

SCHEDULE 19.8 : HEIGHT RESTRICTIONS IN THE VICINITY OF THE ALEXANDRA AIRPORT

The following height restrictions apply to the Alexandra Airport. The objective of these restrictions is to limit the construction of any structure including any building, aerial, antenna or the placing or planting of any other object or tree which may inhibit the safe and efficient operation of Alexandra Airport.

The restrictions are based on combinations of various Civil Aviation (CAR 139.06) and ICAO Annex 14 obstacle limitation surfaces. In summary these are the Instrument Landing Surfaces for Category 1 approaches, Code 3 or 4 aerodromes and the take-off climb surfaces for Code 3 or 4 aerodromes.

All measurements in this Schedule are stated in metres above MSL (Mean Sea Level) unless otherwise stated. The Alexandra Airport runway is located at an elevation of RL 228.4 metres above MSL.

Runway Strip

- (a) This is a rectangular surface extending 60m beyond the western and 120m beyond the eastern ends of the runway and 75m on either side of the extended centreline (1380m x 150m Strip Dimension).
- (b) The height of this surface is defined by the lowest level of the formed runway strip which is 228.4 metres above MSL.

Take-off Fan

Explanation

This surface defines the glidepath on which an aircraft in a situation involving loss of power in one engine on take-off would be expected to climb.

Definition

- (a) The Take-Off Fan rises from the ends of the runway strip.
- (b) The Take-Off Surface rises for 1800m at a gradient 1:62.5 (1.6%) with side splaying at 12.5% from the edge of the runway strip.

Approach Fan

Explanation

This surface defines the glidepath on which an aircraft making an instrument approach would be expected to descend.

Definition

- (a) The Approach Fan rises from the ends of the runway strip from points situated 45m either side of the runway centreline.
- (b) The Approach Surface rises for 3000m at a gradient of 1:40 (2.5%) with side splaying at 15% from the points identified in (a) above.

Transitional Surface (Beside Strip)

Explanation

The Transitional Surface provides for a situation where an approaching aircraft is either off centreline or where it has executed a missed approach and allows for an area free of obstacles to protect aircraft in the final phase of the approach-to-land manoeuvre.

Definition

The Transitional Surface rises at a gradient of 1 in 7 from the edge of the runway strip. This surface rises to a level of 46m above the airstrip.

Horizontal and Conical Surfaces

Explanation

The Horizontal and Conical Surfaces provide an area where aircraft can manoeuvre at low altitude in the vicinity of the aerodrome.

Definition

Horizontal Surface means that surface which extends from the edge of the transitional surface to a maximum distance of 4,000m measured from the runway strip.

Conical Surface means that surface which rises at a gradient of 1 in 40 from the outer edge of the horizontal surface to a level 152 metres above the aerodrome datum.

Restrictions:

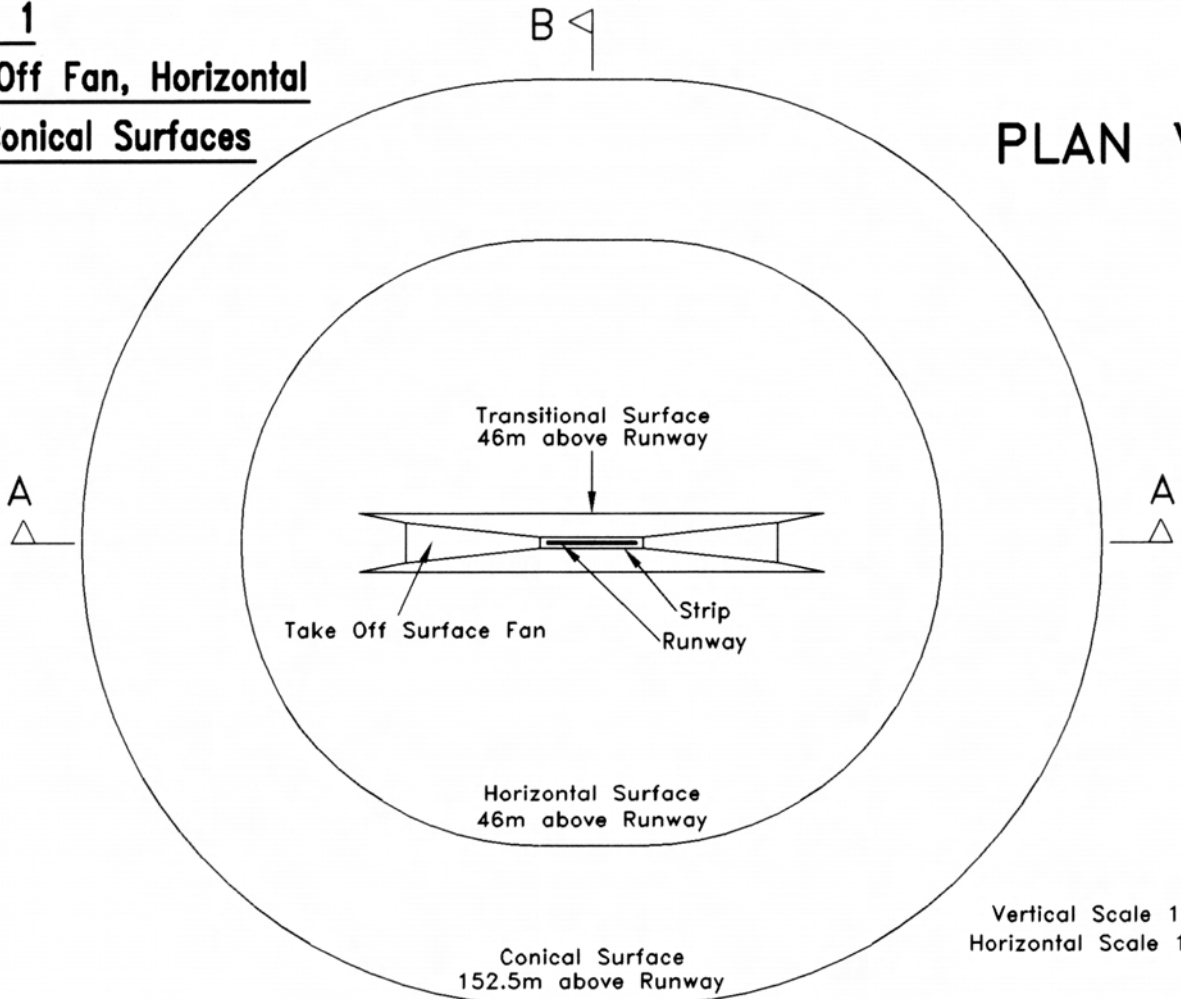
Written consent of the Chief Executive of the Central Otago District Council is required for any resource consent application or building consent application or prior to carrying out of any works involving the construction of any structure including any building, aerial, antennae, or placing or planting any other object or tree which:

- (a) **in any way penetrates any of the surfaces described herein and illustrated in Figures 1 and 2; or**
- (b) **is located on that area covered by the "Airport Protection Zone." as shown on the planning maps.**

Note: The Airport Protection Zone extends from the ends of the runway strip for a distance of 940 metres. At a gradient of 1:62.5 (1.6%) the Airport Protection Zone extends to a point where the take off surface is 15 metres above the level of the runway strip (see Rule 4.7.6A(i)). Beyond the Airport Protection Zone the maximum height of 15 metres is applied in the Rural Resource Area in terms of Rule 4.7.6A(f).

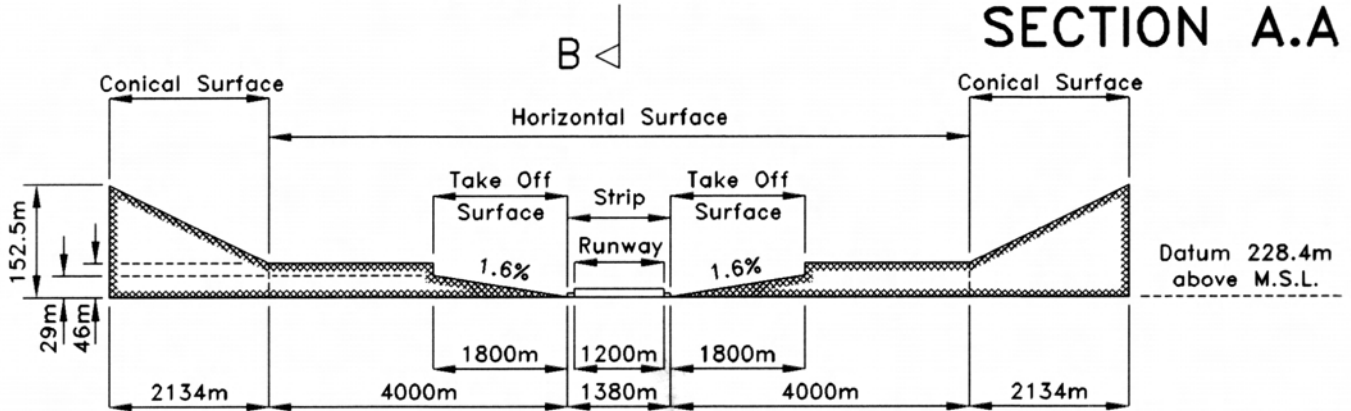
Figure 1
Take Off Fan, Horizontal
and Conical Surfaces

PLAN VIEW



Vertical Scale 1: 10,000
Horizontal Scale 1: 100,000

SECTION A.A



SECTION B.B

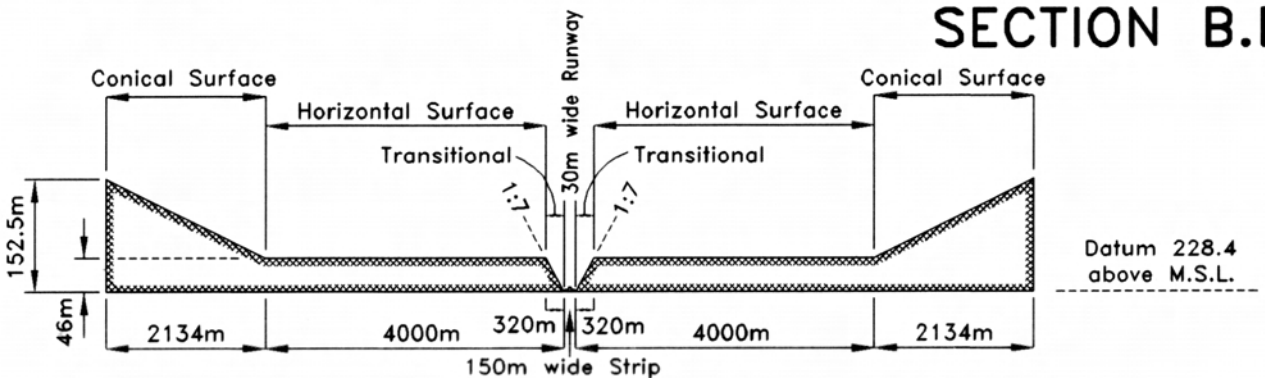
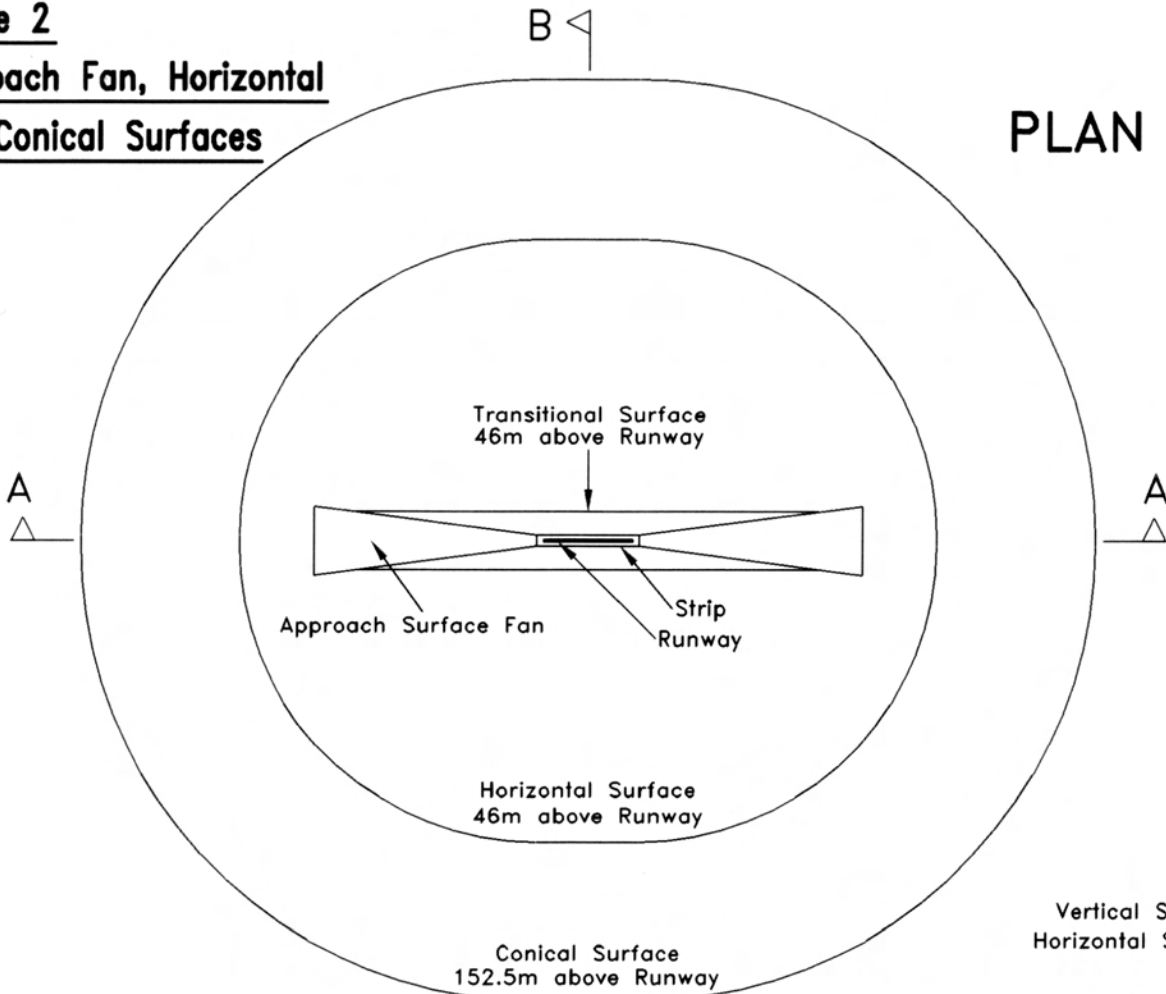


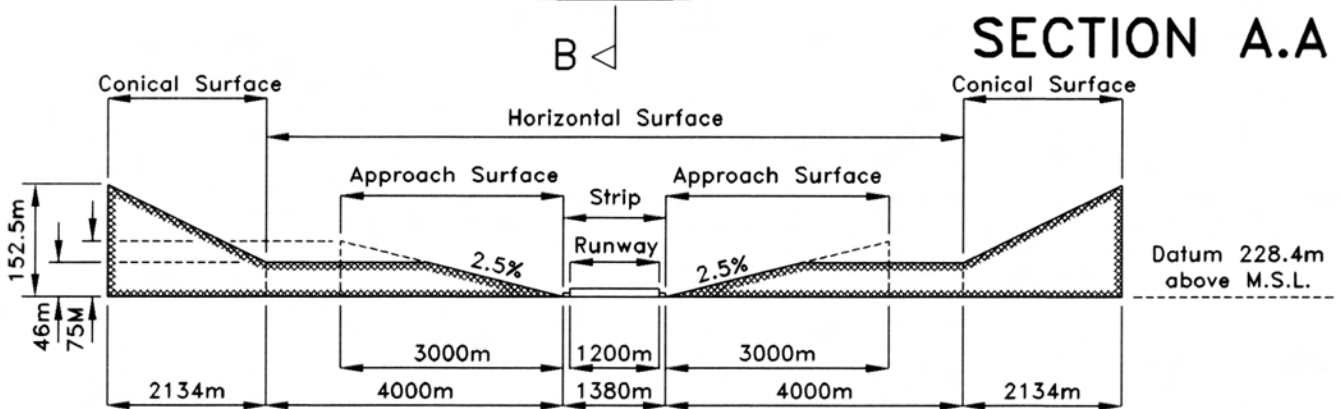
Figure 2
Approach Fan, Horizontal
and Conical Surfaces

PLAN VIEW



Vertical Scale 1: 10,000
Horizontal Scale 1: 100,000

SECTION A.A



SECTION B.B

