

Appendix 9 Te Kowhai Aerodrome

1 Introduction

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

The runway is on the following land: Lot 1 DP 547712, Section 8 SO 495676 (Records of Title 8105283, 755892).

2 Runway and Associated Runway Strip

The runway and associated runway strip is defined as follows:

- (a) Runway: the runway is 923.8 metres long and 18 metres wide.
- (b) Runway strip: the runway is contained within the runway strip. The strip is 983.8 metres long and 60 metres wide.
- (c) The coordinates and elevations of the four corners of the strip in terms of Mount Eden Circuit

New Zealand Geodetic Datum 2000 and Moturiki datum are as follows:

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

3 Obstacle Limitation Surfaces

The obstacle limitation surfaces (OLS) associated with this runway strip are defined as follows.

3.1 Approach and Take-off Surfaces

There is a combined approach and take-off surface at each end of the runway strip. Each approach and take-off surface is a truncated fan originating from a 45 metre wide base centred X metres inwards from the western end of the runway strip and X metres inwards from the eastern end of the runway strip. The surfaces extend either side of the extended centre line of the runway strip for a horizontal distance of 1200 metres (1.2 kilometres). Each surface rises upwards and outwards at a gradient of 1 vertical to 20 horizontal (1:20); the sides of the surfaces splay from their bases outwards at a rate of 1 vertical to 20 horizontal (1:20). The base of the western surface commences at a height of 25.2 metres above Moturiki Datum and the base of the eastern surface commences at a height of 26.6 metres above Moturiki Datum.

3.2 Transitional Side Surfaces

The transitional side surfaces rise upwards and outwards from the sides of the runway strip and each approach/take-off surface at a gradient of 1 vertical to 4 horizontal (1:4) to a height of 28.5 metres above Moturiki Datum.

(Note that the Aerodrome Operator NZTE Operations Limited has been requested in the report to provide evidence on the appropriate distances to replace both of the references above to "X metres").