

AUCKLAND UNITARY PLAN  
INDEPENDENT HEARINGS PANEL

*Te Paepae Kaiwawao Motuhake o te Mahere Kotahitanga o Tāmaki Makaurau*

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**Report to Auckland Council  
Hearing topic 045**

**Auckland International Airport  
Designations 1100, 1101, 1102**

**Attachment 1 recommended text**

**July 2016**

# Report to Auckland Council – Auckland International Airport Limited Designations 1100, 1101 and 1102

## Attachment 1 Recommended text of designations

PART 7 - DESIGNATIONS»Schedules and Designations

### Auckland International Airport Ltd

#### Designation Schedule - Auckland International Airport Ltd

Number	Purpose	Location
1100	Activities for the operation of Auckland International Airport ...	George Bolt Memorial Drive, Mangere
1101	Activities for the operation of Auckland International Airport ...	200 and 260 Ihumatao Road, Mangere
1102	Auckland International Airport, specification for obstacle limitation surfaces, runway end protection areas and restrictions non-aeronautical ground lights	Vicinity of Auckland International Airport

#### 1100 Auckland International Airport

Designation Number	1100
Requiring Authority	Auckland International Airport Limited
Location	George Bolt Memorial Drive, Mangere
Rollover Designation	Yes
Legacy Reference	Designation 231, Auckland Council District Plan (Manukau Section) 2002
Lapse Date	Given effect to (i.e. no lapse date)

#### Purpose

The land to which this designation applies (“the designated area”) may be used for activities for the operation of Auckland International Airport (“the Airport”) subject to the conditions set out below, including but not limited to:

- aircraft operations,
- runways,
- taxiways and other aircraft movement areas,
- aprons,
- terminals,
- rescue facilities,
- navigation and safety aids,
- maintenance and servicing facilities including the testing of aircraft engines (in situ or otherwise),
- catering facilities,
- freight facilities,
- quarantine and incineration facilities,
- fuelling facilities including Joint User Hydrant Installations,
- stormwater facilities,
- roads,
- monitoring activities,
- site investigation activities,
- vehicle parking and storage,
- rental vehicle activities,
- vehicle valet activities,
- public transport facilities,

- landscaping,
- flags,
- signs,
- the relocation of heritage buildings from elsewhere within this Designation and the subsequent restoration and use of those buildings for purposes compatible with their heritage values;
- offices associated with any of the foregoing activities; and
- all related construction and earthwork activities.

## Conditions

1. For the purposes of this designation, unless the context otherwise requires:

**“Activity Sensitive to Aircraft Noise”** or **“ASAN”** means any dwelling, boarding houses, tertiary education facilities, marae complex, papakāinga, retirement village, supported residential care, educational facilities, care centres, hospitals and healthcare facilities with an overnight stay facility.

**“Aircraft Operations”** means:

- the landing and take-off of any aircraft at the Airport;
- the taxiing of aircraft associated with landing and take-off and other surface movements of aircraft for the purpose of taking an aircraft from one part of the Airport to another;
- aircraft flying along any Flight Path (refer definition below).

**“Aircraft Noise Notification Area”** or **“ANNA”** is an area that is outside the HANA and MANA and that will have future noise levels between 55 dB L<sub>dn</sub> and 60 dB L<sub>dn</sub>; and is shown in green on Figure 3 (Aircraft Noise Areas) of this designation.

**“Aircraft Noise Community Consultative Group”** or **“ANCCG”** is that group referred to in Condition 9(a).

**“Airport”** means Auckland International Airport

**“Air Shows”** for the purpose of Condition 8 means a sequence of unscheduled Aircraft Operations of a maximum of three days duration, occurring at a frequency not exceeding one per year, which is organised to provide a spectacle for members of the public.

**“Annual Aircraft Noise Contour”** or **“AANC”** means an L<sub>dn</sub> contour published by AIAL annually as a prediction of noise from Aircraft Operations for the following 12 months (excluding noise excepted from the limit in Conditions 5 and 6, by virtue of Condition 8 of this designation). The prediction is based on monitoring undertaken in accordance with Condition 5(d).

**“Auckland International Airport Limited”** or **“AIAL”** is the requiring authority under this designation.

**“Council”** means the Auckland Council or any committee, sub-committee, or person to whom the relevant powers, duties and discretions of the Council have been delegated lawfully.

**“Designated area”** is the area shown as designated area on Figure 1 of this designation.

**“Existing Building”** means any building:

- that existed at 10 December 2001 and was being used for an ASAN at that time; or
- for which a resource consent for an ASAN was granted by 10 December 2001; or
- which was shown on an outline plan that was lodged with the Council under section 176A of the Resource Management Act 1991 (“RMA”) and was beyond challenge as at 10 December 2001.

**“Flight Path”** means the actual path of an aircraft in flight, following take-off from or prior to landing at the Airport, for so long as that aircraft is within the area of the Control Zone shown in Figure 2 of this designation.

**“Future Aircraft Noise Contour”** or **“FANC”** means each of the long term predicted noise contours shown on Figure 4 (Future Aircraft Noise Contours) of this designation.

**“High Aircraft Noise Area”** or **“HANA”** is the area outside the designated area that will have future noise levels greater than 65 dB L<sub>dn</sub> and is shown in purple on Figure 3 (Aircraft Noise Areas) of this designation.

“**INM**” means United States of America Federal Aviation Authority Integrated Noise Model.

“**L<sub>dn</sub> Contour**” means a line connecting points of equal day/night sound level (dB L<sub>dn</sub>).

“**Moderate Aircraft Noise Area**” or “**MANA**” comprises two areas (one being around the HANA) that will have future noise levels between 60 dB L<sub>dn</sub> and 65 dB L<sub>dn</sub>. The two areas are shown in orange on Figure 3 (Aircraft Noise Areas) of this designation.

“**Noise Management Plan**” or “**NMP**” means the noise management plan described in Condition 9.

“**Noise Minimisation Procedures**” includes:

- procedures and measures adopted to ensure compliance with noise limits for:
  - Aircraft Operations in Condition 5; and
  - Engine Testing on Aircraft in Condition 13;
- Civil Aviation Authority (“CAA”) noise rules applicable to the Airport from time to time;
- voluntary or self imposed procedures or measures for the reduction of aircraft noise.

“**Non-Jet Aircraft**” means any aircraft that is not a turbo-jet or a turbo-fan powered aircraft. For the avoidance of doubt turbo-prop aircraft are non-jet aircraft.

“**Operational Length**” is the length of Runway available and suitable for the ground run of an aircraft taking off, in accordance with the Civil Aviation Advisory Circular 139-6 Revision 4 dated 4 July 2011 called the “Take-Off Run Available” or “TORA”.

“**Principal Living Room**” means the room which the owner identifies as the principal living room.

“**Runway**” means a defined rectangular area on a land aerodrome prepared for the landing and take-off of aircraft.

“**Working Days**” are those days defined by the RMA.

### **Runway System**

2. The following limitations in this Condition apply to all runways:

- a. Subject to clause (c) of this Condition, the number of runways shall not exceed two.
- b. In addition to the existing runway (“Existing Runway”), a second runway (“Northern Runway”) may be developed within the area marked “Northern Runway” shown on Figure 1 of this designation.
- c. Nothing in this Condition shall preclude the use of the taxiway of the Existing Runway for the take-off and landing of aircraft (i.e. as a runway) in substitution for the Existing Runway:
  - where the Existing Runway is under repair; or
  - in an emergency.

*Note:*

Use of the taxiway as a runway will be subject to approval under the Civil Aviation Act 1990.

3.

a. The provisions in this Condition apply to the Northern Runway:

- the Operational Length of the runway shall not exceed 2150 metres;
- the runway shall be entirely located to the west of the alignment of George Bolt Memorial Drive (taking that alignment as it existed at 1 June 2000);

b. The provisions of section 176A of the RMA shall apply to the construction, reconstruction, extension or replacement of the Northern Runway.

4. Non-Jet Aircraft using the Northern Runway between the hours of 11.00pm and 6.00am, and jet aircraft using the Northern Runway between the hours of 10.00pm and 6.00am, shall not depart to or arrive from the east except in cases of:

- a. aircraft landing or taking off in an emergency;
- b. emergency flights required to rescue persons from life-threatening situations or to transport patients, human vital organs or medical personnel in a medical emergency;
- c. the operation of unscheduled flights required to meet the needs of a national or civil defence

emergency declared under the Civil Defence Act 2002:

- d. Aircraft Operations resulting from an emergency which necessitates the closure of the Existing Runway:
- e. Aircraft Operations resulting from the temporary closure of the Existing Runway for essential maintenance which necessitates the unrestricted use of the Northern Runway.

*Explanatory Note for Condition 4 – Northern Runway:*

*Night-Time Restriction*

- i. Throughout the life of this unitary plan it is AIAL's clear intention to maximise the use of the Existing Runway at night and as a result, during the lifetime of this district plan, Non-Jet Aircraft using the Northern Runway between the hours of 11.00pm and 6.00am, and jet aircraft using the Northern Runway between the hours of 10.00pm and 6.00am, are not permitted to depart to or arrive from the east except within the limited exceptions provided for in this Condition.
- ii. For the avoidance of doubt, the need or otherwise for a similar night time restriction on use of the Northern Runway in any subsequent district or unitary plan will be assessed at the relevant time, and the presence of this Condition on this designation is not intended as an indication that such a condition will or will not be appropriate in any future designation for the Airport.

**Noise from Aircraft Operations**

5. Subject to Conditions 6 and 7 below, noise from Aircraft Operations shall not exceed a noise limit of:
  - a. A Day/Night Level of 65 dB  $L_{dn}$  anywhere outside the HANA. For the purpose of this control, aircraft noise shall be measured in accordance with NZS 6805:1992 and calculated as a 12 month rolling logarithmic average; and
  - b. A Day/Night Level of 60 dB  $L_{dn}$  anywhere outside the HANA and the MANA. For the purpose of this control, aircraft noise shall be calculated as a 12 month rolling logarithmic average using the INM and records of actual Aircraft Operations.
  - c. Clauses (a) and (b) of this Condition do not apply within the designated area or within the Coastal Marine Area.
  - d. In addition, AIAL shall:
    - i. monitor noise from Aircraft Operations at a minimum of three locations associated with the Existing Runway which are as near as practicable to the boundary of the HANA to obtain an accurate reading so as to demonstrate compliance with (a) above;
    - ii. monitor noise from Aircraft Operations at a minimum of two locations associated with the Northern Runway so as to demonstrate compliance with (b) above. The required monitoring may be undertaken at points in the MANA and then by calculating the corresponding noise level at the MANA boundary;
    - iii. use the INM and noise monitoring data to calculate whether noise from Aircraft Operations complies with (b) above;
    - iv. calculate noise levels at every other location necessary to ensure compliance with this Condition and with Condition 10;

and shall provide a detailed written report to the Council every 12 months describing and interpreting the results of the monitoring and describing and explaining the calculations and findings.

**Interim Noise Control on Northern Runway**

6.
  - a. For the first five years following the commencement of aircraft operations on the Northern Runway, noise from Aircraft operations associated with the Northern Runway shall not exceed 55 dB  $L_{dn}$  at the intersection of the Northern Runway centreline and State Highway 20. For the purpose of this control, compliance may be assessed by measuring aircraft noise at an alternative location (closer to the Airport) and calculating the corresponding noise level at the intersection of the Northern Runway centreline and State Highway 20. In addition, for the purpose of this control, aircraft noise shall be measured in accordance with NZS 6805:1992 and calculated as a 12 month rolling logarithmic average. The measurements and calculations for any such assessment shall be produced by AIAL if requested by the ANCCG and, if required by the ANCCG, shall be subject to independent review and verification.
  - b. Clause (a) of this Condition shall not apply from the date of receipt by the Council of a certificate from a suitably qualified independent person proposed by AIAL and approved by the Council, certifying that, either of the following circumstances apply:
    - i. There is a need to establish new operations, or relocate existing operations, because there are

insufficient apron areas or taxiway capacity alongside the Existing Runway, or a new or existing operation requires facilities or services not available at the Existing Runway but which are or can be provided at the Northern Runway.

ii. Rehabilitation works on the Existing Runway require use of the Northern Runway to a level which would exceed the 55 dB L<sub>dn</sub> at SH 20 control location to maintain current and projected demand.

- c. The suitably qualified independent person referred to in Condition 6(a) above shall include, when supplying any certificate to the Council, a report which contains:
- A summary of the information provided to the suitably qualified independent person by AIAL; and
  - The suitably qualified independent person's reasons for supplying the certificate.

d. The costs of the suitably qualified independent person shall be met by AIAL.

7. Exceedance by up to 1 dB L<sub>dn</sub> of the noise limits in Conditions 5 and 6 is permitted, provided AIAL demonstrates at the request of, and to the satisfaction of, the Council that any such exceedance is due to atypical weather patterns (including wind speed and direction) during the measurement period, such as produced by the El Nino/La Nina climatic oscillation.

8. Aircraft operations described in clauses (a) to (g) of this Condition, below, are excluded from the calculation of the rolling logarithmic average in Conditions 5, 6 and 7 above:

- Aircraft landing or taking off in an emergency;
- Emergency flights required to rescue persons from life-threatening situations or to transport patients, human vital organs or medical personnel in a medical emergency;
- The operation of unscheduled flights required to meet the needs of a national or civil defence emergency declared under the Civil Defence Act 2002;
- Aircraft Operations resulting from an emergency which necessitates the closure of the Existing Runway;
- Aircraft Operations resulting from the temporary closure of the Existing Runway for essential maintenance which necessitates the unrestricted use of the Northern Runway;
- Aircraft using the Airport as a planned alternative to landing at a scheduled airport elsewhere;
- Air shows.

## **Noise Management Plan**

### ***Consultative Group***

9.

- AIAL shall maintain at its cost, the existing Aircraft Noise Community Consultative Group ("ANCCG") within the Terms of Reference which are contained in Attachment A (Aircraft Noise Community Consultative Group Terms of Reference) of this designation, or such other terms or amended terms of reference that are approved by the Council pursuant to Part 8 of the RMA.

### ***Noise Management Plan***

b. Without in any way limiting its obligations to fully comply with the conditions attaching to this designation, AIAL has completed and will maintain and where necessary update a Noise Management Plan ("NMP") which describes in detail how AIAL proposes to manage the Airport in order to comply with those conditions. The NMP describes, in detail, the following matters:

- procedures for the ongoing maintenance and operation of the ANCCG;
- the mechanisms for giving effect to a Noise Monitoring Programme to assess compliance with Conditions 5, 6 and 13. In particular, the following issues shall be addressed:
  - Location of any noise monitors;
  - Monitoring, recording and calculation of engine testing noise levels under Condition 13;
  - Management of the programme by a suitably qualified person; and
  - Presentation of information.
- The relationship between the Trust which is to be established under Condition 11 and the ANCCG, including reporting procedures.
- The ongoing investigations, methods, processes and resources that AIAL has put in place to provide for:
  - The reduction of noise levels from all aspects of Aircraft Operations and engine testing; and
  - Alternative methods of noise management to achieve the reduction of these noise levels.

- v. The Noise Minimisation Procedures.
- vi. The procedures for modifying and enhancing the Noise Minimisation Procedures to take into account:
  - Any findings made pursuant to any investigation undertaken in accord with (iv) above:
  - The need to ensure compliance with all of the requirements of this designation.
- vii. The procedures for reporting to the ANCCG any Aircraft Operations and engine testing activities which:
  - Contravene a condition of this designation:
  - Are at variance with AIAL's intentions recorded in the Explanatory Note to Condition 4 relating to the use of the Northern Runway.
- viii. The procedure for the annual preparation and publication of the 60 dB L<sub>dn</sub> AANC and the 65 dB L<sub>dn</sub> AANC by AIAL, as required by Condition 10B;
- ix. The procedure for the recording, responding and reporting of complaints received in respect of noise from Aircraft Operations, engine testing activities and any other activities generating noise at the Airport; and
- x. The dispute resolution procedures, to resolve disputes between AIAL and ANCCG about the contents and implementation of the NMP.

#### **Specific Matters in NMP Subject to Council Approval**

- c. The dispute resolution procedures referred to in Condition 9(b)(x) shall be to the Council's satisfaction and any subsequent alteration to these procedures shall be subject to the Council's written approval.

#### **Changes to NMP**

- d. If AIAL makes any changes to the procedures or other matters recorded in the NMP, it shall forthwith forward an amended copy of the NMP to the Council and the ANCCG.

#### **Reporting of Exceptions**

9A. AIAL shall maintain a register (electronic and hard copy) which is available for public inspection of all exceptions to the Noise Minimisation Procedures. The register shall list:

- The date and time of the exception:
- An explanation for the exception:
- Any actions undertaken to prevent a recurrence of the exception.

For the avoidance of doubt an exception includes:

- A breach of noise limits in Conditions 5, 6 and 13:
- A breach of the CAA noise rules applicable to the Airport which has been the subject of an investigation by AIAL into a related complaint:
- Any lapse in AIAL's voluntary or self-imposed procedures for the reduction of aircraft noise.

#### **Noise Mitigation Programme**

10. The development or use of any runway is subject to compliance with clauses (a) to (r) of this Condition (called in this designation, the "Noise Mitigation Programme"):

- a. For the purpose of determining compliance with clauses (b) to (r) of this condition, AIAL has supplied to the Council:
  - i. A list identifying all sites wholly or partly within the HANA and the MANA ("affected sites");
  - ii. A list of the legal descriptions and street addresses of all the affected sites; and
  - iii. Details of any Existing Building located on the affected sites.

#### *Proviso:*

Where a site lies within a mixture of HANA and MANA, or is partly located within one of those noise areas, then for the purposes of clauses (b) to (r) of this Condition:

- If any Existing Building is located wholly or partly within the HANA, that Existing Building shall be deemed to be in the HANA;
- If any Existing Building is located wholly outside the HANA, but wholly or partly within the MANA, that Existing Building shall be deemed to be in the MANA.

#### *Further proviso:*

For the avoidance of doubt, nothing in clauses (b) to (r) of this Condition shall be treated as requiring AIAL to fund acoustic treatment and ventilation measures in Existing Buildings that are located wholly outside the HANA and the MANA.

#### **Existing Buildings Located within the HANA Being Subject to 65 dB L<sub>dn</sub>**

b. Before any part of an affected site falls within the 65 dB  $L_{dn}$  AANC, AIAL shall, in respect of any Existing Building in the HANA on that site (other than any building used as educational facilities or as a registered pre-school) make an offer to the owner(s) to install, at AIAL's sole cost (and if the offer is accepted, install), acoustic treatment and related ventilation measures to achieve, in the manner provided for in clauses (p) and (q) of this Condition, an internal acoustic environment in the existing habitable rooms of the building(s) (with all external doors of the building and all windows of the habitable rooms closed), of 45 dB  $L_{dn}$ , together with related ventilation requirements. These measures shall include but not be limited to:

- A mechanical ventilation system or mechanical ventilation systems capable of:
  - Providing at least 15 air changes of outdoor air per hour in the principal living room of each building and 5 air changes of outdoor air per hour in the other habitable rooms of each building, in each case with all external doors and windows of the building closed with the exception of such windows in non habitable rooms that need to be ajar to provide air relief paths;
  - Enabling the rate of airflow to be controlled across the range, from the maximum airflow capacity down to 0.5 air changes (plus or minus 0.1) of outdoor air per hour in all habitable rooms;
  - Limiting internal air pressure to not more than 30 pascals above the ambient air pressure;
  - Being individually switched on and off by the building occupants, in the case of each system; and
  - Creating no more than 40 dBL<sub>Aeq</sub> in the principal living room, no more than 30 dBL<sub>Aeq</sub> in the other habitable rooms, and no more than 40 dBL<sub>Aeq</sub> in any hallway, in each building. Noise levels from the mechanical system(s) shall be measured at least 1 metre away from any diffuser.
- Thermal grade (minimum R1.8) ceiling insulation to all habitable rooms where equivalent ceiling insulation is not already in place; and
- A mechanical kitchen extractor fan ducted directly to the outside to serve any cooking hob, if such extractor fan is not already installed and in sound working order.

The above mentioned offer shall be made on the following basis:

- i. any structural or other changes required under the Building Act 2004 ("Building Act") or otherwise to enable the installation of the acoustic treatment and related ventilation measures shall be at AIAL's cost, except that nothing in this clause shall require AIAL to fund any measures required to bring a building up to the standard required in any building bylaws or any provisions of any statute that applied when the building or relevant part thereof was constructed; and
- ii. the owner(s) accepting an obligation to enter into a covenant in the terms set out in clause (r) of this Condition.

*Proviso:*

If requested by the owner, AIAL may, at its discretion, install or contribute to the cost of the installation of alternative ventilation measures to those described in clauses (b) and (c) of this Condition, subject to the owner being granted any necessary building or resource consents, the Council waiving AIAL's obligations in respect of the required ventilation measures in clauses (b) and (c) of this Condition, and the provisions of clauses (b), (c), and (n) to (r) applying with the necessary modifications.

c. At the same time, AIAL shall offer to install, (and if the offer is accepted, install), enhancements in addition to the above acoustic treatment and related ventilation measures to achieve, in the manner provided for in clauses (p) and (q) of this Condition, an internal acoustic environment in the existing habitable rooms of the building(s) (with all external doors of the building and all windows of the habitable rooms closed), of 40 dB  $L_{dn}$ , together with related ventilation requirements. This offer shall be made on the following basis:

- i. AIAL shall contribute 75% of the cost;
- ii. The owner agreeing to contribute the balance of the cost; and
- iii. The enhancements are to be installed at the same time as the acoustic treatment and related ventilation measures referred to in clause (b) of this Condition, above.

d. Where an owner or previous owner has earlier accepted the offer set out in clause (e) of this Condition below, AIAL need only offer to install works or enhancements not already installed pursuant to clause (e) of this Condition.

***Existing Buildings Located Within the HANA or the MANA Being Subject to 60 dB  $L_{dn}$***

e. Before any part of an affected site falls within the 60 dB  $L_{dn}$  AANC, AIAL shall, in respect of any Existing Building in the HANA or MANA on that site (other than any building used as educational facilities or as a registered pre-school) make an offer to the owner(s) to install (and if the offer is accepted, install):

- i. A mechanical ventilation system or mechanical ventilation systems capable of:
  - Providing at least 15 air changes of outdoor air per hour in the principal living room of each building and 5 air



changes of outdoor air per hour in the other habitable rooms of each building, in each case with all external doors and windows of the building closed with the exception of such windows in non-habitable rooms that need to be ajar to provide air relief paths;

- Enabling the rate of airflow to be controlled across the range, from the maximum airflow capacity down to 0.5 air changes (plus or minus 0.1) of outdoor air per hour in all habitable rooms;
  - Limiting internal air pressure to not more than 30 pascals above the ambient air pressure;
  - Being individually switched on and off by the building occupants, in the case of each system; and
  - Creating no more than 40 dB  $L_{Aeq}$  in the principal living room, no more than 30 dB  $L_{Aeq}$  in the other habitable rooms, and no more than 40 dB  $L_{Aeq}$  in any hallway, in each building. Noise levels from the mechanical system(s) shall be measured at least 1 metre away from any diffuser.
- ii. Thermal grade (minimum R1.8) ceiling insulation to all habitable rooms where equivalent ceiling insulation is not already in place; and
- iii. A mechanical kitchen extractor fan ducted directly to the outside to serve any cooking hob, if such extractor fan is not already installed and in sound working order.

The abovementioned offer shall be made on the following basis:

- i. Any structural or other changes required under the Building Act or otherwise, to enable the installation of the acoustic treatment and related ventilation measures shall be at AIAL's cost, except that nothing in this clause shall require AIAL to fund any measures required to bring a building up to the standard required in any building bylaws or any provisions of any statute that applied when the building or relevant part was constructed;
- ii. The owner(s) accepting an obligation to enter into a covenant in the terms set out in clause (r) of this Condition;
- iii. AIAL shall contribute 75% of the cost of the above works; and
- iv. The owner agrees to contribute the balance of the cost.
- v. Clauses (iii) and (iv) shall not apply to Pukaki Marae. AIAL shall contribute 100% of the cost of the above works for Pukaki Marae.

*Proviso:*

If requested by the owner, AIAL may, at its discretion, install or contribute to the cost of the installation of alternative ventilation measures to those described in this clause, subject to the owner being granted any necessary building or resource consents, the Council waiving AIAL's obligations in respect of the required ventilation measures in this clause, and the provisions of this clause and clauses (n) to (r) applying with the necessary modifications.

***Existing Registered Pre-schools Located Within the HANA Being Subject to 65 dB  $L_{dn}$***

- f. Before any part of an affected site falls within the 65 dB  $L_{dn}$  AANC, AIAL shall, in respect of any Existing Building in the HANA on that site used as a registered pre-school, make an offer to the owner(s) to install at AIAL's sole cost (and if the offer is accepted, install), in all learning areas:
- i. Acoustic treatment measures to achieve, in the manner provided for in clauses (p) and (q) of this Condition, an internal acoustic environment in each learning area (with all external doors and windows of the learning area closed) of 40dB  $L_{dn}$ ; and
- Mechanical ventilation system or mechanical ventilation systems for each learning area:  
Designed to achieve indoor air temperatures not less than 16 degrees celsius in winter at 5% ambient design conditions as published by the National Institute of Water & Atmospheric Research ("NIWA") (NIWA, Design Temperatures for Air Conditioning (degrees Celsius), Data Period 1991–2000);
    - Capable of providing (when all external doors and windows of the learning area are closed) outdoor air ventilation at the rate of 15 litres of air per second per square metre for the first 50 square metres and 7.5 litres of air per second per square metre of remaining area;
    - Capable of enabling the rate of air flow to be controlled across the range, from the maximum air flow capacity down to 8 litres of air per second per person for the maximum number of people able to be accommodated in the learning area at one time;
    - Otherwise complying with the New Zealand Standard NZS 4303:1990 *Ventilation for Acceptable Indoor Air Quality*;
    - Each ventilation system shall be capable of being individually switched on and off by the building occupants; and
    - Capable of creating no more than 35 dB  $L_{Aeq}$  in each learning area, and no more than 40 dB  $L_{Aeq}$  in any hallway or corridor. Noise levels from the mechanical system(s) shall be measured at least 1 metre away from any diffuser.

The abovementioned offer shall be made on the following basis:

- i. any structural or other changes required under the Building Act or otherwise required to enable the installation of the acoustic treatment and related ventilation measures shall be at AIAL's cost, except that nothing in this clause shall require AIAL to fund any measures required to bring a building up to the standard required in any building bylaws or any provisions of any statute that applied when the building or relevant part thereof was constructed; and
  - ii. the owner accepting an obligation to enter into a covenant in the terms set out in clause (r) of this Condition.
- g. Where an owner or previous owner has earlier accepted the offer set out in clause (h) of this Condition below, AIAL need only offer the works not already installed pursuant to clause (h) of this Condition.

**Existing Registered Pre-schools Located Within the HANA or the MANA being Subject to 60 dB L<sub>dn</sub>**

- h. Before any part of an affected site falls within the 60 dB L<sub>dn</sub> AANC, AIAL shall in respect of any Existing Building in the HANA or the MANA on that site used as a registered pre-school, make an offer to the owner(s) to install (and if the offer is accepted, install) at AIAL's sole cost:
- i. A mechanical ventilation system or mechanical ventilation systems for each learning area:
    - Designed to achieve indoor air temperatures not less than 16 degrees Celsius in winter at 5% ambient design conditions as published by the National Institute of Water & Atmospheric Research ("NIWA") (NIWA, Design Temperatures for Air Conditioning (degrees Celsius), Data Period 1991–2000);
    - Capable of providing (when all external doors and windows of the learning area are closed) outdoor air ventilation at the rate of 15 litres of air per second per square metre for the first 50 square metres and 7.5 litres of air per second per square metre of remaining area;
    - Capable of enabling the rate of air flow to be controlled across the range, from the maximum air flow capacity down to 8 litres of air per second per person for the maximum number of people able to be accommodated in the learning area at one time;
    - Otherwise complying with the New Zealand Standard NZS 4303:1990 *Ventilation for Acceptable Indoor Air Quality*;
    - Each ventilation system shall be capable of being individually switched on and off by the building occupants; and
    - Capable of creating no more than 35 dB L<sub>Aeq</sub> in each learning area, and no more than 40 dB L<sub>Aeq</sub> in any hallway or corridor. Noise levels from the mechanical system(s) shall be measured at least 1 metre away from any diffuser.
    - Thermal grade (minimum R1.8) ceiling insulation in all learning areas where equivalent ceiling insulation is not already in place.

*Proviso:*

If the owner wishes to install a ventilation system at greater cost, (e.g. an air conditioning system), then AIAL shall contribute the equivalent cost of the ventilation system(s) prescribed in clause (h) of this Condition.

The abovementioned offer shall be made on the following basis:

- i. any structural or other changes required under the Building Act or otherwise required to enable the installation of the acoustic treatment and ventilation measures shall be at AIAL's cost, except that nothing in this clause shall require AIAL to fund any measures required to bring a building up to the standard required in any building bylaws or any provisions of any statute that applied when the building or relevant part thereof was constructed; and
- ii. the owner(s) accepting an obligation to enter into a covenant in the terms set out in clause (r) of this Condition.
- iii.

**Existing Educational Facilities Within the HANA or the MANA Being Subject to 60 dB L<sub>dn</sub>**

- i. Before any part of an affected site falls within the 60 dB L<sub>dn</sub> AANC, AIAL shall, in respect of any Existing Building in the HANA or MANA on that site used as an educational facility or facilities, make an offer to the owner(s) to install (and if the offer is accepted, install) acoustic treatment and related ventilation measures to achieve, in the manner provided for in clauses (p) and (q) of this Condition, an internal acoustic environment in all existing classrooms, libraries and halls (with all external doors and windows of the classrooms, libraries and halls closed) of 40 dB L<sub>dn</sub>, together with related ventilation requirements. These measures shall include but not be limited to:
  - i. In the case of classrooms and libraries, air conditioning and/or a mechanical ventilation system or mechanical ventilation systems for each classroom and library, that are:
    - Designed to achieve indoor air temperatures not less than 16 degrees Celsius in winter and not greater than 27 degrees Celsius in summer at 5% ambient design conditions as published by the National

Institute of Water & Atmospheric Research (“NIWA”) (NIWA, Design Temperatures for Air Conditioning (degrees Celsius), Data Period 1991–2000);

- Capable of providing outdoor air ventilation at the rate of 8 litres of air per second per person for the maximum number of people able to be accommodated in any such room at one time (“the required airflow”);
- Capable of enabling, (in the case of classrooms or libraries in which only mechanical ventilation systems are used to satisfy the above temperature and outdoor air requirements), the outdoor airflow to be controlled across the range, from the maximum airflow capacity down to the required airflow when all external doors and windows of the classroom or library are closed;
- Otherwise complying with the New Zealand Standard NZS 4303:1990 Ventilation for Acceptable Indoor Air; and
- Capable of creating no more than 35 dB  $L_{Aeq}$  in each classroom, no more than 40 dB  $L_{Aeq}$  in each library, and no more than 40 dB  $L_{Aeq}$  in any hallway or corridor.
- Noise levels from the mechanical system(s) shall be measured at least 1 metre away from any diffuser.
  - ii. in the case of halls, a mechanical ventilation system or mechanical ventilation systems for each hall capable of:
- Providing at least 12 litres of outdoor air per second per square metre with all external doors and windows of the hall closed;
- Enabling the outdoor airflow to be controlled across the range, from the maximum airflow down to the rate of 8 litres of outdoor air per second per person for the maximum number of occupants able to be accommodated in the hall at one time;
- Otherwise complying with the New Zealand Standard NZS 4303:1990 Ventilation for Acceptable Indoor Air Quality; and
- Creating no more than 35 dB  $L_{Aeq}$  in each hall, and no more than 40 dB  $L_{Aeq}$  in any hallway or corridor. Noise levels from the mechanical system(s) shall be measured at least 1 metre away from any diffuser.
- Thermal grade (minimum R1.8) ceiling insulation shall be provided in the case of school halls where equivalent ceiling insulation is not already in place.

The abovementioned offer shall be made on the basis that any structural or other changes required under the Building Act or otherwise to enable the installation of the acoustic treatment and related ventilation measures shall be at AIAL’s cost, except that nothing in this clause shall require AIAL to fund any measures required to bring a building up to the standard required in any building bylaws or any provisions of any statute that applied when the building or relevant part thereof was constructed.

j. AIAL’s obligations under clause (i) of this Condition for acoustic treatment and related ventilation measures shall be “capped” at the maximum costs set out in Attachment B of this designation. For the avoidance of doubt, the costs in Attachment B are expressed as the maximum costs for which AIAL shall be responsible, and, in addition, AIAL shall not be required to expend the maximum costs where the acoustic treatment and related ventilation measures can be installed by AIAL more cost effectively to achieve the internal acoustic environment and related ventilation standards specified in this Condition (Condition 10). Any new windows installed as part of the acoustic treatment and related ventilation measures shall be made able to be opened or shall be fixed at the discretion of the owner(s) of the educational facilities at the time the work is undertaken.

For existing educational facilities, the maximum figures referred to in Attachment B are exclusive of GST and are in year 2012 dollars and they will therefore be adjusted to compensate for inflation and increased annually from the date of the inclusion of this designation in the Unitary Plan by the percentage increase in the Consumer Price Index (All Groups) or any substitute national measure of inflation adopted in lieu of the Consumer Price Index (All Groups).

***New Buildings at Existing Educational Facilities Within the MANA***

- k. Where, in the case of educational facilities established within the MANA before 10 December 2001:
- i. A new classroom, library, or hall is to be established; or
  - ii. An addition or alteration is to be made to any existing classroom, library or hall,
- and the new classroom, library or hall, or the addition or alteration, is not by definition, an Existing Building, then AIAL upon receiving advice of the proposed works, shall make an offer to the owner(s) of the relevant educational facilities to provide funding (and if the offer is accepted, provide funding) for acoustic treatment and related ventilation measures to achieve an internal acoustic environment (with all external doors and windows of

the classrooms, libraries or halls closed) of 40 dB L<sub>dn</sub> for all such new facilities along with ventilation to a standard consistent with clause (i) of this Condition, above, provided that this offer shall be conditional on:

- The owner agreeing to contribute 25% of the costs of the acoustic treatment and ventilation measures;
- Construction of the new or additional facilities otherwise complying with the relevant requirements of the Building Act and any relevant legislation,

and further provided that AIAL's obligations under clause (k) of this Condition shall only extend, in the case of additional classrooms, libraries or halls, to those which the Regional Network Manager — Auckland of the Ministry of Education or successor of that office certifies are required as a result of roll growth caused by underlying increases in population in the catchment in the immediate vicinity of the educational facility.

- l. The offer referred to in clause (k) of this Condition may be made on the basis that if the new or additional facilities are removed from the affected site before the 60 dB L<sub>dn</sub> AANC reaches the affected site, any cost incurred by AIAL in respect of that building shall be returned to AIAL.

#### ***New Public Schools or Pre-schools Within the MANA***

m. AIAL shall offer the owner(s) of any new public (i.e. non-private or integrated) school or preschool to be established on affected sites located within the MANA, funding (and if the offer is accepted, provide funding) for acoustic treatment and related ventilation measures to meet the requirements in, and to a standard consistent with, clause (k) of this Condition, above, provided that this offer shall be conditional on:

- The owner agreeing to contribute 50% of the costs of the acoustic treatment and ventilation measures;
- The Regional Network Manager — Auckland of the Ministry of Education or successor of that office certifying, following consultation on the issue of location with AIAL, that the proposed new school or preschool could not reasonably be located outside the MANA., such consultation having been undertaken as soon as reasonably practicable before selecting a potential new school or pre-school site.

#### ***Building Act 2004***

- n. All work undertaken pursuant to the terms of this Condition (Condition 10) shall be in accordance with the Building Act and any other relevant legislation.
- o. Nothing in this Condition (Condition 10) shall require AIAL to fund any measures required to bring a building up to the standard of the building regulations that applied when the building was constructed or the relevant part thereof was last modified.

#### ***Certified Standard Packages and Individual Packages***

p. Where this Condition (Condition 10) requires AIAL to offer to provide acoustic treatment and ventilation measures, AIAL:

i. Has developed standard acoustic and ventilation treatment packages for as many types of building for each FANC, shown on Figure 4 (Future Aircraft Noise Contours) of this designation, as is practicable ("standard packages"). These standard packages may be updated or further developed at any time. Each standard package shall be:

- Sufficient to achieve the internal acoustic environment and ventilation requirements specified in this Condition (Condition 10) for the type of building within the FANC for which the package has been developed; Certified to that effect by a suitably qualified independent person (or persons) nominated by AIAL and approved by the Council ("an approved person") ("certified standard package"); and
- Developed in consultation with the Building Research Association of New Zealand.

For the avoidance of doubt the standard packages are intended to mitigate against aircraft noise, not against other sources which may have different characteristics and hence require different attenuation in respect to the treatment measures on offer;

ii. Shall offer to install (and if the offer is accepted, install) the relevant certified standard package, which has been certified by an approved person as being suitable to fulfil the requirements of this Condition (Condition 10) for the building and FANC within which the building is located; and in all other cases, shall offer a package certified by an approved person as suitable, at the time of the offer, to achieve the internal acoustic environment and ventilation requirements specified in this Condition (Condition 10) for the FANC within which the building is located ("certified individual package") and if that offer is accepted, shall install the certified individual package.

q. Where AIAL installs any acoustic treatment and or ventilation or air conditioning measures, AIAL:

- i. Shall provide the Council with a certificate from a suitably qualified independent person (or persons) nominated by AIAL and approved by the Council, that the installation of any relevant certified standard package, or relevant certified individual package, has been properly undertaken in accordance with sound practice; and

- ii. Shall not be in breach of this condition where the internal noise standards and related ventilation requirements are not met in each instance provided the relevant certificate required in sub-clause (q)(i) of this Condition, above, has been provided to the Council.

### **Covenants**

- r. AIAL shall not be obliged to undertake any work pursuant to clauses (b) to (h) of this Condition (Condition 10) unless the owner of the particular affected site agrees to enter into a covenant with AIAL (which shall be registered on the site's title) in the terms set out in Attachment C of this designation with such necessary changes, approved by the Council. The cost of preparation and registration of the covenant on the site's title shall be met by AIAL. AIAL shall meet the reasonable legal costs incurred by the owner for the perusal and approval of the covenant.

### **Monitoring of Noise Mitigation Programme**

10A. AIAL is to monitor the implementation of the Noise Mitigation Programme as set out in Condition 10 and provide a written report setting out its findings in detail to the Council on an ongoing basis at six monthly intervals each year.

### **Preparation and Publication of the AANC's**

10B. AIAL shall:

- a. Prepare annually the 60 dB L<sub>dn</sub> AANC and 65 dB L<sub>dn</sub> AANC.
- b. Publish a public notice in:
  - i. One or more daily newspapers circulating in the areas contained in the HANA, MANA and ANNA; or
  - ii. One or more other newspapers that have at least an equivalent circulation, advising the public that:
    - The AANCs have been prepared for the following twelve months;
    - Explaining what the AANCs are and who is potentially affected; and
    - That the AANCs are available for public inspection at such Council offices as determined by a designated Council officer approved by the Chief Executive of the Council.

### **Temporary Noise Mitigation Programme**

10C

(a) This condition shall only apply:

- (i) until this designation is altered to reflect the extent of AIAL's aircraft noise contours in the Unitary Plan D24 Aircraft Noise Overlay, after which it will no longer apply; and
- (ii) to landowners within the areas shown on the Auckland International Airport Transitional Mitigation Plans set out in Attachment D; and
- (iii) to landowners who are required to comply with the acoustic insulation and ventilation standards set out in D24.6.3 of the D24 Aircraft Noise Overlay when establishing a new ASAN or undertaking additions or alterations to an existing ASAN within those areas, and who have acquired building consent.

(b) If the requirements set out in subsection (a) are met, AIAL shall meet the relevant part of the cost of installing acoustic treatment in buildings where this is required by D24.6.3 of the Unitary Plan on the same basis as set out in condition 10 as if the building in question was an "existing building", or the addition or alteration was part of an "existing building", on an "affected site", with all other modifications required to condition 10 to allow it to be applied in this context.

Provisos:

- Condition 10C is only required during the transitional period between the Unitary Plan being made operative and this designation being altered to reflect the extent of AIAL's aircraft noise contours in the Unitary Plan Aircraft Noise Overlay. At this time, this Condition will be deleted from this designation.
- When Condition 10C applies to additions or alterations, the costs are to be met or partially met only in relation to the additions or alteration itself not the whole building.

### **Aircraft Noise Mitigation Fund**

11. AIAL shall (at its cost and to the Council's satisfaction) maintain a Trust with two Trustees appointed by AIAL, two Trustees appointed from the community by the Council, and one Trustee appointed by the ANCCG.

12. AIAL shall contribute \$ 325,000 (in 2012 New Zealand dollar terms) per annum plus GST if any (adjusted thereafter to compensate for inflation and increased annually from December 2012 by the percentage increase in the Consumer Price Index (All Groups) as provided for in Condition 12A, below),

to a Noise Mitigation Fund, to be administered by the Trustees for the benefit of the local community affected by aircraft noise and located or residing within the HANA, MANA and ANNA, for the purpose of:

- a. The mitigation of adverse effects associated with noise from Aircraft Operations which are not provided for under Condition 10 (“other adverse effects”); or
- b. Ensuring positive effects on the external environment to offset those other adverse effects; or
- c. In cases of significant financial hardship, assisting an owner or owners to meet their share of the costs of acoustic treatment measures or enhancements as set out in Conditions 10(c)(ii) and 10(e)(iv).

12A. On each anniversary of the Trust, AIAL will make a payment to the Trust of an amount sufficient to compensate for inflation over the immediately preceding annual period calculated in accordance with the following formula:

$\$325,000 \times A\%$ , where A is the percentage increase in the Consumer Price Index (All Groups) (or any substitute national measure of inflation) for that 12 month period.

*Explanatory Note, Aircraft Noise Mitigation Fund:*

While there are various physical measures proposed by way of acoustic insulation and ventilation of buildings containing Activities Sensitive to Aircraft Noise, the Aircraft Noise Mitigation Fund is designed to ensure that adverse effects of aircraft noise on the external environment which cannot be mitigated by physical means can at least be partially offset by providing positive effects in the form of enhanced cultural, recreational and other opportunities and facilities to affected residents. Those opportunities and facilities may be provided outside the affected area but should be readily available to affected residents.

**Engine Testing on Aircraft**

13.

- a. Any use of the designated area for the testing of engines which are in situ on an aircraft (“in situ aircraft engines”) shall not exceed the following noise limits within the Identified Area shown on Figure 5 attached to this designation:

7 day rolling average	55 dB L <sub>dn</sub>
10pm to 7am	75 dB L <sub>max</sub>

For the purpose of this control, testing of in situ aircraft engines shall be measured in accordance with NZS 6801:2008 Acoustics- Measurement of Environmental Sound.

- b. AIAL shall monitor and record all testing of in situ aircraft engines and provide a summary report of the tests undertaken and the calculated noise levels whenever requested in writing by the ANCCG.
- c. The testing of in situ aircraft engines is excluded from the calculation of the 7 day rolling average in clause (a) above where such testing is associated with work necessary to satisfy an airworthiness directive or other like safety requirement issued by the Minister of Transport, the Director of Civil Aviation or the Civil Aviation Authority, which requires within 7 days of the directive or requirement being issued, the ground running of the engines on:
  - i. All aircraft with a specific engine type; or
  - ii. aircraft of a specific make or model.

Prior to any testing excluded by this clause commencing, AIAL shall give written notice to the ANCCG and the Council explaining:

- The nature of and the reason for the testing;
- Its expected duration and noise effects; and
- Details of the directive or requirement received.

**Other Noise**

13A. Any use of the land for any purpose other than:

- a. Aircraft Operations (Conditions 5 and 6);
  - b. testing of in situ aircraft engines (Condition 13); and
  - c. the use of audible bird scaring devices for the discouragement of birds;
- shall not exceed the following noise limits within the Identified Area shown on Figure 5 attached to this designation:

Average Maximum Levels	Maximum
------------------------	---------

dB LAeq			dB LAmax
Monday to Saturday 7am–6pm (0700–1800)	Monday to Saturday 6pm–10pm (1800–2200) AND Sunday and Public Holidays, 7am–10pm(0700–2200)	At all other times	10pm–7am (2200–0700)
55	50	45	70

For the purpose of this control, Other Noise shall be measured in accordance with NZS 6801:2008 Acoustics- Measurement of Environmental Sound and assessed in accordance with NZS 6802:2008 Acoustics – Environmental Noise.

### Coastal Protection Yard

14. A coastal protection yard having a minimum depth of 20 metres shall be maintained where any part of the designated area abuts the Mean High Water Spring Tide Mark. No structure shall be erected in the coastal protection yard except essential Airport operational facilities (for example, security fences, navigational aids, rescue facilities and stormwater facilities) which require a location in the area of the coastal protection yard. Prior to any land modification works within the coastal protection yard, the requiring authority shall submit an outline plan to the Council for approval.

15. Subject to any waiver of this Condition, or any part of this Condition, prior to any land modification or development on any land within 200 metres of the northern boundary of the designated area east of Pukaki Creek (“northern boundary”), the requiring authority shall submit an outline plan to the Council for approval which, without limiting the requirements of Section 176A of the RMA, shall show:

- a. Provision for the landscaping in native vegetation of a five metre wide strip along the northern boundary and a limitation on building height in relation to the northern boundary so that no part of any building shall project beyond a building envelope contained by a 55 degree recession plane from points 2.5 metres above the northern boundary (i.e. maximum height = 2.5 metres plus 1.428 x distance from boundary).
- b. Details of any land modification within:
  - i. 200 metres of the northern boundary which involves more than 500m<sup>3</sup> of earthworks; or
  - ii. 30 metres of the northern boundary which involves more than 200m<sup>3</sup>.
- c. The timetable for completion of the abovementioned landscaping, earthworks and remedial work.
- d. The height, shape and bulk of any proposed structures.
- e.

16. For the purpose of conditions 14 and 15(b) details shall be given of the following:

#### *Alteration to Natural Landscape*

- a. Whether any earthcut or fill will remove existing vegetation, alter the existing topography of the site, or affect existing natural features including landforms, and the impacts on the area’s amenity values.

#### *Alteration to cultural heritage sites or cultural landscape*

- aa. Whether any earthcut, fill, structures or buildings will adversely affect values associated with scheduled cultural heritage sites or cultural landscapes.

#### *Site Stability and Erosion*

- b. Whether the effects from natural hazards will be avoided, remedied or mitigated, and the extent to which earthworks affect the stability and erosion potential of the site and surrounding site.

#### *Topography in Relation to Adjacent Land*

- c. Whether the site contours and final contours coordinate with the final levels of adjoining land.

#### *Flooding*

- d. Whether the earthworks and final levels will adversely affect overland flowpaths or increase the potential for flooding within the site or surrounding area.

#### *Utility Services*

- e. Whether the earthworks and final levels will adversely affect existing utility services.

### Public Access to the Coastal Marine Area and Fossil Forest

17. AIAL shall provide road access for the public to the coastal marine area, through the designated area, to a point near the fossil forest (located in the coastal banks of Lot 2 DP 62092 and Allotment 164

Manurewa Parish) and shall provide pedestrian access from the end of that road down to Mean High Water Springs, so as to provide public access to the coastal marine area and the fossil forest.

## **Public Consultation**

17A.

- a. Construction of the Northern Runway to its maximum length, shall not take place until AIAL has completed a process of public notification and consultation. The process of public notification and consultation shall include the following:
  - i. Written notice to the ANCCG (or its successor from time to time); and
  - ii. A public notice published in a daily newspaper circulating in the Auckland Council area, and in each of the local newspapers circulating in those parts of the Auckland Council area subject to the ANNA, MANA and HANA. Such notice to be published in each case twice at an interval of approximately a fortnight.
- b. Each of the abovementioned notices shall include a brief description of the proposal and shall advise:
  - i. Where full details of the proposal can be inspected and copies of those details obtained;
  - ii. Of the opportunity to forward comments to AIAL about the proposal;
  - iii. The date by which comments about the proposal should be sent to AIAL, which date shall not be less than 20 working days from the date of the last of the public notices;
  - iv. Details of any additional consultation proposed by AIAL.
- c. The information available for inspection under this Condition shall include the following:
  - i. Diagram(s) and description of the proposal including all associated work;
  - ii. A description of the proposed operating scenario for the Northern Runway;
  - iii. The reasons for the proposed operating scenario;
  - iv. The reasons for the proposal including an explanation of the need for the Northern Runway to have the proposed Operational Length;
  - v. Reference to any relevant reports; and
  - vi. Any other information AIAL wishes to make available for the purpose of explaining the proposal or in respect of which it would like to invite comments.
- d. AIAL shall consider any comments made to it pursuant to the notification and consultation process described above before deciding whether or not to proceed with the proposal. If AIAL decides to proceed, it shall provide as soon as possible to the Council copies of all comments received, together with written advice of:
  - i. Details of the notification and consultation undertaken;
  - ii. A summary of comments received;
  - iii. A statement describing the actions planned, if any, in respect to the comments received; and
  - iv. Statement explaining the reasons for the actions to be taken or the decision not to take any action.
- e. AIAL shall regularly consult the ANCCG and seek its input and comment on community consultation that the latter may recommend to inform the public from time to time on any matter relating to the Northern Runway

## **Outline Plan**

18. Where AIAL seeks to rely on the provisions of the designation for any works within its land, an outline plan of any work to be constructed on the designated area must be submitted to the Council pursuant to section 176A of the RMA unless the works have been otherwise approved under the RMA or the details of the work are incorporated in the designation or Council waives the requirement for an outline plan. For any proposed work to be constructed for taxiing of aircraft on the designated area north of the area shown as Northern Runway on Figure 1 of this designation, the outline plan shall include, in addition to the matters required under section 176A of the RMA, an analysis and prediction of the noise associated with the Aircraft Operations component of the proposal so as to demonstrate compliance with Condition 5.

## **Heritage Resources**

17. Each of the following heritage resources shall be relocated by the requiring authority in a manner and to a site that will ensure the continued protection of the resource before any construction or work is commenced on the designated area that would damage or destroy the resource:
  - a. the Norfolk Island Pine identified as notable tree 1783 on the planning maps provided however that this tree need not be relocated and may be removed, if AIAL provides the Council with a report from a qualified arborist, approved by the Council, who certifies that it is not reasonably practical to relocate the tree;



- b. Abbeville Farm House and Barn, Part Lot 2, DP 12194 (refer Schedule of Significant Heritage Places, Item 1414);
- c. Westney Road Methodist Church, Part Lot 2, DP 12194(refer Schedule of Significant Heritage Places, Item 1414); and
- d. Rennie Jones Homestead, Pt Allot 163, Manurewa Parish (refer Schedule of Significant Heritage Places, Item 1424).

### **Lapsing Date**

20. As this designation has been given effect to, the designation cannot lapse pursuant to section 184(1) of the RMA.

## **Attachments**

### **Attachment A: Aircraft Noise Community Consultative Group Terms of Reference**

#### **DESIGNATION AIAL 1100 — ATTACHMENT A**

#### **AIRCRAFT NOISE COMMUNITY CONSULTATIVE GROUP (“Group”)**

#### **TERMS OF REFERENCE**

##### **Purpose**

To consider, and where appropriate make recommendations to Auckland International Airport Limited (“AIAL”), on aircraft noise issues and concerns that arise from the operation and activities at Auckland International Airport (“Airport”).

##### **Activities**

1. To identify community concerns regarding aircraft noise.
2. To co-operatively formulate and propose rules and procedures to minimise the impact of aircraft noise on the community and to consider how AIAL should respond to community concerns regarding aircraft noise.
3. To assist and advise AIAL and Council in the dissemination of relevant information to the community.
4. To regularly review the current procedure for handling noise complaints, modify that procedure where necessary and make it publicly available as soon as practicable.
5. To assist AIAL in the review of and, where necessary, to recommend modifications to, the Noise Management Plan which (in summary) addresses:
  - (i) procedures for handling noise complaints;
  - (ii) noise abatement procedures; and
  - (iii) timely provision of aircraft noise and flight path monitoring information.

AIAL is to consider any recommended modifications in good faith and provide the Group with a written response to the recommendations, including the reasons for rejecting any recommendations, should such a response be requested by the Group.

6. To monitor noise levels and compliance with the noise abatement procedures and Noise Management Plan.
7. To access appropriate technical expertise and guidance as required, including to, where appropriate, independently peer review noise monitoring and other technical data provided to the Group by AIAL.

## Chairperson

Meetings will be chaired by an independent chairperson appointed by Council and AIAL jointly. The chairperson may invite other persons on an ad hoc basis to address the Group on particular agenda items. Where a matter is to be considered by the Group which would be likely to directly affect residents of a local board that is not otherwise represented on the Group, then the chairperson should notify the chair of that local board and invite them to the relevant meeting.

## Membership

Local Board Representatives	(x 12)	<ul style="list-style-type: none"> <li>• Mangere-Otahuhu</li> <li>• Otara-Papatoetoe</li> <li>• Manurewa</li> <li>• Howick</li> <li>• Franklin</li> <li>• Maungakiekie-Tamaki</li> <li>• Albert-Eden</li> <li>• Puketepapa</li> <li>• Whau</li> <li>• Orakei</li> <li>• Waitakere Ranges</li> <li>• Papakura_</li> </ul>
Auckland Council Representative	(x1)	
Industry Representative (freight forwarder or manufacturer etc)	(x1)	
Airways Corporation Representative	(x1)	
Board of Airline Representatives of New Zealand	(x2)	
AIAL Representatives	(x2)	
Mana Whenua Representatives-	(x2)	

## General

1. The Group will meet at least every three months.
2. Meetings of the Group will be held at the Airport anytime between 2:00 pm and 9:00 pm.
3. AIAL will provide secretarial and support services at AIAL's cost and expense.
4. The selection of the community representatives will be on the basis of one community representative on behalf of each of the Local Boards namely, Mangere-Otahuhu, Otara-Papatoetoe, Manurewa, Howick, Franklin, Maungakiekie - Tamaki, Albert-Eden, Puketepapa, Whau, Orakei, Waitakere Ranges and Papakura.
5. The term of office for Local Board appointed representatives will be the same as the local body electoral term, that is three years. Council will be responsible for any payments to be made to the Local Board appointed representatives.
6. AIAL will be responsible for any payments that are to be made to mana whenua in return for services to the Group.
7. AIAL and Council will share equally the reasonable costs of the independent chairperson.

8. AIAL will provide data and technical information on aircraft movements and a noise complaint summary. The Group will monitor AIAL's process for responding to noise complaints and queries. Noise complaints will not be dealt with on an individual basis.

The Group has an objective to reach consensus, however, dissenting views will be recorded.

#### Meeting procedure

1. **Chairperson:** AIAL and Council will be jointly responsible for appointing and removing the chairperson. The terms of appointment will set out the conditions of appointment and removal, and will include that the term of appointment for the chairperson is limited to 5 years, unless the Group otherwise agrees. The chairperson will chair the meeting. If the chairperson is not present within 15 minutes of the time appointed for the meeting then the Group will appoint another person to chair the meeting.
2. **Notice of meeting:** AIAL will arrange for:
  - public notice of the meeting to be published on the internet, including the contact details of all members of the Group; and
  - a reminder of meeting, together with any other relevant information to be sent to all members of the Group at least 5 working days before the meeting. The notice of meeting will set out the time and place of the meeting, and the nature of the business to be discussed. Members of the Group may advise AIAL of items to be included in the notice of meeting.
3. **Method of holding meeting:** Meetings will be held by a number of members, who constitute a quorum, being assembled together at the place, date and time appointed for the meeting.
4. **Quorum:** No business may be transacted at a meeting of the Group if a quorum is not present. A quorum is present if there are at least 6 people including three Local Board representative, one Board of Airline Representatives of New Zealand representative, the Airways Corporation representative and one AIAL representative. If a quorum is not present within 15 minutes of the time appointed for the meeting then the meeting is to be adjourned to the same day in the following week at the same time and place or to such other date, time and place as the Group may appoint.
5. **Members may act by representative:** A member of the Group may appoint a representative to attend one or more meetings of the Group.
6. **Minutes:** The Group will ensure that minutes are kept of all proceedings and that the minutes are made available as soon as possible after the meeting on the internet. Minutes of the previous meeting will be sent to members with the notice of meeting for the next meeting.

#### Attachment B: Maximum Costs of Acoustic Treatment and Related Ventilation Measures

\* For details of each classroom type for the specified schools refer to Marshall Day Acoustics report "Sound Insulation and Ventilation – Schools", dated 1 May 2001.

TYPE OF SPACE*	NUMBER OF CLASSROOMS, LIBRARIES AND HALLS	MAXIMUM COSTS OF ACOUSTIC TREATMENT AND RELATED VENTILATION MEASURES PER CLASSROOM, LIBRARY OR HALL	MAXIMUM COST FOR CLASSROOMS (= TOTAL PER CLASSROOM X NUMBER OF CLASSROOMS) AND FOR EACH LIBRARY AND HALL
<b>Redoubt North School</b>			
E1	20	\$68,000	\$1,360,000
Library	1	\$68,000	\$68,000

Hall	1	\$23,000	\$23,000
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<b>All Preschools and Schools</b>	
<b>Type of space</b>	<b>Maximum cost per Classroom, Library or Hall</b>
Classroom	\$188,000
Library	\$149,000
Hall	\$78,000

**Attachment C: Example of Deed of Covenant**

**Easement instrument to grant easement or profit à prendre, or create land covenant**  
(Sections 90A and 90F Land Transfer Act 1952)

2008/6229EF  
APPROVED  
Registrar-General of Land

Grantor

Grantee

AUCKLAND INTERNATIONAL AIRPORT LIMITED

**Grant of Easement or Profit à prendre or Creation of Covenant**

The Grantor being the registered proprietor of the servient tenement(s) set out in Schedule A grants to the Grantee (and, if so stated, in gross) the easement(s) or profit(s) à prendre set out in Schedule A, or creates the covenant(s) set out in Schedule A, with the rights and powers or provisions set out in the Annexure Schedule(s)

**Schedule A**

*Continue in additional Annexure Schedule, if required*

Purpose (Nature and extent) of easement, profit or covenant	Shown (plan reference)	Servient Tenement (Computer Register)	Dominant Tenement (Computer Register) or in gross
Covenant to maintain Aircraft Noise Mitigation Work			

REF: 7203 – AUCKLAND DISTRICT LAW SOCIETY INC.

**ANNEXURE SCHEDULE A**

**INTRODUCTION**

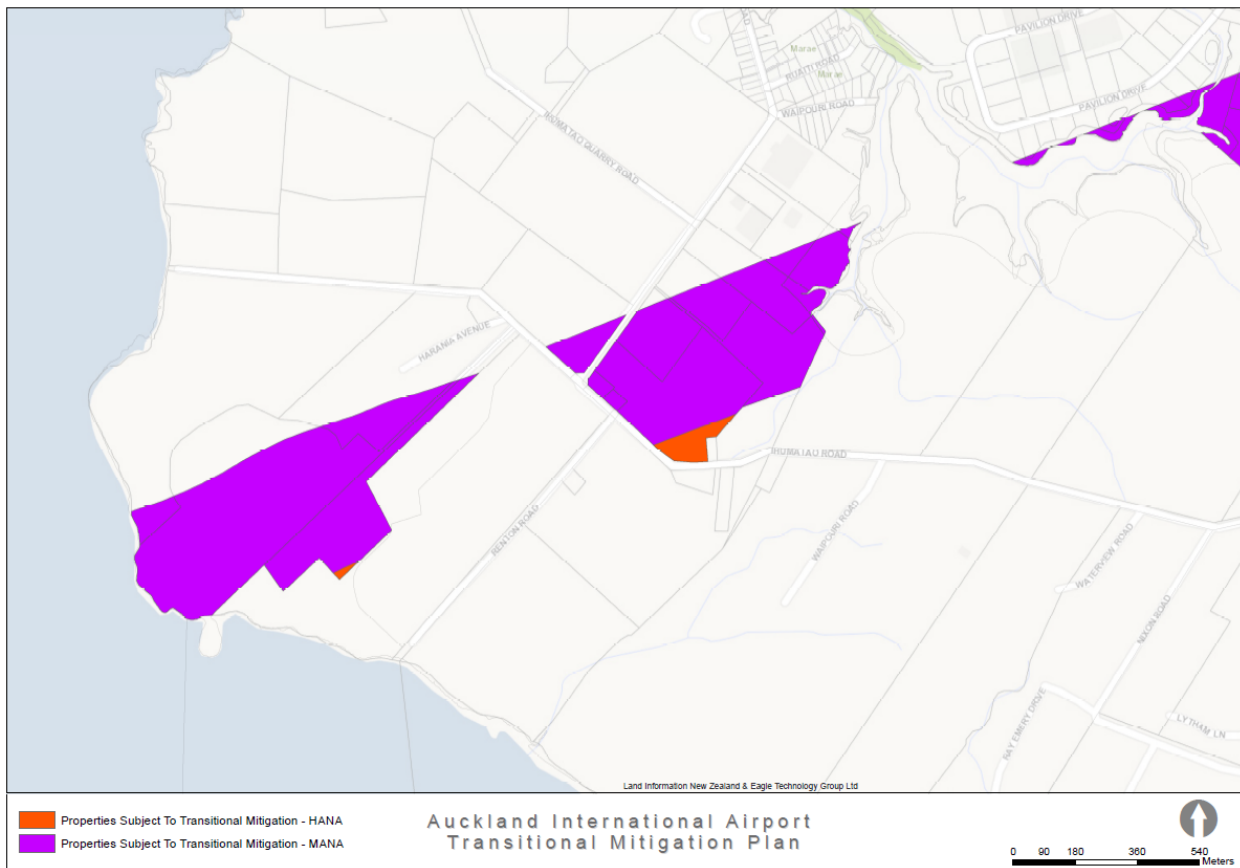
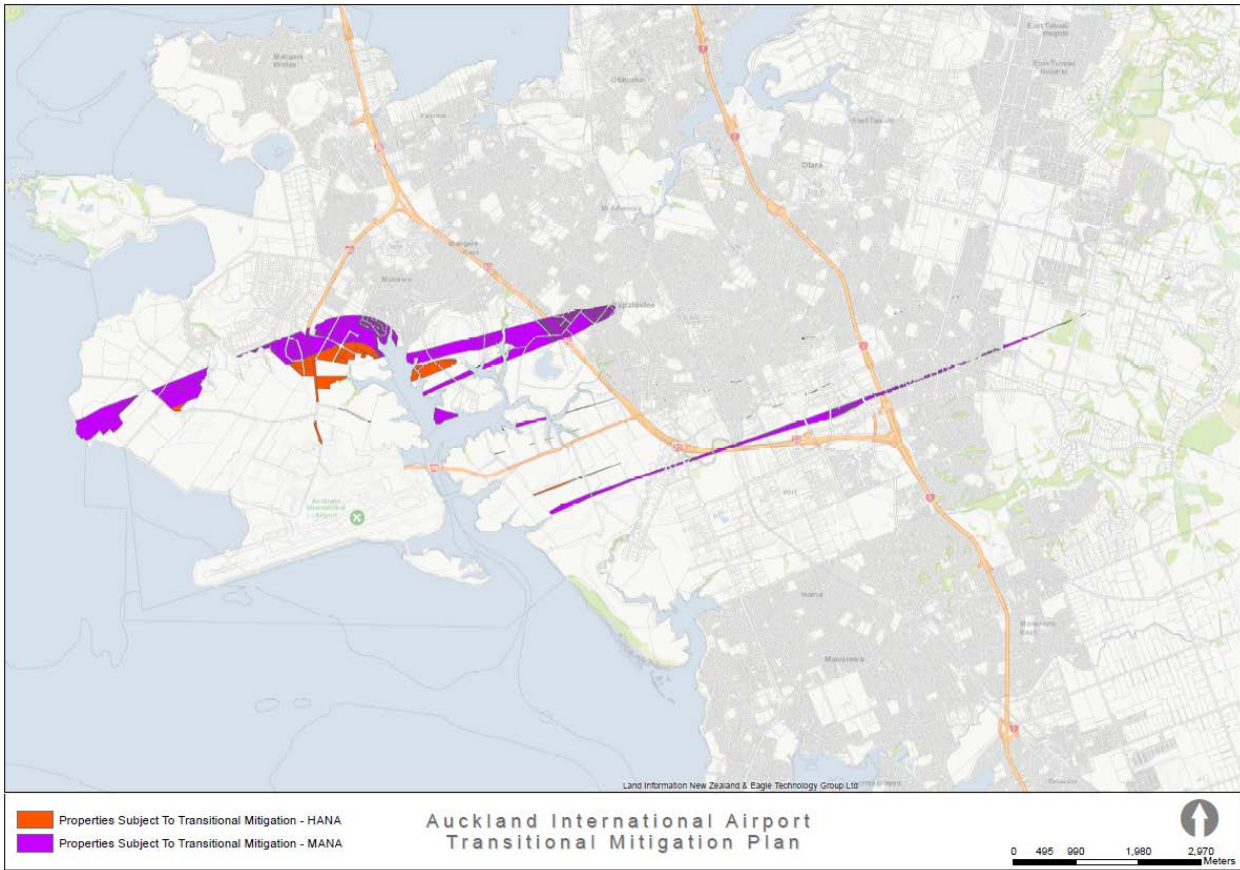
A. The Grantor is registered as proprietor of the Servient Tenement (“**Servient Tenement**”).

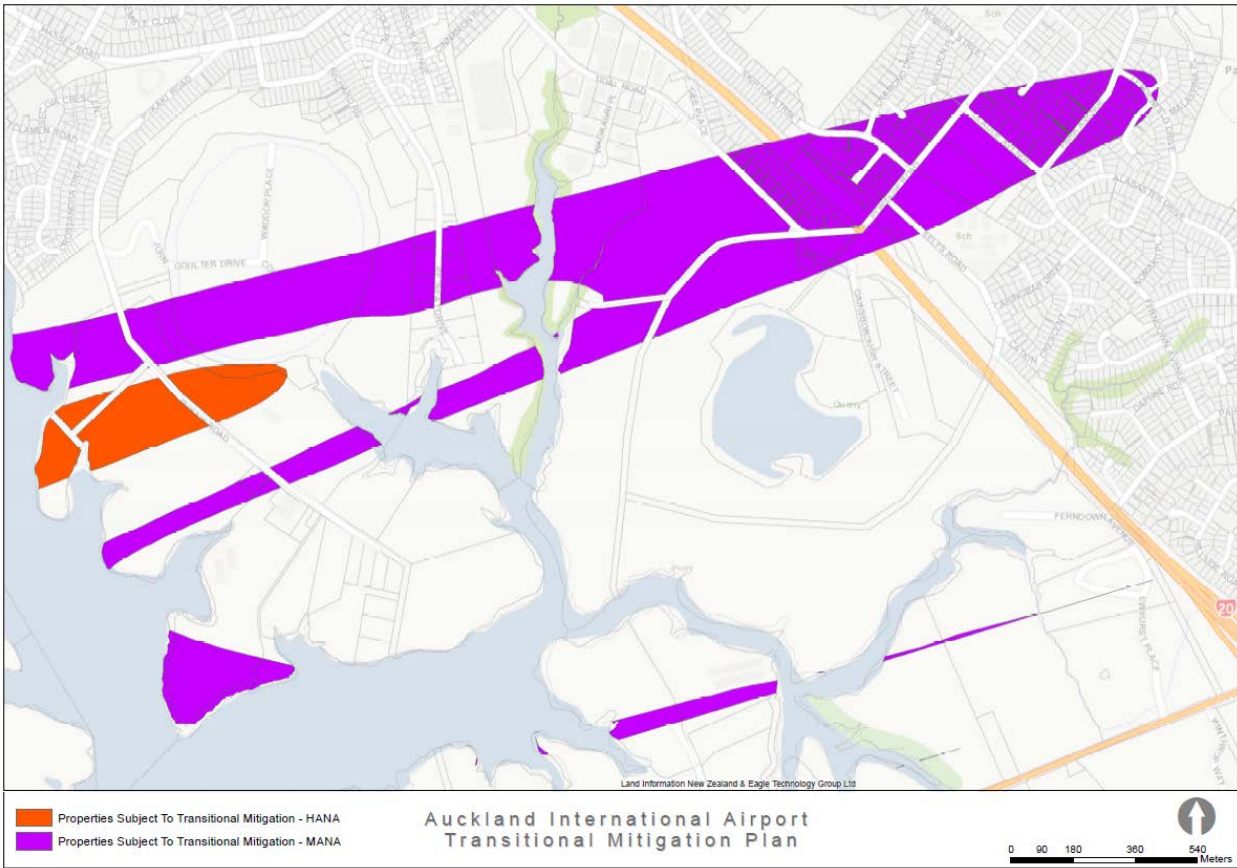
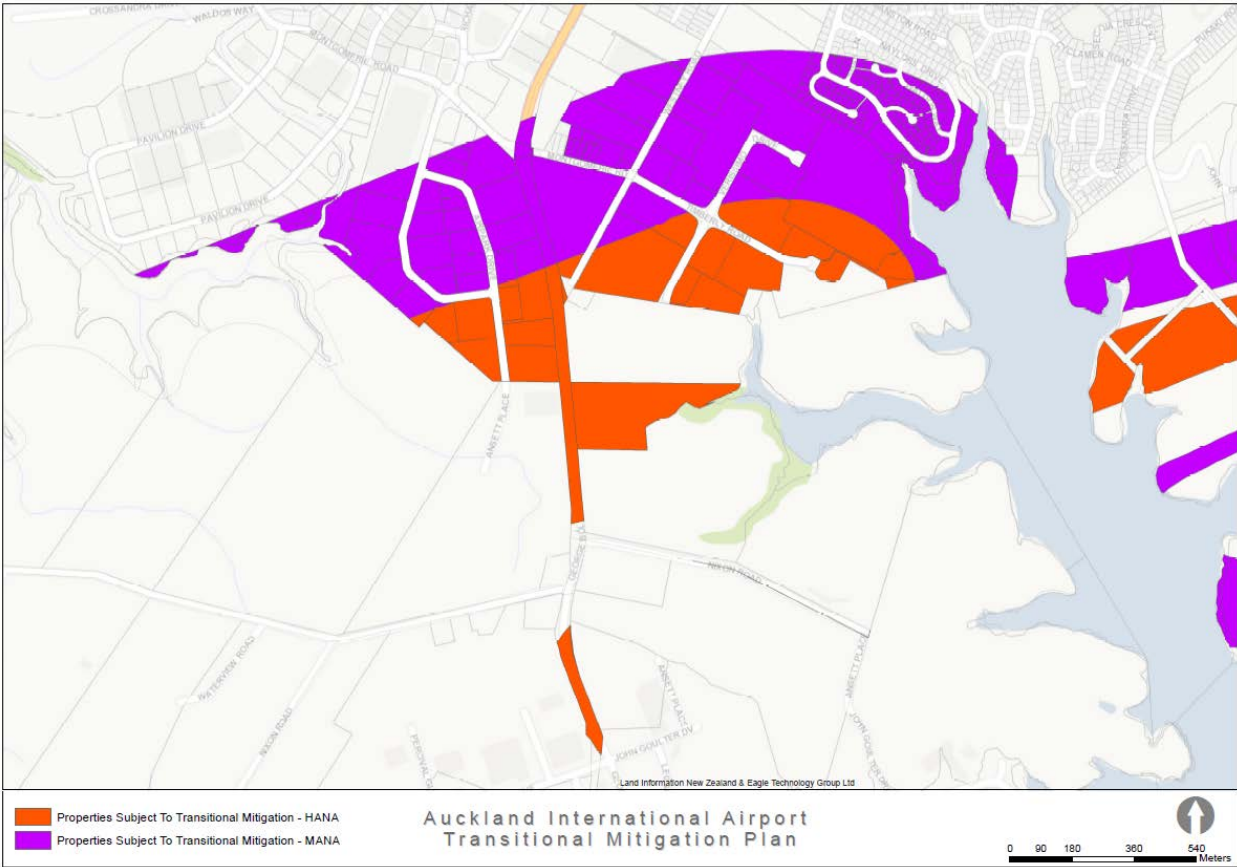
- B. The Grantee is registered as proprietor of the Dominant Tenement ("**Dominant Tenement**") and owns or is entitled to use the structures erected thereon.
- C. The Grantee either itself or by its lessees, licensees and other invitees operates the Auckland International Airport together with other associated industrial, commercial and retail activities from the Dominant Tenement, which results and is likely to result in environmental effects, such as noise, which has and is likely to have consequences beyond the boundaries of the Dominant Tenement, including upon the Servient Tenement.
- D. The Servient Tenement is identified as being subject to **[high (in the case of Servient Tenement located within the HANA)] / [moderate (in the case of Servient Tenement located within the MANA)]** levels of noise from operations at Auckland International Airport, and the Grantor has accepted the Grantee's offer to install physical works and equipment ("**Aircraft Noise Mitigation Works**") in the building(s) on the Servient Tenement, for the purpose of mitigating the effects of such noise, more particularly described in Schedule Two of this Annexure Schedule.
- E. In consideration of the Grantee's offer the Grantor has agreed with the Grantee (for the benefit of the Grantee and its lessees, licensees and other invitees) to accept for itself and its successors in title to the Servient Tenement and any part or interest in the Servient Tenement, for the period until 31 March 2044, an obligation not to lessen the effectiveness of, or remove, the Aircraft Noise Mitigation Works, in accordance with the terms of this Covenant.

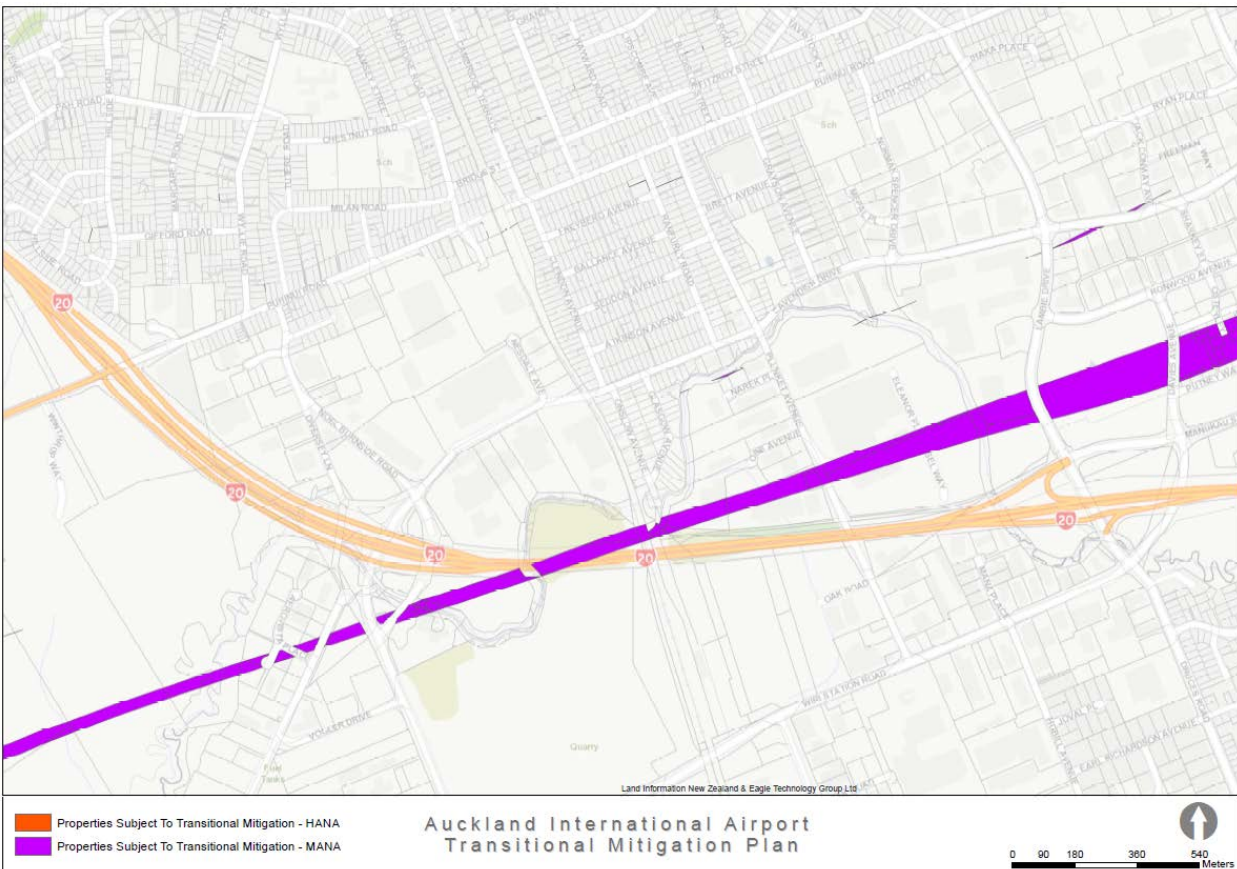
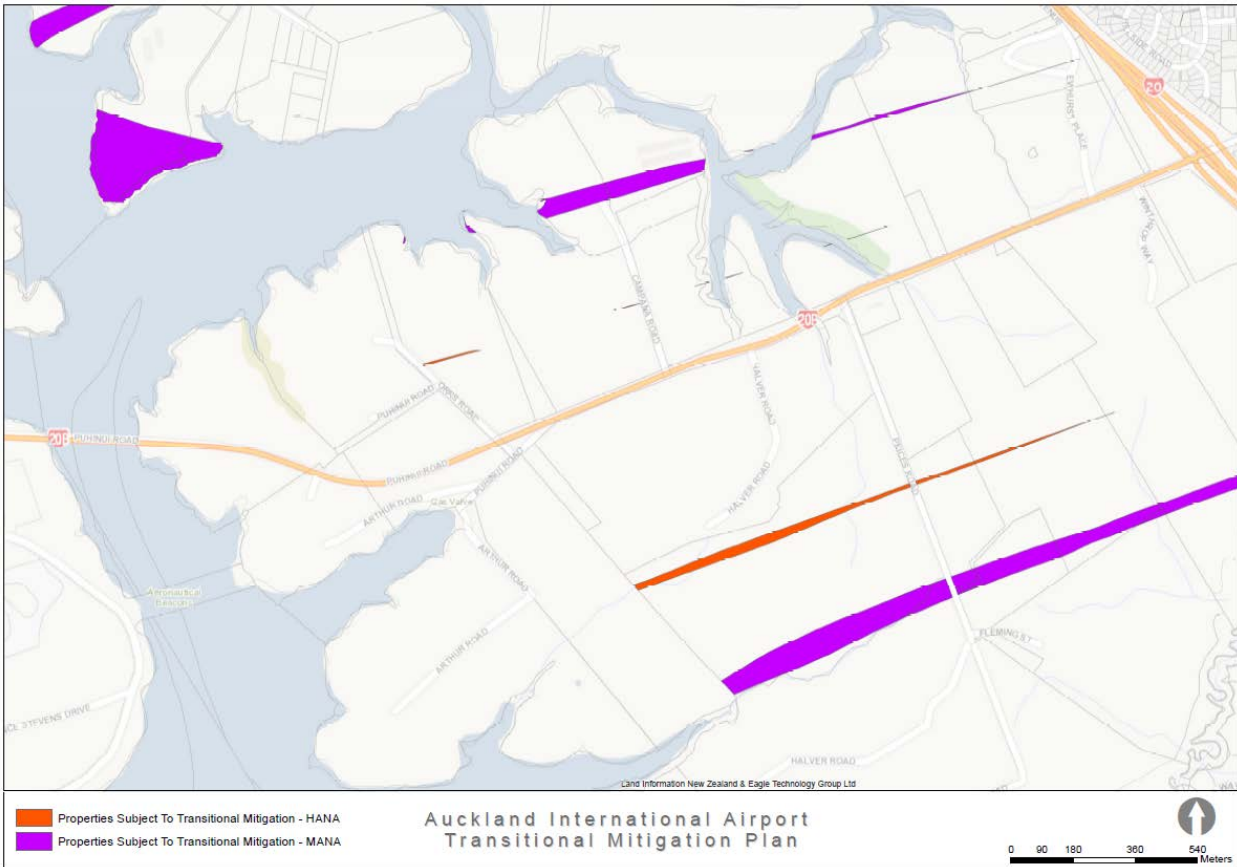
## COVENANTS

The Grantor for itself and its successors in title to the Servient Tenement, or any part of it, (excluding any tenants occupying the Servient Tenement pursuant to a lease or tenancy vested in the Housing New Zealand Corporation or any statutory or regulatory successor to the Housing New Zealand Corporation), hereby covenants, acknowledges and agrees with the Grantee as a covenant for the benefit of the Grantee itself and its lessees, licensees and invitees on the Dominant Tenement from time to time, that the Grantor will observe and perform all the stipulations and restrictions contained in Schedule One of this Annexure Schedule to the end and intent that each of the stipulations and restrictions shall, in the manner and to the extent prescribed, ensure for the benefit of, and be appurtenant to, the whole of the Dominant Tenement until 31 March 2044.

**Attachment D: Auckland International Airport Transitional Mitigation Plans**









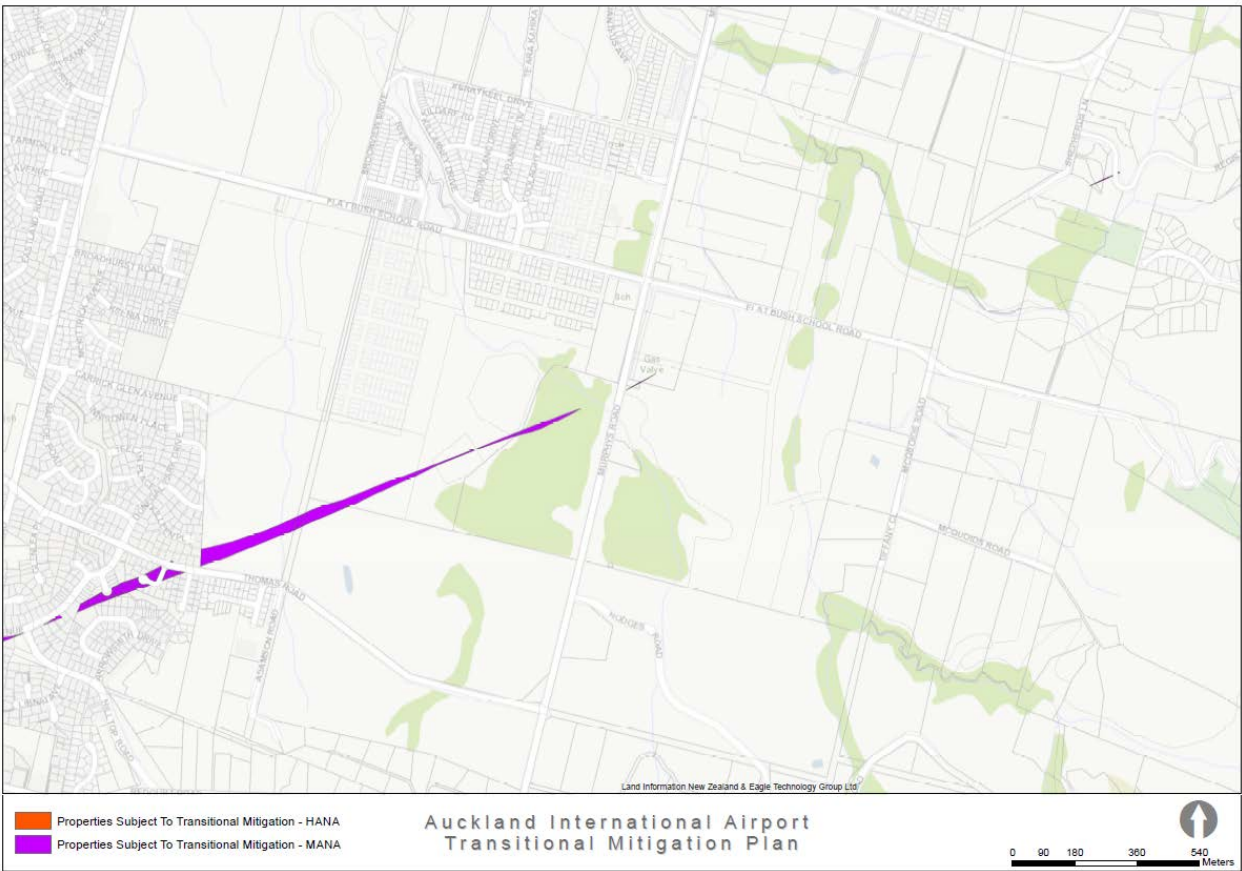
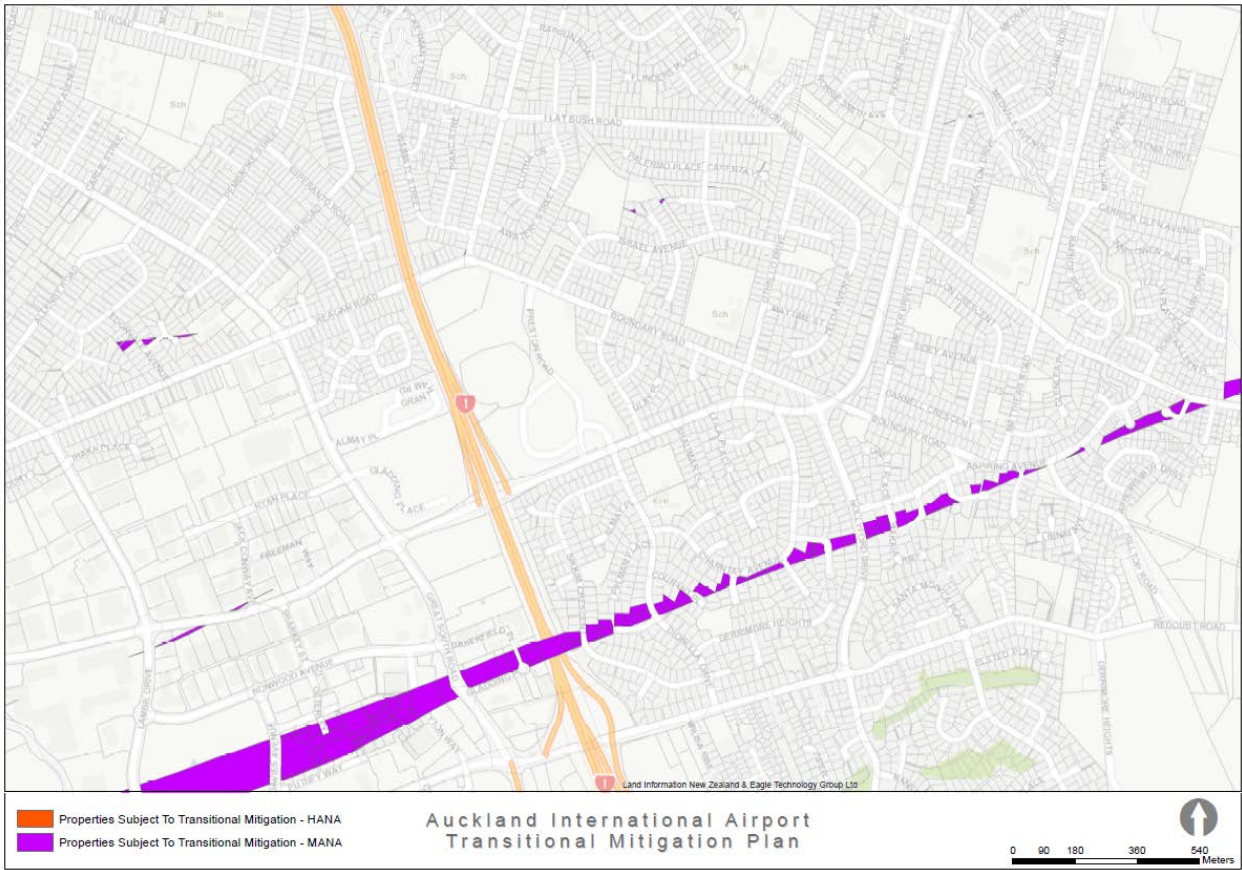


Figure 1 - Designated Area

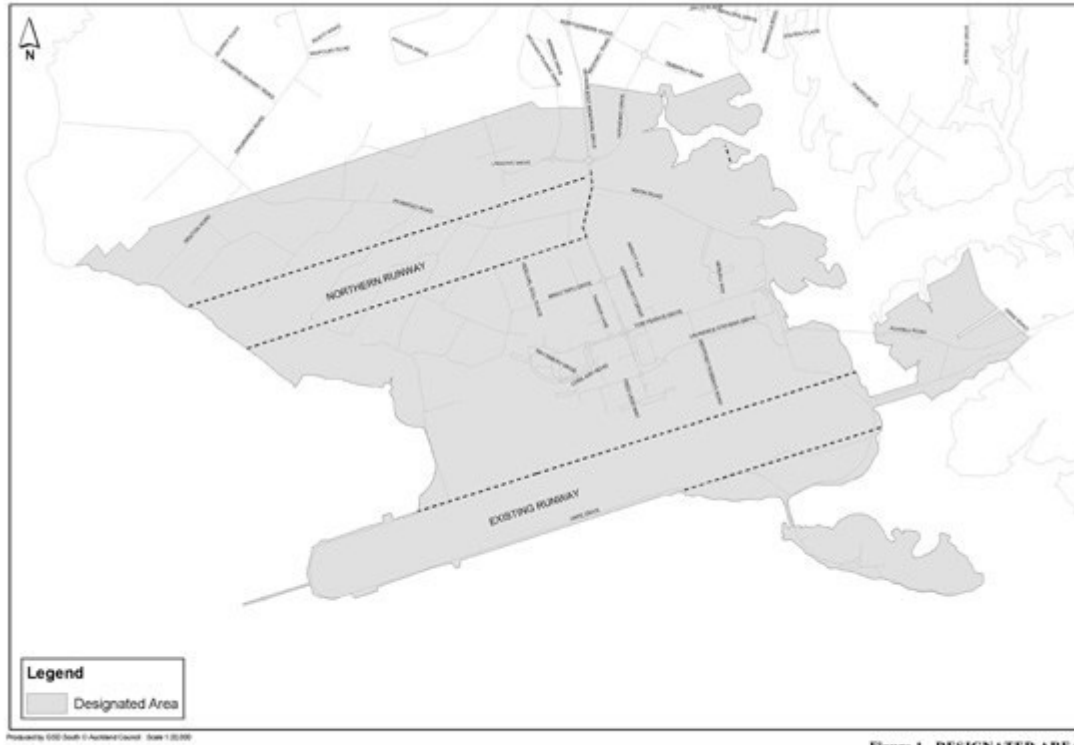


Figure 1 - DESIGNATED AREA  
APPENDIX I

Figure 2 - Control Zone

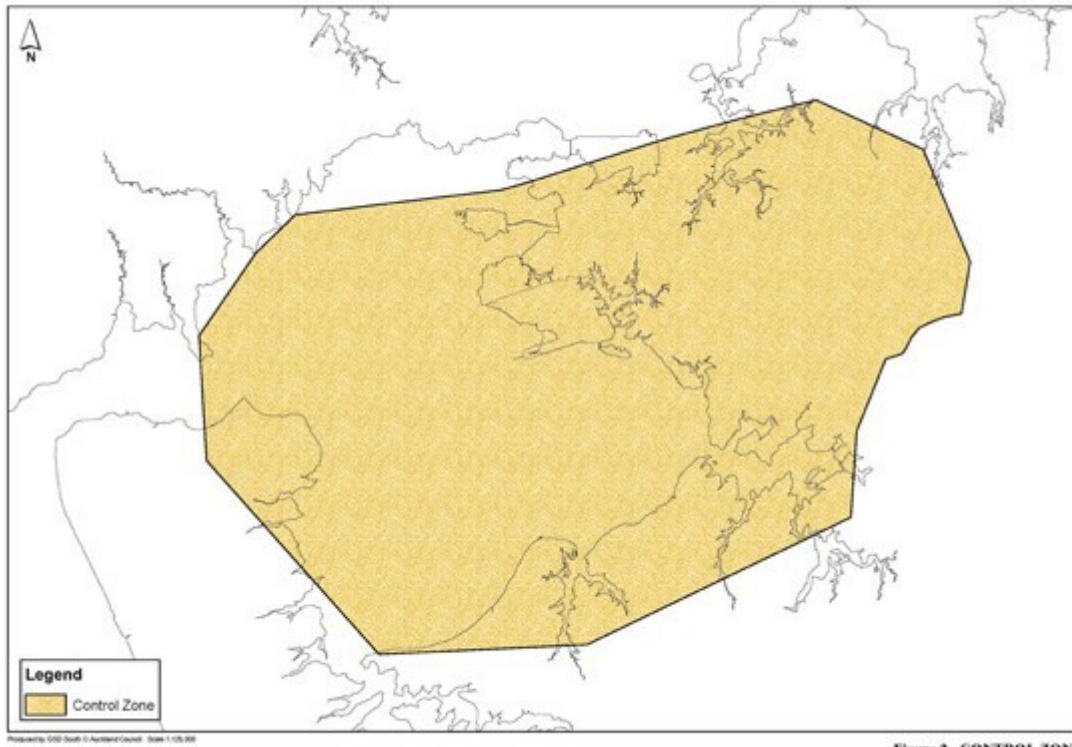


Figure 2 - CONTROL ZONE  
APPENDIX 1

Figure 3 - Aircraft Noise Areas

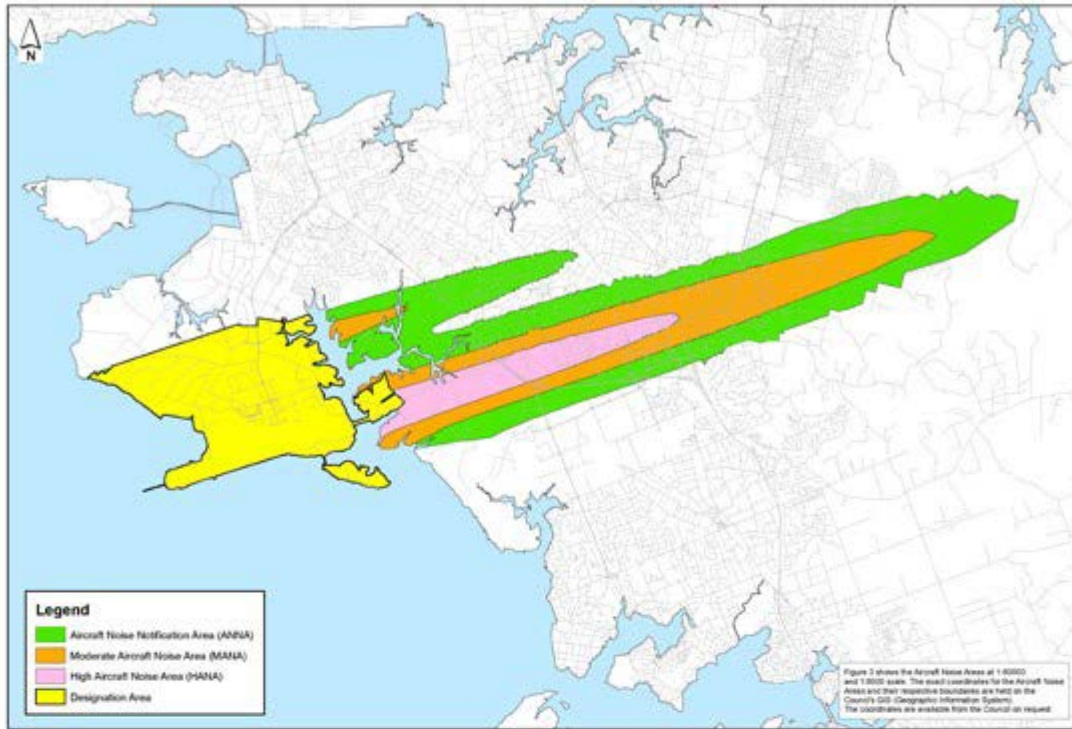
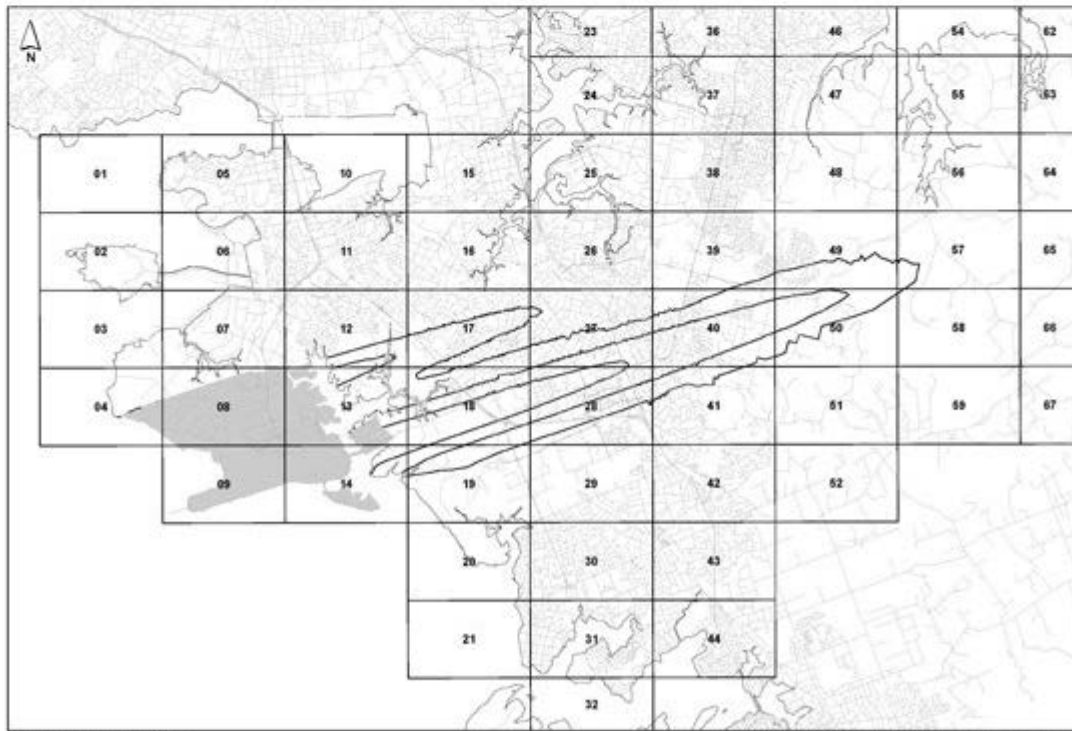
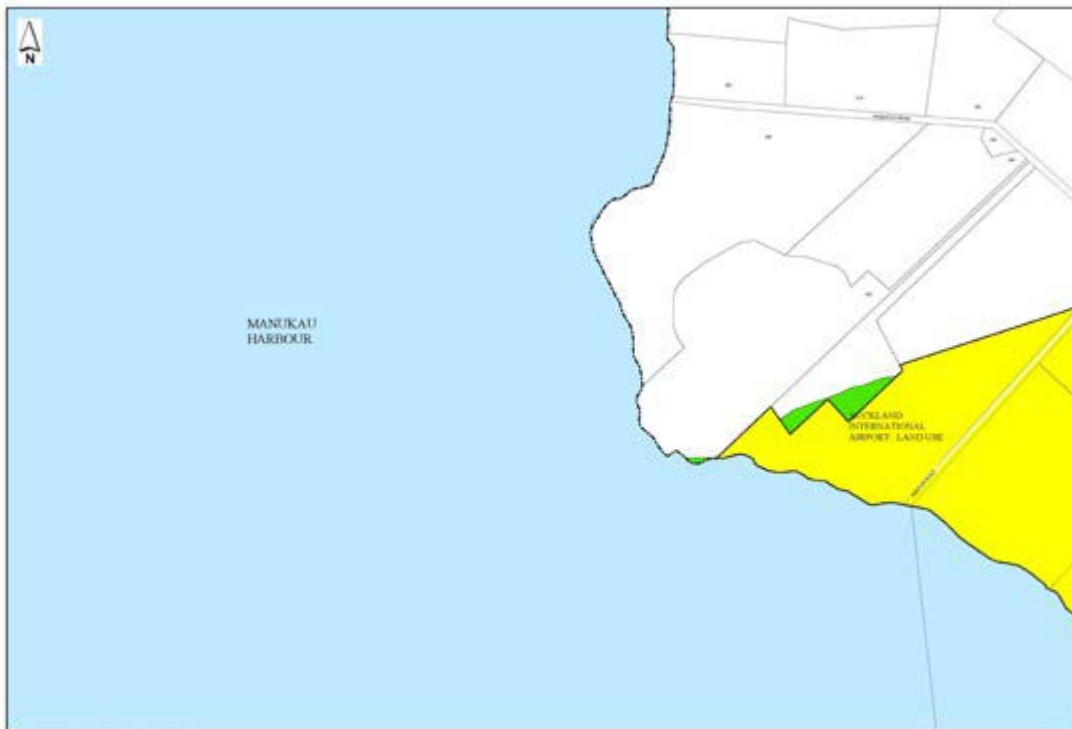


Figure 3 - AIRCRAFT NOISE AREAS  
APPENDIX 1



GRID FOR APPENDIX 1 FIGURE 3 MAPS AT 1:8000  
APPENDIX 1



Provisional 000 South of Auckland Council Scale 1:6,000



Figure 3 - Aircraft Noise Areas

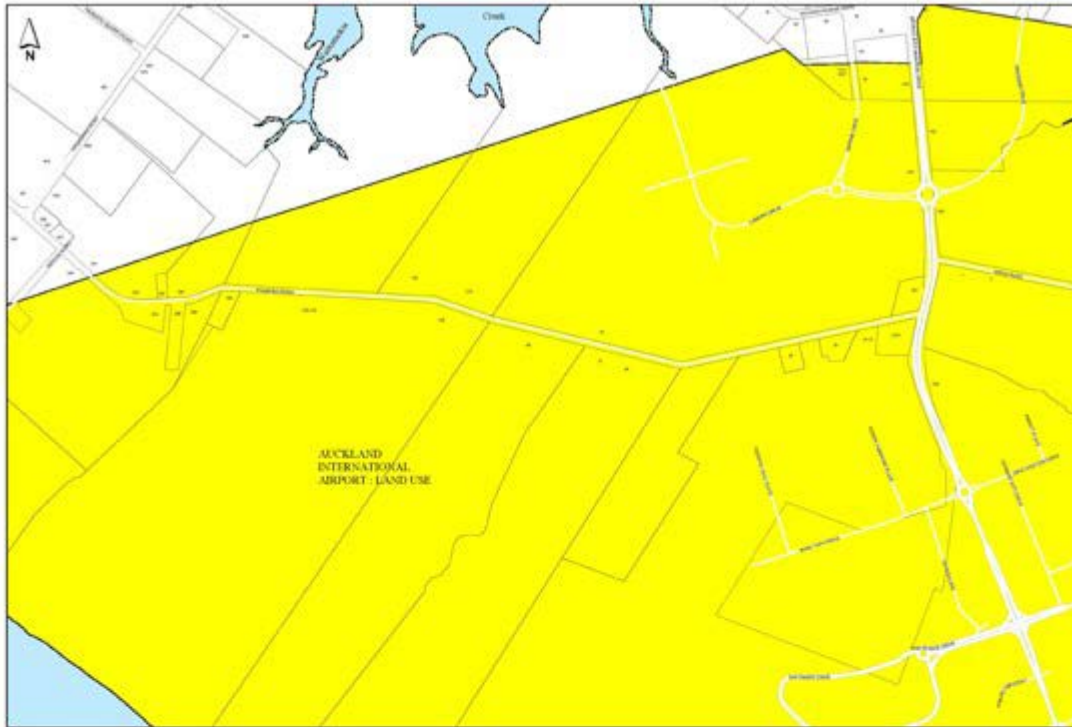
APPENDIX 1



Provisional 000 South of Auckland Council Scale 1:6,000

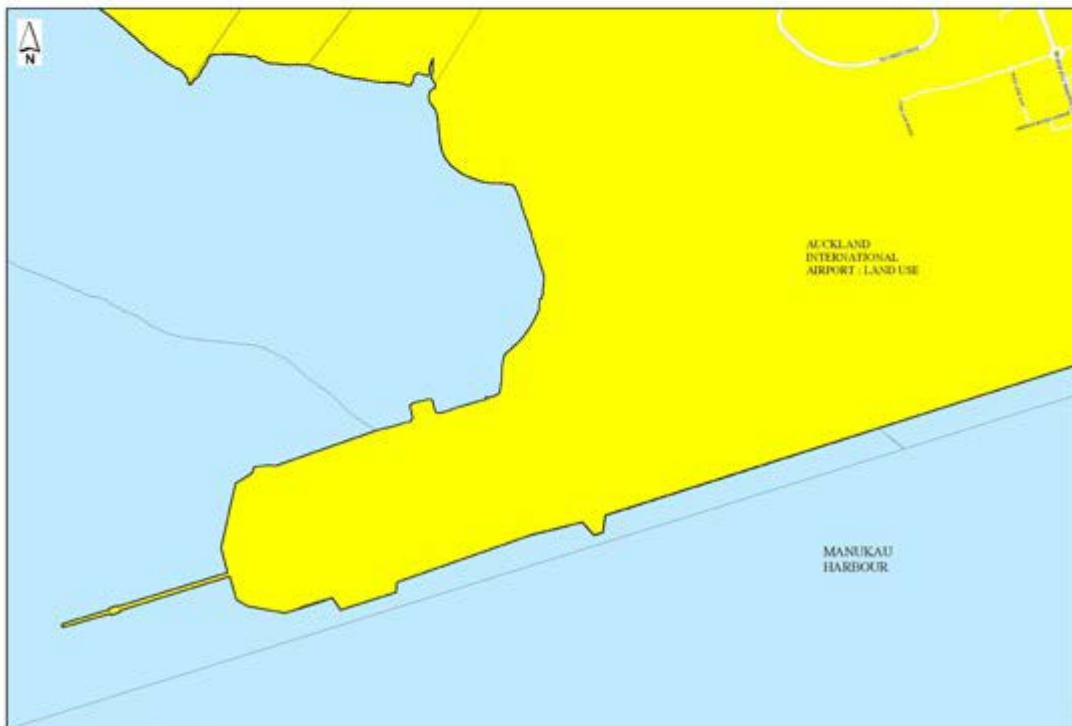
Figure 3 - Aircraft Noise Areas

APPENDIX 1



Prepared by: GSD South O Auckland Council - Scale 1:8,000

Figure 3 - Aircraft Noise Areas  
APPENDIX 1



Prepared by: GSD South O Auckland Council - Scale 1:8,000

Figure 3 - Aircraft Noise Areas  
APPENDIX 1



Figure 3 - Aircraft Noise Areas  
APPENDIX 1

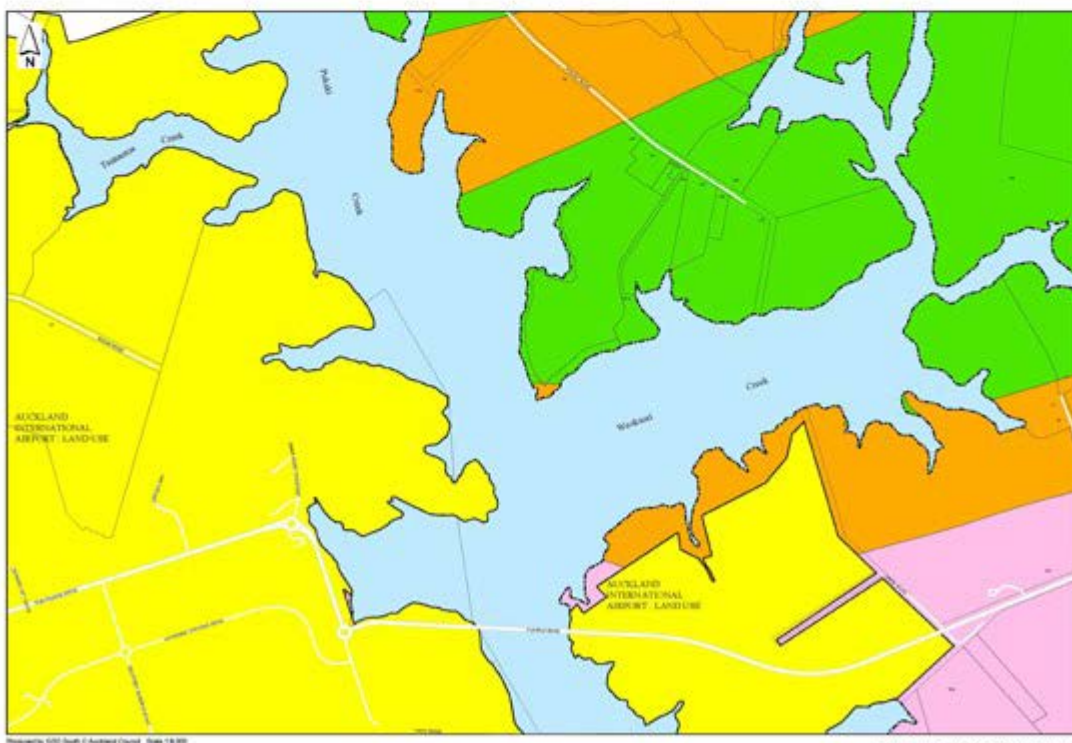
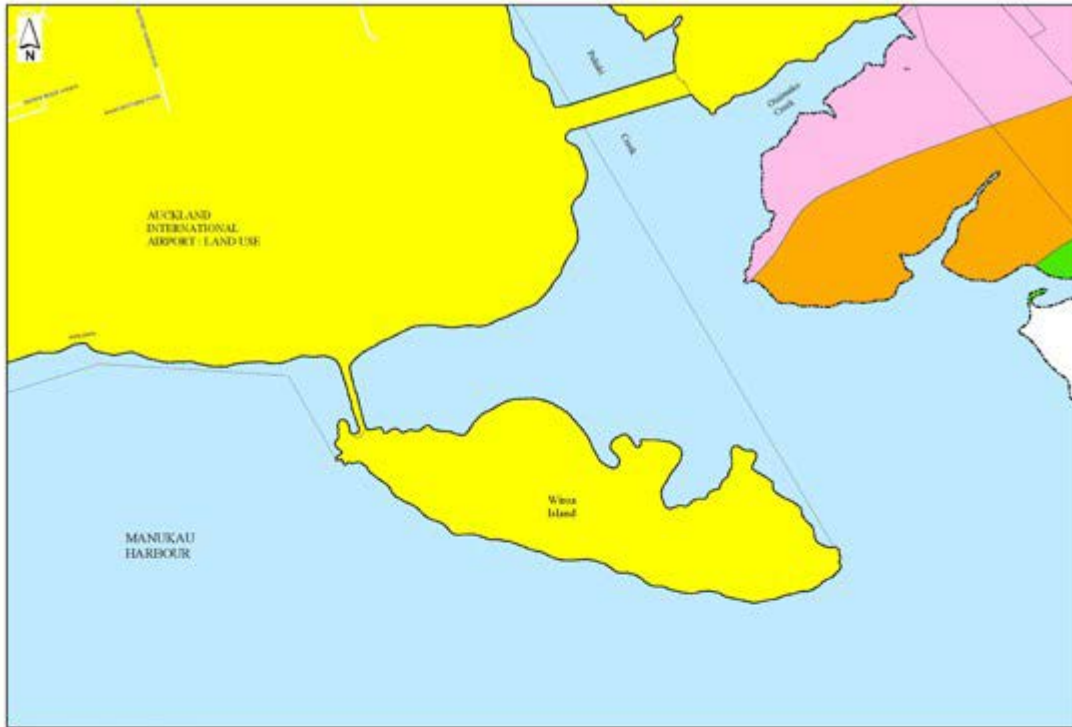


Figure 3 - Aircraft Noise Areas  
APPENDIX 1



Planworks 010 South C Auckland Council Scale 1:8,000

Figure 3 - Aircraft Noise Areas  
APPENDIX 1



Planworks 010 South C Auckland Council Scale 1:8,000

Figure 3 - Aircraft Noise Areas  
APPENDIX 1



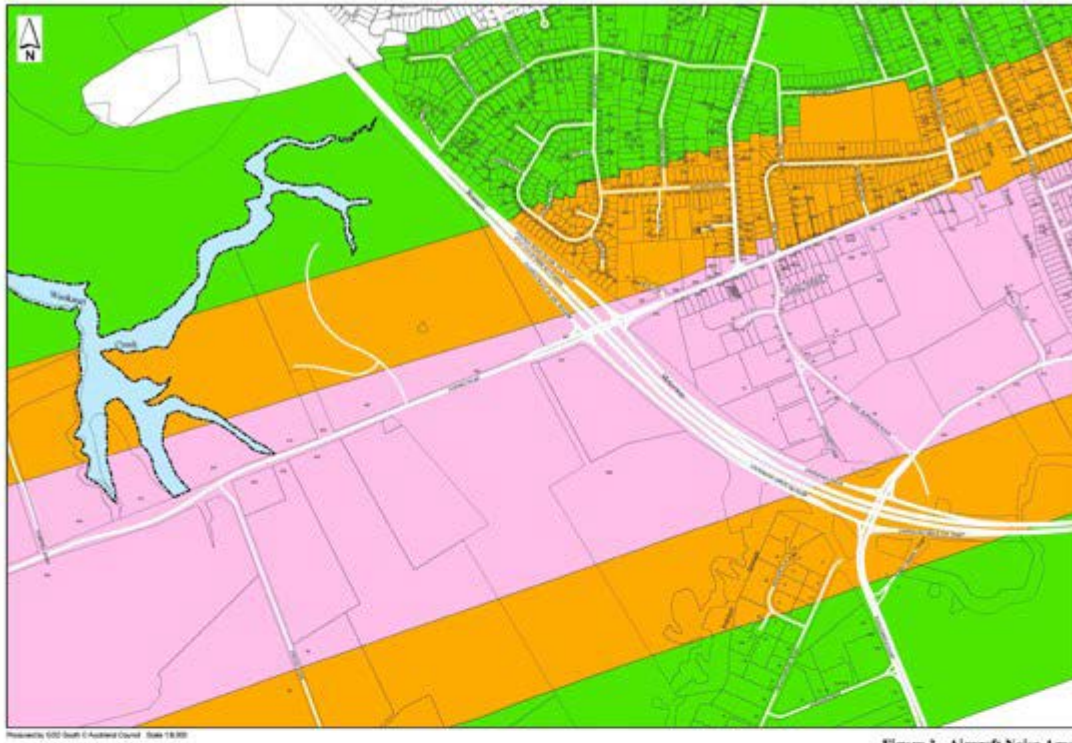


Figure 3 - Aircraft Noise Areas  
APPENDIX 1



Figure 3 - Aircraft Noise Areas  
APPENDIX 1

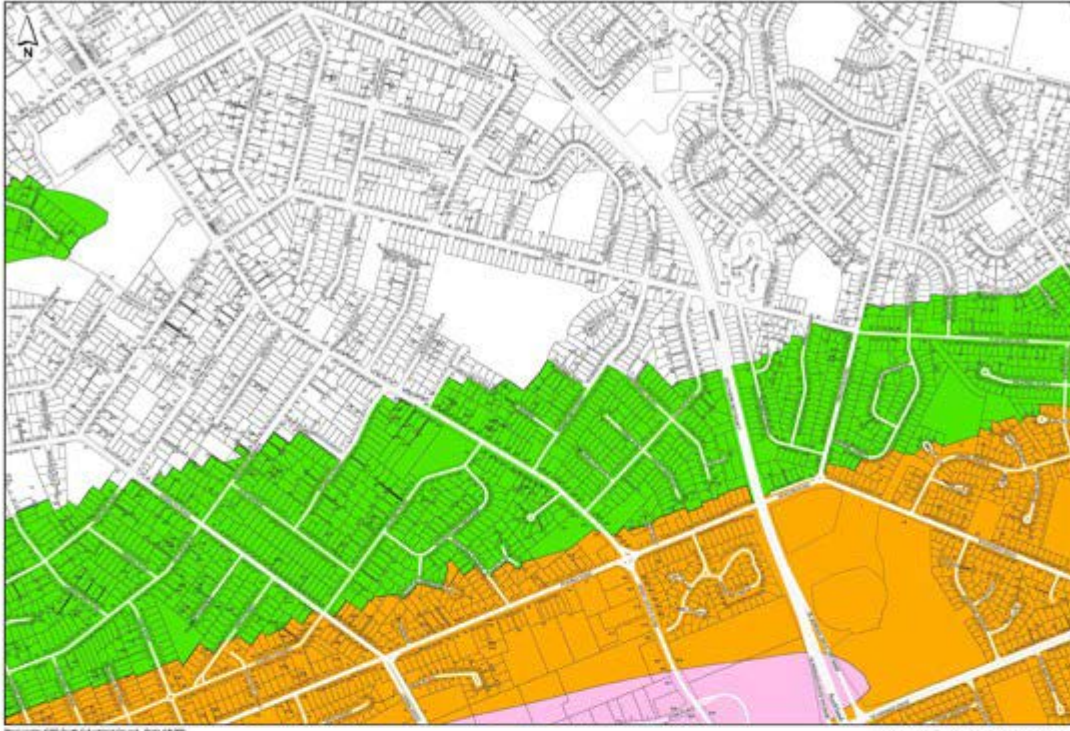


Figure 3 - Aircraft Noise Areas  
APPENDIX 1



Figure 3 - Aircraft Noise Areas  
APPENDIX 1



Planworks 002 South C-Hastford Council Scale 1:8,000

Figure 3 - Aircraft Noise Areas  
APPENDIX 1



Planworks 002 South C-Hastford Council Scale 1:8,000

Figure 3 - Aircraft Noise Areas  
APPENDIX 1

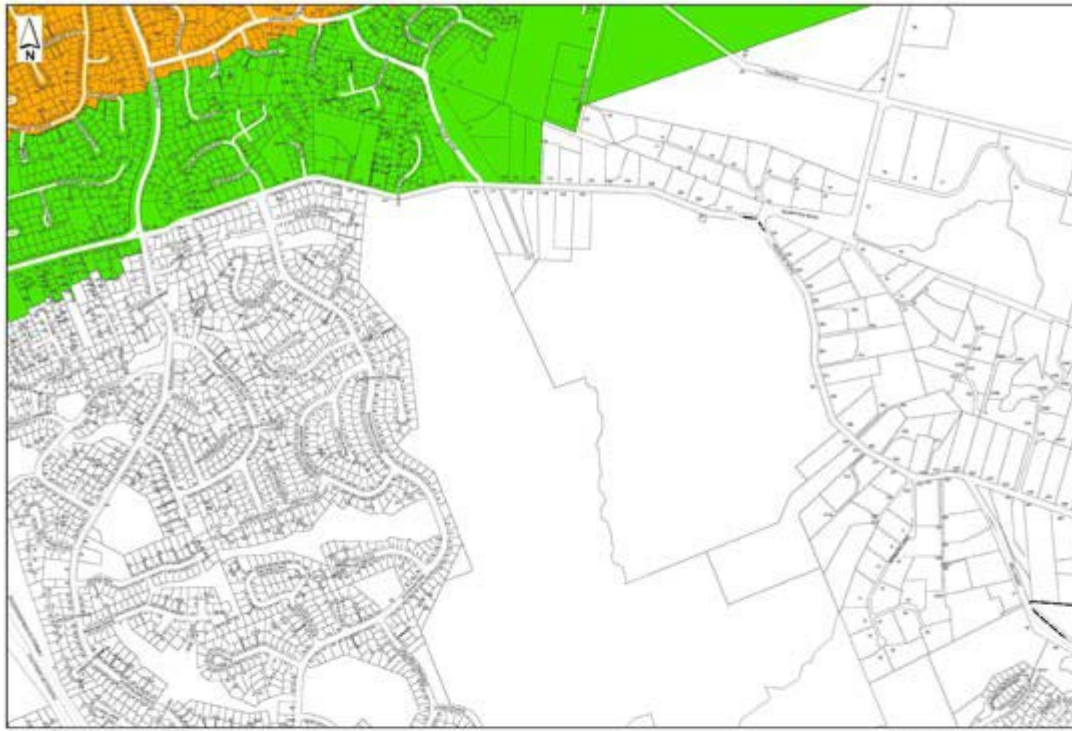


Figure 3 - Aircraft Noise Areas  
APPENDIX 1



Figure 3 - Aircraft Noise Areas  
APPENDIX 1



Providence 1000 South C-Airfield Council Scale 1:8,000

Figure 3 - Aircraft Noise Areas  
APPENDIX 1



Providence 1000 South C-Airfield Council Scale 1:8,000

Figure 3 - Aircraft Noise Areas  
APPENDIX 1



Figure 3 - Aircraft Noise Areas  
APPENDIX 1

Figure 4 - Future Aircraft Noise Contours

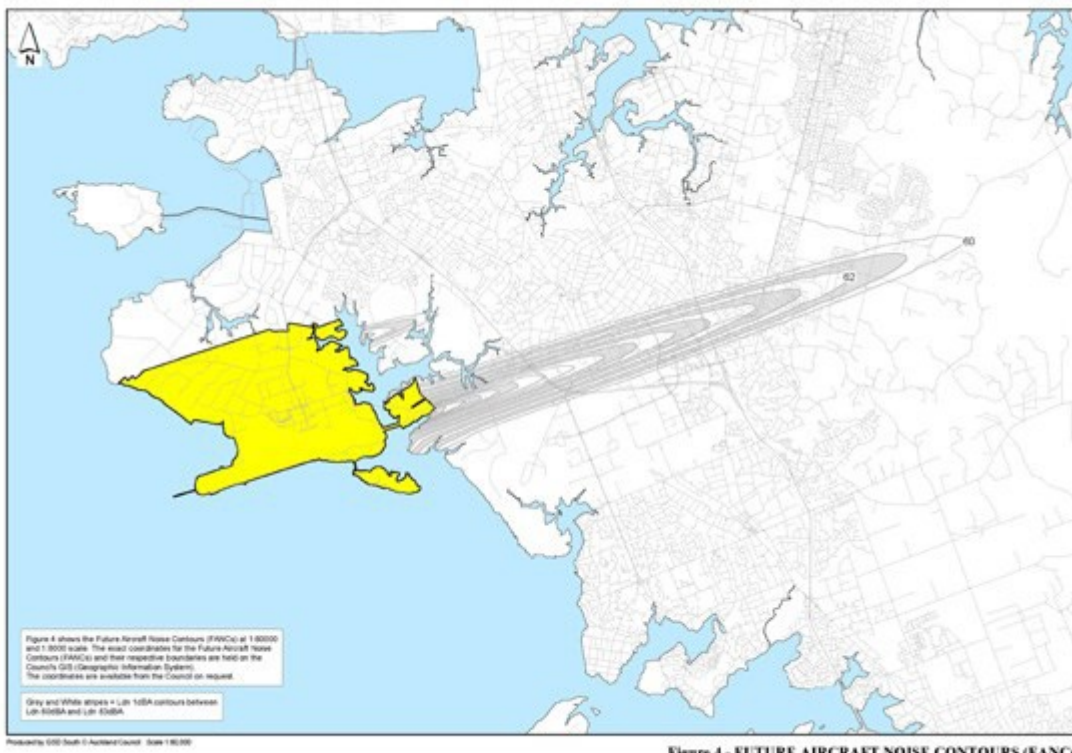


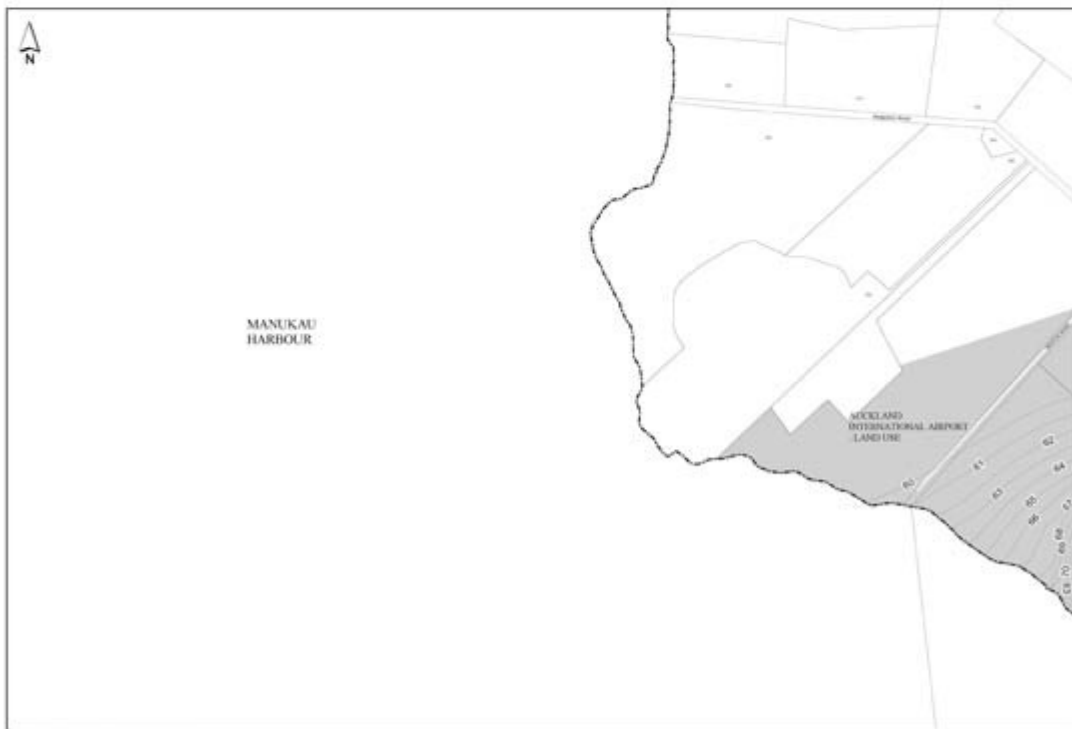
Figure 4 - FUTURE AIRCRAFT NOISE CONTOURS (FANCs)  
APPENDIX 1



Prepared by 1002 South O'Hara Road Auckland, New Zealand. Scale 1:10,000

GRID FOR APPENDIX 1 FIGURE 4 MAPS AT 1:8000

**APPENDIX 1**



Prepared by 1002 South O'Hara Road Auckland, New Zealand. Scale 1:10,000

Figure 4 - Future Aircraft Noise Contours (FANCs)

**APPENDIX 1**



Figure 4 - Future Aircraft Noise Contours (FANCs)  
**APPENDIX 1**



Figure 4 - Future Aircraft Noise Contours (FANCs)  
**APPENDIX 1**



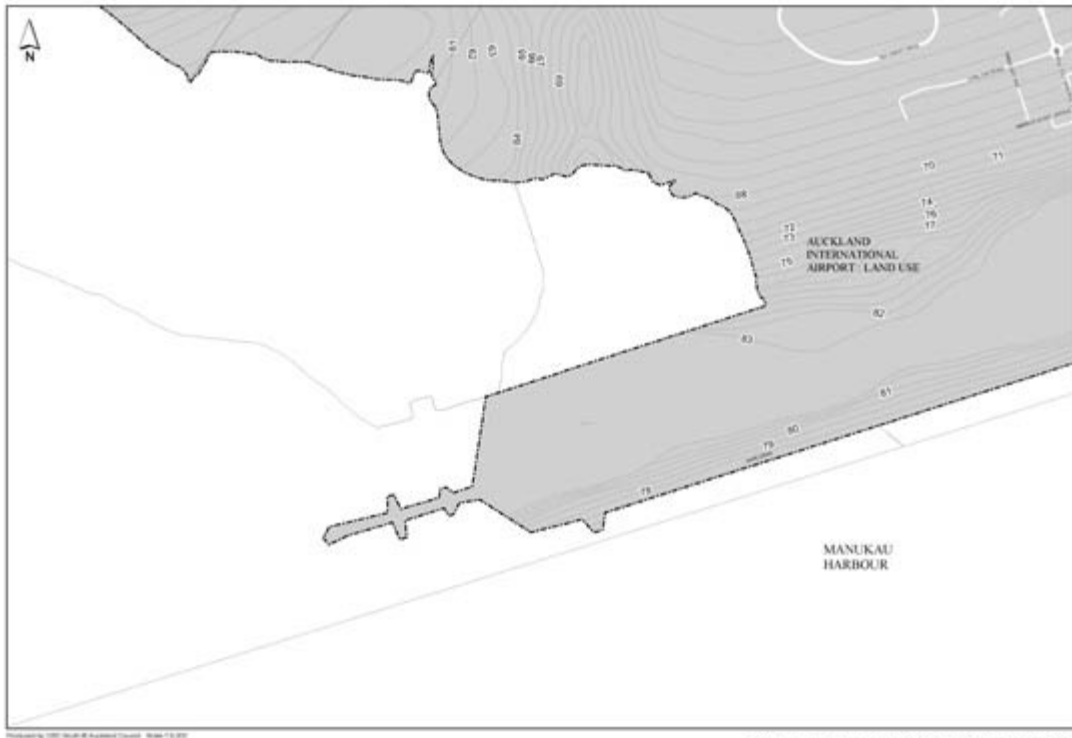


Figure 4 - Future Aircraft Noise Contours (FANCs)  
APPENDIX 1



Figure 4 - Future Aircraft Noise Contours (FANCs)  
APPENDIX 1



Figure 4 - Future Aircraft Noise Contours (FANCs)  
**APPENDIX 1**

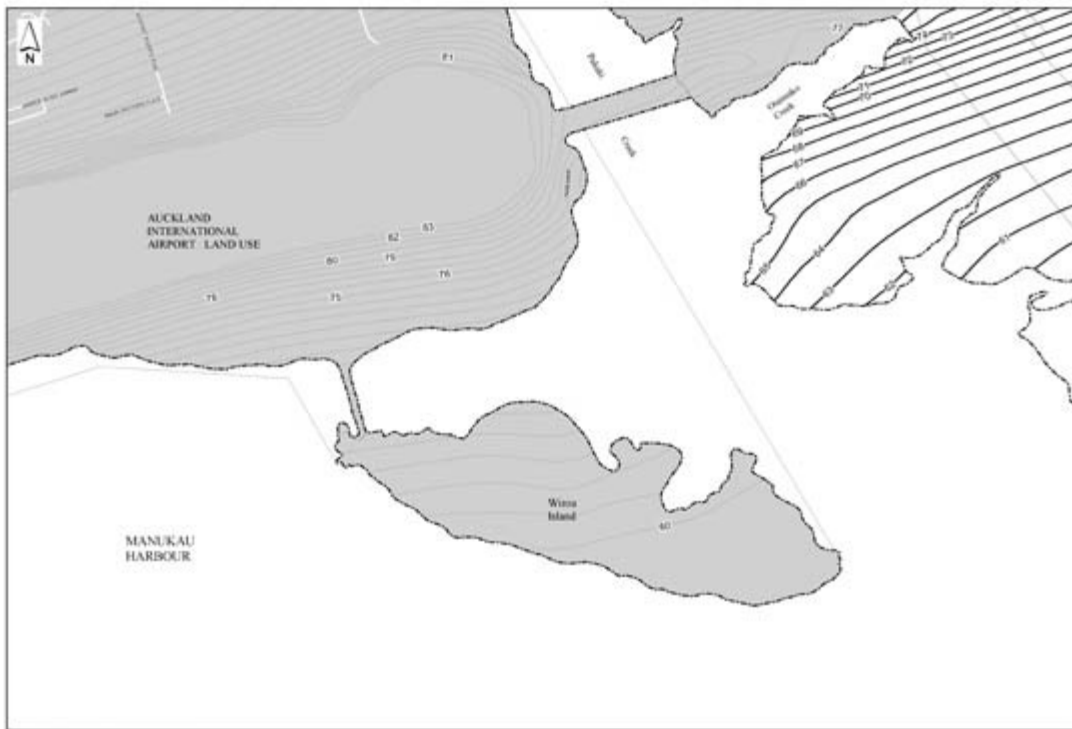


Figure 4 - Future Aircraft Noise Contours (FANCs)  
**APPENDIX 1**



Figure 4 - Future Aircraft Noise Contours (FANCs)  
**APPENDIX 1**



Figure 4 - Future Aircraft Noise Contours (FANCs)  
**APPENDIX 1**

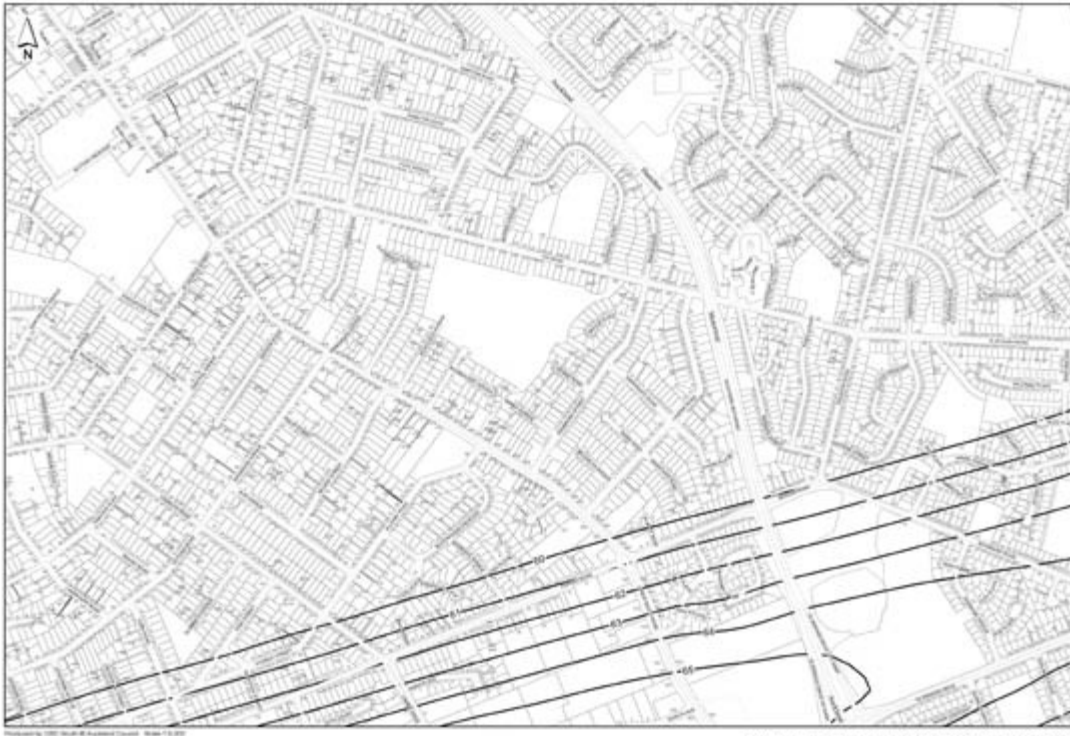


Figure 4 - Future Aircraft Noise Contours (FANCs)

APPENDIX 1



Figure 4 - Future Aircraft Noise Contours (FANCs)

APPENDIX 1



Figure 4 - Future Aircraft Noise Contours (FANCs)

**APPENDIX 1**



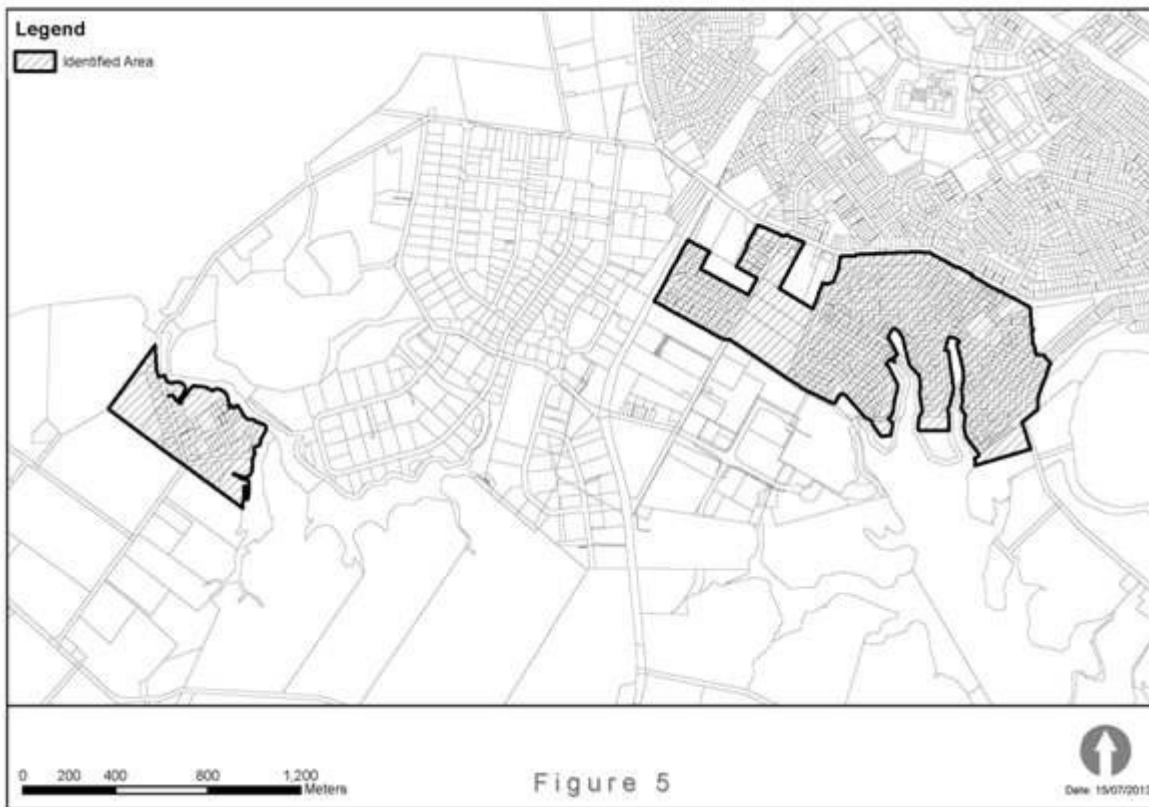
Figure 4 - Future Aircraft Noise Contours (FANCs)

**APPENDIX 1**



Figure 4 - Future Aircraft Noise Contours (FANCs)  
**APPENDIX 1**

**Figure 5 - Identified Area**



**Figure 5**

## 1101 Auckland International Airport - Renton Road Area

Designation Number	1101
Requiring Authority	Auckland International Airport Ltd
Location	200 and 260 Ihumatao Road, Mangere
Rollover Designation	Yes
Legacy Reference	Designation 231A, Auckland Council District Plan (Manukau Section) 2002
Lapse Date	Pursuant to section 184(1)(c) of the RMA this designation shall only lapse when this unitary plan ceases to be operative

### Purpose

Activities within the designation are limited to:

- i. Runways, taxiways and other aircraft movement areas and aprons;
- ii. Aircraft Operations;
- iii. The repair, maintenance and servicing of aircraft;
- iv. Air freight operations which require airside frontage;
- v. Landscaped open space buffer areas (refer Figure 1A.1);
- vi. Activities that are ancillary to the above activities; and
- vii. Buildings and other Structures required for the above activities.

### Conditions

1. The following conditions from Designation AIAL 1100 shall apply to Designation AIAL 1101:
  - a. Condition 1 (Definitions)
  - b. Condition 9 (Noise Management Plan)
  - c. Condition 9A (Reporting of Exceptions)
  - e. Condition 13(b) (Engine Testing on Aircraft)
  - f. Condition 13(c) (Engine Testing on Aircraft)
  - g. Condition 17 (Public Access to the Coastal Marine Area and Fossil Forest);
 and pursuant to section 184(1)(c) of the RMA this designation shall only lapse when this unitary plan ceases to be operative. Note: in relation to this condition, references to the "designated area" in the conditions to Designation AIAL 1100 shall be read as references to the land to which Designation AIAL 1101 applies.

***In addition, the following conditions also apply to this designation:***

2. Auckland International Airport ("the Airport") activities within Designation AIAL 1101 shall be limited to:
  - a. Runways, taxiways and other aircraft movement areas and aprons;
  - b. Aircraft Operations;
  - c. The repair, maintenance and servicing of aircraft;
  - d. Air freight operations which require airside frontage;
  - e. Landscaped open space buffer areas (refer Figure AIAL 1A.1);
  - f. Activities that are ancillary to the above activities; and
  - g. Buildings and other Structures required for the above activities.
3. An outline plan of any work in the designated area must be submitted to the Council pursuant to section 176A of the RMA, unless, in the case of minor works, the Council waives the requirement for an outline plan.
4. The outline plan shall include, in addition to the matters required under section 176A of the RMA:
  - a. A report or reports covering the following matters, as relevant to the scale and location of the works proposed:

### Site Layout

- i. Whether the site layout is compatible with the site development (existing or potential) of adjoining sites and the streetscape;
- ii. Whether the building aligns with Oruarangi Road or realigned Renton Road (if relevant), to create a clear spatial system along the roads;
- iii. Whether buildings align with other buildings on the site or (existing or potential) on adjoining sites;

***Design and External Appearance of Buildings and Structures***

- i. Whether site levels and building form, colour and texture are used to reduce the apparent height and bulk of large buildings where viewed from Ihumatao Road, Oruarangi Road and realigned Renton Road;
- ii. Whether building platforms are designed in such a way that one building is not more dominant than neighbouring buildings;
- iii. Whether rooftop mechanical equipment is integrated into roof forms or otherwise concealed from adjacent roads and reserves;
- iv. Whether there will be a consistency of building materials and colours between buildings (including buildings on adjoining sites);
- v. Whether service areas and loading docks, car parks, loading docks are designed to face away from the front yard;
- vi. Whether any security fencing is integrated with planting and buildings so as to avoid any adverse visual effect on Ihumatao Road and realigned Renton Road;
- vii. Whether low glare, high cut-off exterior lighting is used, and integrated with the architectural and landscape design;
- viii. Whether signage is integrated with the architectural and landscape design.

***Landscape Treatment***

- i. Whether existing planting along the Ihumatao Road frontage is to be retained and/or enhanced and, in the area shown as “supplementary landscape planting” on Figure AIAL 1A.1, whether the landscape planting proposed will complement and be consistent with the planting approved under any Framework Plan for Policy Area F of the Auckland Airport Precinct.
- ii. Whether a continuity of planting along the realigned Renton Road frontage is to be achieved to enhance the streetscape;
- iii. Whether the proposed landscape design enables the site as a whole to relate positively to development on adjoining sites and the road, and neighbouring areas of open space;
- iv. Whether the landscape treatment is in scale with the proposed development, providing for the visual softening of large buildings and the screening of parking, loading and storage areas;
- v. Whether the form (including density, species, depth and height) of planting that is proposed to be undertaken within the site provides coherent design with existing trees and shelterbelts on and immediately adjacent to the site;
- vi. Whether the proposed plantings are to be placed so that they do not obstruct views of landscape or landmark features.

***Land Modification***

In relation to any land modification exceeding 200m<sup>3</sup>, details of the following:

- i. Alteration to Natural Landscape - Whether any earthcut or fill will remove existing vegetation, alter the existing topography of the site, or affect existing natural features including landforms, and the impacts on the area's amenity values and cultural values, including wahi tapu.
  - ii. Site Stability and Erosion - Whether the effects from natural hazards will be avoided, remedied or mitigated, and the extent to which earthworks affect the stability and erosion potential of the site and surrounding site.
  - iii. Topography in Relation to Adjacent Land - Whether the site contours and final contours co-ordinate with the final levels of adjoining land.
  - iv. Flooding - Whether the earthworks and final levels will adversely affect overland flowpaths or increase the potential for flooding within the site or surrounding area.
  - v. Utility Services - Whether the earthworks and final levels will adversely affect existing utility services.
- b. Evidence of consultation with an appropriately delegated representative/s of the Makaurau Marae and Te Kawarau Iwi Tribal Authority Incorporated, including confirmation whether the delegated representative/s has sighted the final version of the outline plan of works that is to be submitted to Council.



- c. An analysis and prediction of the noise associated with the proposed works, so as to demonstrate compliance with Conditions 7-9 of this designation.
  - d. Details of traffic management proposals for the period of construction of the proposed works, and for the operation of the proposed activities once established.
  - e. The timetable for completion of works.
5. The land shown as "Landscape Buffer Area" in Figure AIAL 1A.1 shall be planted and developed in accordance with a Landscape Buffer Development and Landscape Treatment Plan 3 years prior to any building being erected in the Designation AIAL 1101 area or within 5 years of this designation being incorporated in the Unitary Plan, whichever is the earlier date. The Landscape Buffer Development and Landscape Treatment Plan shall include provision for the following:
- a. Maintaining Ellett House and its surrounds to an appropriate sustainable standards suitable for a productive use, and in accordance with recognised conservation principles.
  - b. Retaining the existing stone wall as a landscape and cultural heritage feature and ensuring that any planting will avoid archaeological site R11/2471 adjacent to the stone wall and the stone wall itself.
  - c. The establishment of appropriate native vegetation (eco-sourced where practical), "story board" signage and/or a tohu (monument) or plaque(s) to acknowledge archaeological sites, and Maori past presence, use and traditional relationship to the site.
  - d. Any security fencing is to be located on the airport side of the landscape buffer, i.e. to the east of the realigned Renton Road. No security fencing is to be located on or beside realigned Renton Road itself or on the western boundary of the designation.
  - e. Other than the signage required under c. or security signage, including in relation to .d above, no signage shall be visible from realigned Renton Road or Ihumatao Road.
6. In relation to Ihumatao and the realigned Renton Road boundaries of this designation, no part of any building within the designated area shall project beyond a building envelope contained by a 55 degree recession plane from points 2.5 metres above the edges of those roads (i.e. the maximum height = 2.5 metres plus 1.428 x distance from the edge of the road). For the purposes of this condition the edge of Ihumatao Road is defined by the south-western boundary of Ihumatao Road while the edge of realigned Renton Road boundary of the designation is defined by the south-eastern edge of the carriageway of the realigned Renton Road.
7. Noise from Aircraft Operations within the area of the Designation shall not exceed a Day/Night level ( $L_{dn}$ ) of 55dB within the notional boundary of any dwelling within the Identified Area shown on Figure 5 attached to Designation AIAL 1100 (where the notional boundary is defined as a line 20m from any side of a dwelling or the legal boundary where this is closer to the dwelling). For the purpose of this control aircraft noise shall be measured in accordance with NZS6805:1992 and calculated as a 12 month rolling logarithmic average.
8. The noise from the testing of engines, which are in situ on an aircraft, within the designated area, combined, where relevant, with the noise from the testing of engines, which are in situ, on aircraft within the area of Designation 231, shall not exceed the following noise limits within the notional boundary of any dwelling within the Identified Area shown on Figure 5 attached to Designation AIAL 1100 (where the notional boundary is defined as a line 20m from any side of a dwelling or the legal boundary where this is closer to the dwelling):
- |                       |               |
|-----------------------|---------------|
| 7 day rolling average | 55dB $L_{dn}$ |
| 10pm to 7am           | 75dBLAmax     |
- For the purpose of this control, the noise arising from testing of in situ aircraft engines shall be measured in accordance with NZS6801:2008 Acoustics: Measurement of Environmental Sound.
9. The noise from any use of the designated area for any purposes other than:
- a. Aircraft Operations;
  - b. Testing of in situ aircraft engines; and
  - c. The use of audible bird scaring devices for the discouragement of birds;

combined with, if relevant, the noise from any use of the area of Designation AIAL 1100 for the same purposes, shall not exceed the following noise limits within the notional boundary of any dwelling within

the Identified Area shown on Figure 5 attached to designation AIAL 1100 (where the notional boundary is defined as a line 20m from any side of a dwelling or the legal boundary where this is closer to the dwelling).

Average Maximum Levels			Maximum
dB LAeq A			dB LAmax
Monday to Saturday (0700-1800)	Monday to Saturday 6pm – 10pm (1800 – 2200) AND Sundays and Public Holidays, 7am – 10pm (0700 – 2200)	At all other times	10pm – 7am (2200 – 0700)
55	50	45	70

For the purpose of this control, other noise shall be measured in accordance with NZS 6801:2008 Acoustics - Measurement of Environmental Sound and assessed in accordance with NZS 6802:2008 Environmental Noise.

10. Changes to the Noise Management Plan (NMP) required by the Conditions attaching to Designation AIAL 1100 to address the area covered by this designation are to be presented to the ANCCG within 6 months of this designation being confirmed. AIAL shall invite comments from the ANCCG before finalising the changes to the NMP.
11. The existing portion of Renton Road shown on the attached diagram to be closed as part of the new designation be replaced by a new road over which public access is provided to the buried fossil forest located in the coastal banks of lot 2 DP 62092 and allotment 164 Manurewa parish. This condition complements condition 17 in Designation AIAL 1100.
12. In the event of archaeological features being uncovered during any works undertaken within the designation (e.g. shell midden, hangi, oven stones, pit depressions, defensive ditches, artefact material, koiwi tangata (human skeletal remains)), work shall cease within a 10 metre radius of the discovery and the Auckland Council, the New Zealand Historic Places Trust and the appropriate iwi authorities shall be contacted within 72 hours, so that appropriate action can be taken. Work should not recommence until the applicant has consulted with the iwi authorities and obtained New Zealand Historic Places Trust approval for the work to continue. Note: at the request of mana whenua, AIAL must make an area available for the reburial of any koiwi found within the designated area.

## Attachments

Figure AIAL 1A.1 - Designation Area 1A

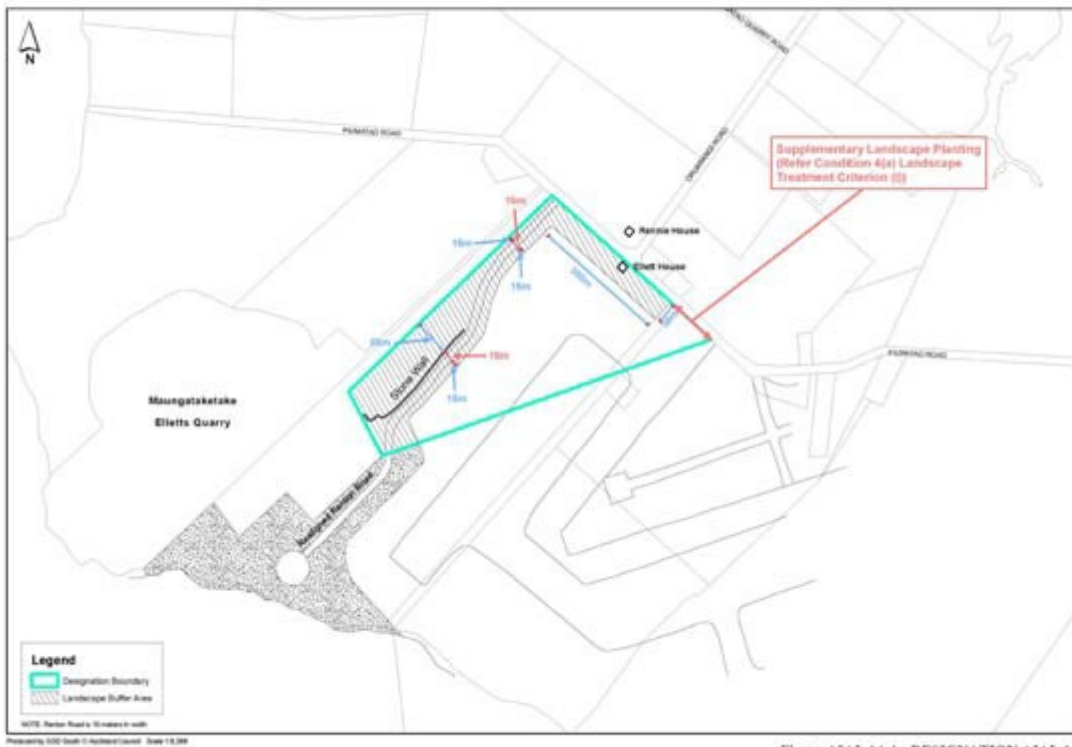


Figure AIAL 1A.1 - DESIGNATION AIAL 1A

## 1102 Obstacle Limitation, Runway Protection and Ground Light Restriction

Designation Number	1102
Requiring Authority	Auckland International Airport Ltd
Location	Vicinity of Auckland International Airport
Rollover Designation	Yes
Legacy Reference	Designation 232, Auckland Council District Plan (Manukau Section) 2002; Designation H05-04, Auckland Council District Plan (Isthmus Section) 1999; Designation 141 Auckland Council District Plan (Franklin Section) 2000
Lapse Date	Given effect to (i.e. no lapse date)

### Purpose

#### Part 1: Auckland International Airport, Specification for Obstacle Limitation Surfaces

1. Figure 1 to this designation together with this specification comprises the Auckland International Airport Specification for Obstacle Limitation Surfaces.

The Civil Aviation Act 1990 requires that hazards to aviation safety be controlled.

Obstacle Limitation Surfaces of an aerodrome are defined surfaces in the airspace above and adjacent to the aerodrome. These Obstacle Limitation Surfaces are necessary to enable aircraft to maintain a satisfactory level of safety while manoeuvring at low altitude in the vicinity of the aerodrome.

No obstacle shall penetrate the Obstacle Limitation Surfaces. An obstacle is defined as any object which is connected directly or indirectly to the ground or water and includes trees. The designation restrictions do not apply to objects located beneath the obstacle limitation services identified on Figure 1. In addition, no chimney shall discharge effluent through the Approach Slopes shown on Figure 2 to this designation at a velocity in excess of 4.3 metres per second.

#### 2. Runway Centreline

##### 2a. Existing Runway

Point A: This is a position located at the eastern end of the centreline of the existing runway. The position of Point A is shown on the Department of Survey and Land Information plan number SO 44954. In metric terms, the co-ordinate value of Point A is:

685,729.76m N  
303,667.43m E

Co-ordinate values and bearings are in terms of the Geodetic Datum 1949 and origin of co-ordinates is Mt Eden, 700,000mN 300,000mE.

The western end of the existing runway centreline is 3635 metres west on a bearing of 2510 00'01" from Point A on Figure 1 to this designation.

##### 2b. Proposed Second Runway

The eastern end centreline of the proposed second runway is defined as Point C on Figure 1 to this designation with geodetic co-ordinates of:

687,048.03m N  
301,506.40m E

The western end centreline proposed second runway is defined as Point D on Figure 1 to this designation with geodetic co-ordinates of:

686,348.07m N

### **3. Runway Strips**

The runway strips are areas at ground level 300 metres wide symmetrical about the runway centreline. The ends of the runway strips are 60 metres beyond the eastern and western ends of the defined runway centrelines.

### **4. Approach Slopes - General**

The surfaces known as Approach Slope Surfaces meet requirements for both approach and takeoff. The Approach Slopes (inner edge) start at the points as specified in clauses 4a and 4b below and are symmetrical about the extension of the runway centreline. The Approach Slopes rise at a gradient of 1.2% and terminate at a point 152 metres above mean sea level (AMSL). The sides of the approach slope diverge from the runway centreline at a rate of 15%.

#### **4a. Approach Slopes - Existing Runway**

##### ***Eastern Approach Slope***

Starting point - end of the eastern clearway, i.e. 213.36 metres east of Point A.

Width of inner edge - 346 metres.

Starting Level - 9.66 metres above mean sea level.

##### ***Western Approach Slope***

Starting point - western end of the runway strip.

Width of inner edge - 342 metres.

Starting level - 6.83 metres above mean sea level.

#### **4b. Approach Slopes - Proposed Second Runway**

##### ***Eastern Approach Slope***

Starting point - end of the eastern clearway, i.e. 400,00 metres east of Point C.

Width of inner edge - 402 metres.

Starting Level - 17.00 metres above mean sea level.

##### ***Western Approach Slope***

Starting point - end of the western clearway, i.e. 235.5 metres west of point D.

Width of inner edge - 353 metres.

Starting level - 17.00 metres above mean sea level.

### **5. Inner Horizontal Surface**

The Inner Horizontal Surface is a flat planar surface at an altitude of 52 metres above mean sea level. The outer limits are located 4000 metres from and parallel to the outer sides and ends of the runway strips as depicted on Figure 1 to this designation. The corners of the rectangle are formed by a radius of 1500 metres.

### **6. Transitional Surfaces**

The Transitional Side Surface slopes upwards and outwards from the sides of the runway strips at a gradient of 1:7 extending until they meet the Inner Horizontal Surface and Approach Slopes.

### **7. Conical Surface**

The Conical Surface slopes upward and outwards from the periphery of the Inner Horizontal Surface at a gradient of 1:40 until reaching an elevation of 152 metres above mean sea level.

### **8. Procedure Turning Area Surfaces**

There are two Procedure Turning Areas located to the east and west and bounded by the Conical Surfaces. The surfaces for the Procedure Turning Areas are at 152 metres above mean sea level or 21 metres above terrain whichever is the higher. The northern limit of both Procedure Turning Areas is 4000 metres north of the northern side of the proposed second runway strip. The southern limit of both Procedure Turning Areas is 4000 metres south of the southern side of the existing runway strip. The western limit of the western Procedure Turning Area is 14,000 metres west of the Inner Horizontal Turning Surface. The eastern

Procedure Turning Area extends 16,000 metres east of the Inner Horizontal Surface.

## **9. Controlling Surface**

At any point where any two surfaces overlap and are at differing elevations, the lower of the two surfaces shall apply.

### **Part 2: Restrictions Relating to Runway End Protection Areas**

The Runway End Protection Areas (REPAs) shown on Figure 3 to this designation, are areas off the ends of both the existing and proposed second runways which are required to be free of obstructions or activities which could interfere with aeronautical navigational aids. The areas of the REPAs as required for operational purposes are also areas in which, statistically, there are greater chances of aircraft related accidents. It is considered desirable that the public's exposure to such risks be reduced by limiting the range of activities permitted in the REPAs. The following requirements for REPAs are intended to achieve both objectives which, to a large extent, are compatible.

The requirements for REPAs detailed in this section are based on the Federal Aviation Administration (FAA) Office of Airport Standards (Washington, DC, USA) Advisory Circular 150/5300-13 Airport Design and the Civil Aviation Authority (CAA) of New Zealand Advisory Circular AC 139-06A Aerodrome Design - Aeroplanes Above 5700kg MCTOW.

The REPAs comprise fan-shaped areas plus a rectangular area which extends beyond the fan along the extended runway centre-line. The fan-shaped areas commence at the ends of the runway strips (defined in the Specification for Obstacle Limitation Surfaces) and extend equidistant about the extended runway centre-line to a point 750 metres from the end of the runway strips. The width of the fan at this point is 525 metres. The rectangular areas then extend beyond the fans and equidistant about the extended runway centre-lines, for a further 540 metres. The width of the rectangular areas is 120 metres.

All buildings, except those required for aviation purposes, are prohibited within the REPAs. For the purpose of this section, the word "building" shall have the meaning assigned to it in the Building Act 2004, except that the exclusions listed under Section 9(a), (ab), (ac), (b), (c), (f), (g), (h) (i) & (j) of that Act shall not apply and those objects shall be considered to be buildings. Any buildings erected in the REPA for the proposed second runway shall be removed unless the building has the written approval of Auckland International Airport Limited under section 176(b) of the Resource Management Act 1991.

In addition to buildings, all activities within the REPAs which generate or have the potential to generate any of the following effects are prohibited:

- a. Mass assembly of people;
- b. Release of any substance which would impair visibility or otherwise interfere with the operation of aircraft including the creation of smoke, dust and steam;
- c. Concentration of dangerous substances;
- d. Production of direct light beams or reflective glare which could interfere with the vision of a pilot;
- e. Production of radio or electrical interference which could affect aircraft communications or navigational equipment; and
- f. Attraction of birds.

### **Part 3: Requirements for Non-Aeronautical Ground Lights Adjacent to Extended Runway Centre Lines**

CAA Advisory Circular AC 139-6 requires that any non-aeronautical ground light which, by reason of its intensity, configuration or colour, might cause confusion or prevent the clear interpretation of aeronautical ground lights, should be extinguished, screened or otherwise modified so as to eliminate such a possibility. For Auckland International Airport, this requirement currently applies to the Existing Runway only. In advance of the Northern Runway becoming operational a similar requirement will need to be introduced for that runway. The current requirement applies over a rectangular area, 1500 metres wide, extending equidistant either side of the extended runway centre-line for a distance of 4440 metres from the end of the runway strip (as defined in the Specification for Obstacle Limitation Surfaces). This area is shown in Figure 4 to this designation.

For ease of administration, Auckland International Airport Ltd requires that any light in the above area be

prohibited from shining above the horizontal.

## Attachments

Figure 1 - Specification for Obstacle Limitation Surfaces

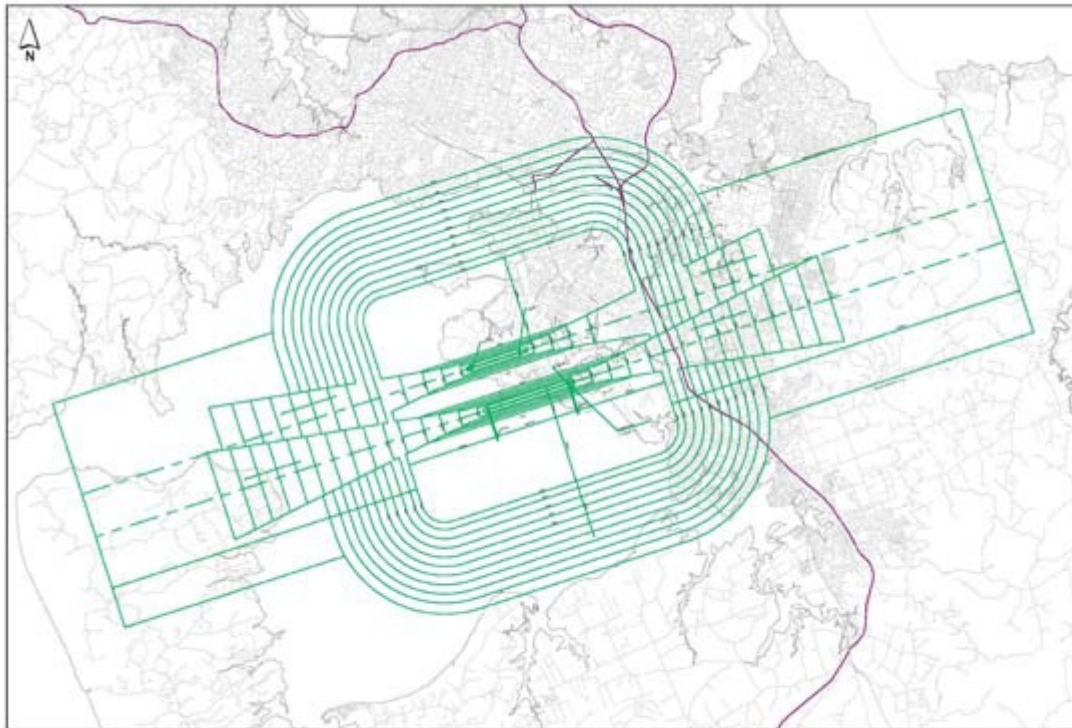


Figure 1 - SPECIFICATION FOR OBSTACLE LIMITATION SURFACES  
APPENDIX I

Figure 2 - Specification for Discharge to Air Rates Through Obstacle Limitation Surfaces

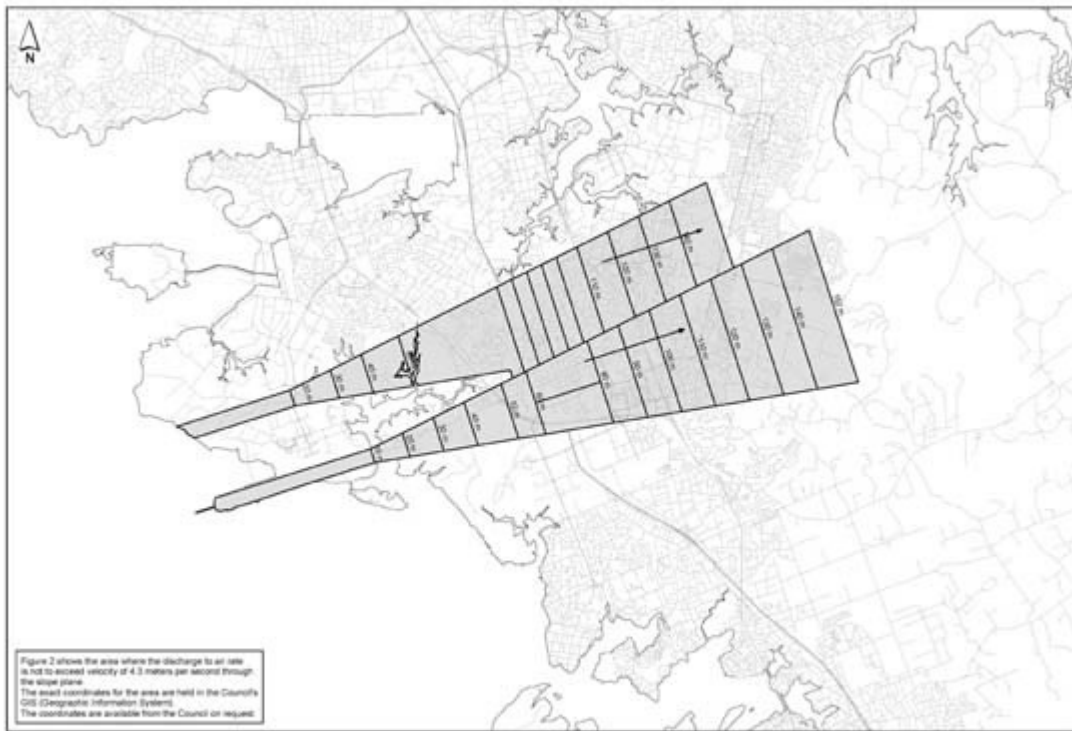


Figure 2 - SPECIFICATION FOR DISCHARGE TO AIR RATES THROUGH OBSTACLE LIMITATION SURFACES  
APPENDIX I

Figure 3 - Runway End Protection Areas

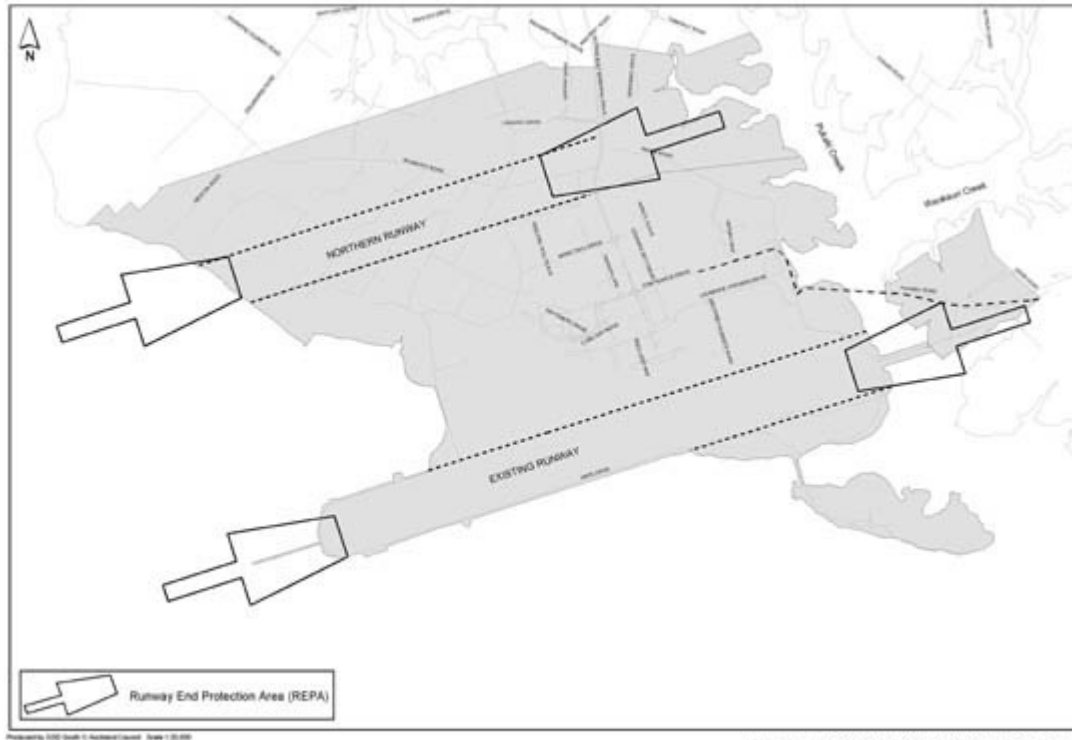


Figure 3 - RUNWAY END PROTECTION AREAS  
APPENDIX 2

Figure 4 - Requirements for Non-Aeronautical Ground Lights



Figure 4 - REQUIREMENTS FOR NON-AERONAUTICAL GROUND LIGHTS  
APPENDIX 3