Provided the conditions proposed by Fulton Hogan and the additional amendments discussed above are retained, CIAL's overall position on this application is neutrality.

Date: 14 October 2019

A handwritten signature in dark ink, appearing to read 'Rhys Duncan Boswell', written over a horizontal line.

**Rhys Duncan Boswell**

## **ATTACHMENT 1**

This picture was taken at 2:02pm on 11/04/2015 from the CIAL corporate office towards the South-west during a strong North-westerly wind.





