## D23. Airport Approach Surface Overlay

## D23.1. Description

The purpose of the Airport Approach Surface Overlay is to manage obstructions such as buildings and trees, so that they do not protrude into airport approach surfaces.

This overlay applies to Kaipara Flats Airfield, North Shore Airport, Parakai Airfield and Auckland Gliding Club.

Height restrictions for the Auckland International Airport, Whenuapai Airbase and Ardmore Airports are contained within the designations applying to those airports and the airbase.

## D23.2. Objective

(1) Obstructions that compromise the safe and efficient operation of airports or airfields are prevented from protruding into airport approach surfaces or airspace restriction designations as shown on the planning maps.

## D23.3. Policies

- (1) Allow the removal or topping of trees that protrude into airport approach surfaces and airport restriction designations.
- (2) Control development through height restrictions within the airport approach surfaces and airspace restriction designations shown on the planning maps.
- (3) Prevent the height of buildings and trees and other obstructions from adversely affecting the safety and efficiency of airports or the ability of airports to function at present levels.

## D23.4. Activity table

Table D23.4.1 specifies the activity status of activities in the Aircraft Approach Surface Overlay pursuant to section 9(3) of the Resource Management Act 1991.

## **Table D23.4.1 Activity Table**

Activi	Activity status	
(A1)	Removal or topping of a tree that protrudes into the airfield height restriction shown in Standard D23.6.1 Height	Р
(A2)	Buildings, structures and masts and trees that do not exceed the airfield height limits restriction in Standard D23.6.1 Height. This rule does not prevail over any underlying zone or precinct height rules	Р
(A3)	Buildings, structures, masts and trees that exceed the height restriction in Standard D23.6.1 Height.	Pr

#### D23.5. Notification

- (1) Resource consent is not required for activities (A1) and (A2) in Table D23.4.1.
- (2) No application for resource consent may be made for the activity (A3) in Table D23.4.1.

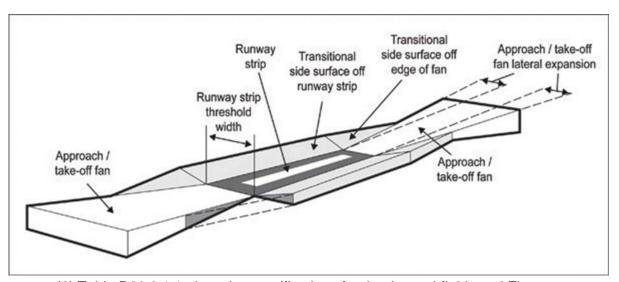
#### D23.6. Standards

All activities listed as permitted in Table D23.4.1 must comply with the following standard.

## D23.6.1. Height

- (1) At any point where two surfaces overlap and are at differing elevations, the lower of the two surfaces applies.
- (2) The height restriction consists of three separate height restrictions around North Shore Airport and two around Kaipara Flats and Parakai Airfields as follows.
  - (a) Take off/landing fans: These fans extend for 5.5km (North Shore) and 1.2km (Kaipara Flats and Parakai) from each end of each runway. The height limit begins at ground level and rises at a slope of 1 in 40 (North Shore) and 1 in 20 (Kaipara Flats and Parakai).
  - (b) Transitional side surfaces: This height restriction runs at right angles to the runway strip and the centre line of the fans. The height limit begins at ground level at the edge of runway strip and rises at a slope of 1 in 7 (North Shore) and 1 in 4 (Kaipara Flats and Parakai) to a maximum height of 45m (North Shore) and 2m (Kaipara Flats and Parakai) above the runway ground level. This height limit also applies from the outside edge of each fan, the surface rising at the same slopes to a maximum height of 45m (North Shore) and 2m (Kaipara Flats and Parakai).
  - (c) Horizontal surface: All properties within 2.6km of North Shore Airport are subject to a horizontal height control which is 45m above the average runway ground level i.e. 107m above mean sea level. There is no horizontal surface control for either Kaipara Flats or Parakai Airfields.
- (3) All height restrictions are affected by the elevation of the property and height limits must be assessed in terms of elevation relative to the runway itself.
- (4) Appendix 12 Airport approach surface provides detailed guidance on how to assess whether a proposal complies with Standard D23.6.1 Height.
- (5) Figure D23.6.1.1 explains the terms for Airport Approach Surface Overlay calculations.

## Figure D23.6.1.1 Explanation of teminology



(6) Table D23.6.1.1 gives the specifications for the three airfields and Figures D23.6.1.2, D23.6.1.3, D23.6.1.4 and D23.6.1.5 illustrate the airfield height restriction boundaries.

Table D23.6.1.1 Height specifications

Feature	North Shore		Kaipara Flats		Parakai		
Runway threshold ground	Main Runway East End	65m	East End	33m	East End	5m	
level above mean sea level	Main Runway West End	63m	West End	33m	West End	6m	
	Crosswind Runway East End	63m					
	Crosswind Runway West End	60m					
Runway strip width	90m		100m		65m		
Approach/takeo	ff fan						
Length (from runway threshold)	5,500m		1,200m		1,200m		
Slope (rate of rise)	1 in 40	n 40		1 in 20		1 in 20	
Lateral expansion	1 in 10		1 in 20		1 in 20		
Transitional side	e surface						
Slope (rate of 1 in 7 rise)		1 in 4		1 in 4			
Maximum height above runway	45m		2m		2m		
Horizontal surfa	ice						
Height	leight 107m above sea level		N/A		N/A		
Lateral extent	Lateral extent 2.6km from edge of runway strip		N/A		N/A		

Figure D23.6.1.2 Kaipara Flats airfield height restriction



Figure D23.6.1.3 North Shore airport height restriction

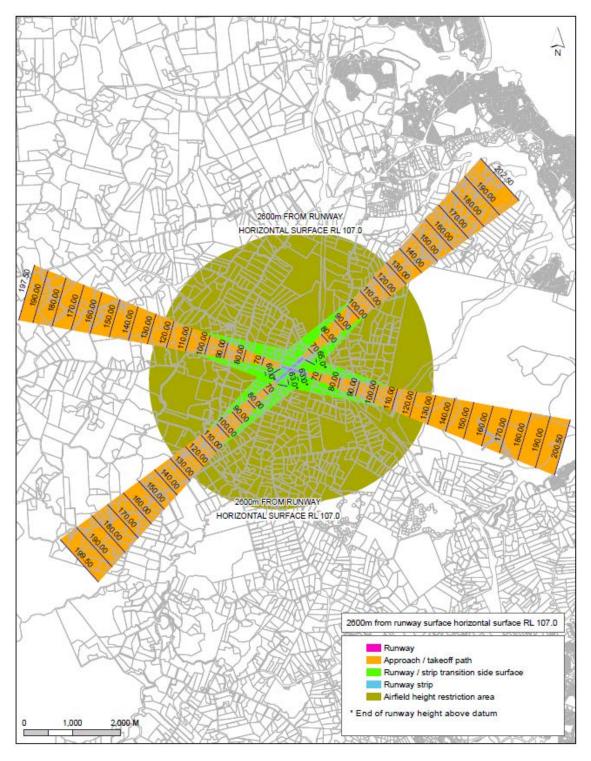
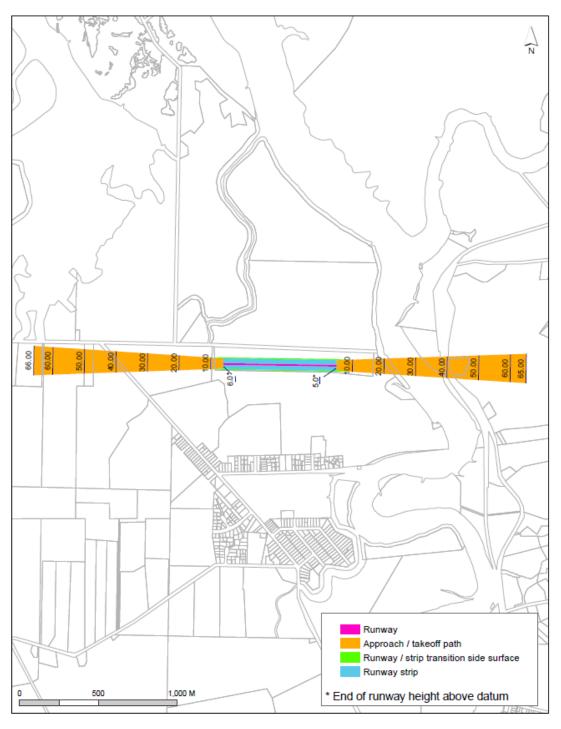


Figure D23.6.1.4 Parakai airfield height restriction



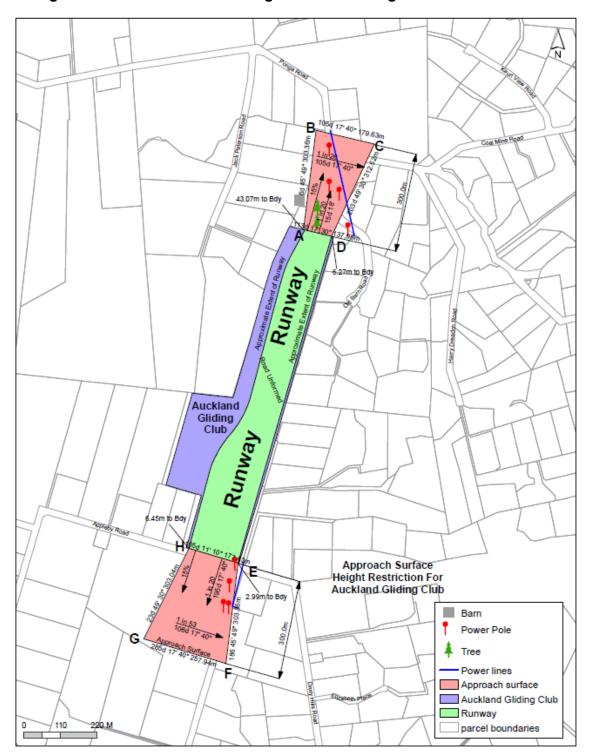


Figure D23.6.1.5 Auckland Gliding Club airfield height restrictions

# D23.7. Assessment - controlled activities

There are no controlled activities in this section.

# D23.8. Assessment – restricted discretionary activities

There are no restricted discretionary activities in this section.

# D23.9. Special information requirements

There are no special information requirements in this section.