# Before an Independent Hearings Panel and Freshwater Hearing Panel of Greater Wellington Regional Council

In the matter	of the Resource Management Act 1991 (the Act)
And	
In the matter	of Proposed Plan Change 1 to the Wellington Regional Policy Statement – Hearing Stream 7 – RSI Definition

# Statement of Evidence of Jo Lester for Wellington International Airport Limited

Dated: 28 March 2024

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## 1. INTRODUCTION

## **Qualifications and Experience**

- **1.1** My name is Jo Lester. I hold a Bachelor of Resource and Environmental Planning (with Honours) from Massey University, obtained in 1995.
- 1.2 I am currently employed as the Airport Planning Manager at Wellington International Airport Limited (WIAL) that owns and is responsible for Wellington International Airport (Wellington Airport or Airport). I have held that position since 2021. Prior to that, I was employed by WIAL in 2019 as the Airport Planner. From 2015 until 2019, I worked as a Senior Policy Advisor in the Resource Management Practice Team at Ministry for the Environment.
- **1.3** My principal role at WIAL is the primary resource management planner of all environmental aspects at Wellington Airport. I have day-to-day oversight and management responsibility for all environmental planning, Resource Management Act 1991 (**RMA**) planning, noise, and monitoring the local, regional and central government legislative and regulatory environment for changes that may impact Wellington Airport operations.

# 2. SCOPE OF EVIDENCE

- **2.1** This statement of evidence relates to Hearing Stream 7 and in particular the definition of Regionally Significant Infrastructure. It.
- **2.2** My evidence provides background information about the seawall area between Lyall Bay and Moa Point and outlines the following:
  - (a) The history and description of the seawall area;
  - (b) The importance of the seawall area to the Airport and Wellington;
  - (c) The current maintenance requirements of the seawalls;
  - (d) How the seawalls are nearing the end of their life span;
  - (e) WIAL's future plans for the seawall area and the potential for resource consents.

# 3. HISTORY/DESCRIPTION OF THE SEAWALL AREA

- **3.1** An existing system of seawalls is located along the coastal interface between Lyall Bay and Moa Point, within and adjacent to the land held in record of title WN45A/75 (Lot 3 Deposited Plan 78304) which is about 2.2 hectares in area.
- 3.2 The land is owned by Wellington City Council (WCC) and is a Local Purpose Reserve (Esplanade). It is zoned Natural Open Space in the WCC Proposed District Plan. See Figure 1 below:



Figure 1: Land vested in WCC for Local Purpose Reserve (Esplanade)

- **3.3** The area is reclaimed land, created when the airport was extended and Moa Point Road rerouted and I understand the land was vested in WCC as part of the transaction when the Airport was transferred from the Crown to WIAL.
- **3.4** Through a consent notice WIAL is required "protect the land from erosion and inundation by the sea" on a continuous basis including:
  - keeping the existing sea wall, breakwater and other sea protection works fully maintained, and
  - constructing new or replacement sea protection structures.

**3.5** Currently the seawalls are comprised of three main structures, specifically the southern seawall including a wave trap constructed in 1972, the Lyall Bay breakwater (built in 1954-1955), and the western seawall (built in 1955-56 and modified between 1983 and 1987). See figure 2 below:



Figure 2: Seawall Structures Lyall Bay

- 3.6 All of this land either forms part of the primary seawall structure, or is integral to the functioning of the seawalls, by helping to prevent overtopping, prevent scouring, to dissipate energy of water back into the sea, or provide a solid platform for heavy maintenance plant etc. Refer to Photos 2-7 below.
- **3.7** The seawall area is in a dynamic coastal environment and is subject to:
  - Rogue waves during storms (refer to Photo 1 below as to the consequence of this);
  - Boulders etc being thrown into the wave trap (refer Photos 2-3 below);
  - Jet Blast and wake turbulence at the southern end (equivalent to hurricane force winds, enough to tip over a vehicle) noting that WIAL is required to protect people from jet blast including beyond the Airport boundaries<sup>1</sup>;

<sup>&</sup>lt;sup>1</sup> Civil Aviation Rule 139.69 (Part 139 Aerodromes Certification, Operation and Use | aviation.govt.nz)

• Akmon/ rock amour movement during storms which pose a risk to persons seeking to scramble over these parts of the seawall.

# 4. SIGNIFICANT FUNCTION OF THE SEAWALLS

- **4.1** The seawalls serve a significant function for the surrounding landform. The seawalls protect Wellington Airport and in particular the southern end of the runway from the effects of coastal erosion and storm surges.
- **4.2** They also protect vital WCC infrastructure including Moa Point Road, stormwater and potable water infrastructure, and major sewage pipes (interceptors and sludge risers) to/from the Moa Point wastewater treatment plant. Most of Wellington's untreated sewage flows through pipes behind the seawall, which could end up in Lyall Bay if there was damage to the pipes.
- **4.3** Refer to **Figure 3** below which shows the location of the potable and wastewater pipes mentioned above and the location of the runway beyond.



Wastewater Pipe Directionality
Trunk Main
Rising Main
Main
Service Connection
All other values

Figure 3: WCC Wastewater and potable water pipes and WCC land ownership (local Purpose (Esplanade) Reserve)

#### 5. MAINTENANCE OF THE SEAWALLS

5.1 The seawall area requires regular maintenance to address storm damage and agerelated deterioration (e.g. placing additional akmons, re-grading wave trap, gabion basket re-wiring and re-filling; cavity filling in the unpaved crest areas, etc). The wave trap, crest, eastern crest (and access track leading from Moa Point Road) also provide maintenance access and space for emergency akmon replacement storage.



Photo 1 - 2018: A car parked on Lyall Bay breakwater pushed into sea by a wave



Photo 2: "Crest, gabion basket wall and wave trap between the airport and the southern seawall (looking towards Moa Point)



Photo 3: Wave trap and gabion basket wall - looking from Moa Point end of Southern Seawall towards the west.



Photo 4: Area Western Seawall and wind sock adjacent to the Lyall Bay Breakwater.



Photo 5: Lyall Bay and the breakwater on a calm day



Photo 6: Lyall Bay Breakwater



Photo 7: Moa Point Road – crest of western seawall.

#### 6. SEAWALLS ENDING LIFE SPAN/ CONSEQUENCES OF FAILURE

- **6.1** These current sea defences are between 50 and 70 years old and are underdesigned by modern engineering standards and are reaching the end of their natural lives. This has been confirmed by expert marine engineering advice from Beca and peer reviewed by AECOM.
- 6.2 In addition, it is also necessary to prepare for the impacts of climate change, given the frequency and severity of storms is increasing and sea levels are rising. The current sea defences weren't designed or built to withstand the weather conditions Wellington is likely to experience in future.
- **6.3** The current seawalls are also considered vulnerable to earthquakes. Major damage to the runway and to sewage pipes could have a major impact on Wellington's emergency response and see sewage released into Lyall Bay. The southern seawall in particular is the most vulnerable, being exposed directly to the Southern Ocean with no land mass between Moa Point and Antarctica.
- **6.4** Temporary repairs and upgrades have been made many times over the years, but this is no longer adequate they need more than patchwork repair.
- 6.5 Without adequate protection, the risk of inundation and disruption to Wellington Airport's operations is very real. For example, in 1983 the southern seawall was breached which caused the disruption to flights for a number of weeks. See photo 8 below.



Photo 8: June 1983 seawall breach

- **6.6** If this happened today, the impact would have far-reaching consequences given:
  - The airport generates around \$1.1 billion per year and 11,000 jobs for the wider economy<sup>2</sup>;
  - Tourism and trade in particular are heavily dependent on aviation;
  - Over 1400 people are directly employed at the airport including businesses like rental cars, food and beverage, transport and aviation services;
  - The immeasurable social and community benefits from connecting people and families with 230 flights and 19,000 passengers per day.
- **6.7** Finally I note that Wellington Airport is recognised as a lifeline utility in the Civil Defence Emergency Act 2002, meaning we provide infrastructure vital to the community. We are required by law to ensure we are able to operate to the fullest extent possible during and after an emergency. Not being able to appropriately upgrade these sea defences could place us in breach of these responsibilities quite part from the consent notice discussed above.

# 7. SEAWALL PROJECT AND FUTURE CONSENTING PROCESSES

<sup>&</sup>lt;sup>2</sup>Economic analysis by BERL for Wellington Airport's 2040 Masterplan: <u>https://www.wellingtonairport.co.nz/documents/3131/FINAL\_Master\_plan.pdf</u>

- **7.1** Given the above, WIAL has been investigating options for protecting the Airport runway and renewing the seawall defences.
- **7.2** As part of Hearing Stream 6, Ms Hunter **attached** a powerpoint document that was presented to the community during initial public consultation sessions that briefly describes the project and options for the upgrade or renewal of each structure.
- **7.3** It is clear from these investigations that resource consents will be required from both the Regional and District Councils given the scale and location of the works regardless of which options are ultimately chosen. Once the project is completed it is anticipated that there will be less ongoing maintenance, however given the dynamic nature of this coastal environment, ongoing maintenance will still be required.
- **7.4** As such it is important that the definition of Regionally Significant Infrastructure expressly refers to the airport's associated supporting infrastructure (including that which is close by the airport but not within its boundaries):
  - (a) which are integral to the operation of the Airport, and in turn
  - (b) can properly inform the statutory analysis for any future resource consents.

# Dated 28 March 2024

# Jo Lester

Planning Manager