

# Integrating a new regional airport into the local landscape

## *Landscape Part 1: Understanding Landscape Assessment*

August 2023

### Central Otago\* has a wide and varied landscape

Central Otago is home to a number of outstanding and highly valued natural features and landscapes.

These range from environments associated with the high country of the Lindis Pass and surrounding mountain areas, to lowland ecosystems such as the Lindis River, Clutha (Mata-Au) River and the wetlands at the head of Lake Dunstan and across to the mountainous Wakatipu.

It is also a working landscape shaped also by people's interaction with the land. Throughout the region you can see man's impact over generations – mining, viticulture, agriculture and horticulture

operations have all shaped this region.

Landscape and visual effects assessments are an important component for major projects and Christchurch Airport has engaged experts to consider these in relation to its proposal for a new regional airport at Tarras.

The first step was completing desktop research of the landscapes around the airport site (including areas of significance), the likely visual effects of the airport and identifying the key elements that will require more detailed research.

This Information Paper reflects that research.

### There are a variety of landscapes around the proposed airport site

The proposed airport site is approached from three different directions, each of which reveal quite different landscape experiences.

Travelling down State Highway 8 (SH8) from the direction of the Lindis Pass, the landscape remains largely pastoral. Outside of the river valleys, it is sparsely vegetated and often barren. Bare schist

competes with a depleted matrix of vegetation, so the hills and mountains climbing away from SH8 are most notable for their rounded, sheered-off landforms.

Closer to Tarras this pattern changes, with sedimentary terraces, ridges and valleys replacing the glaciated hill country on both sides of SH8.



\*This project defines the Central Otago region as the area overseen by the Queenstown Lakes District Council and the Central Otago District Council.



Those approaching Tarras from Wānaka remain enclosed within a valley corridor dominated by a mixture of farmland, shelterbelts and small pockets of lifestyle development.



On either side of Lake Dunstan (along either SH6 or SH8) the working character of the area becomes more pronounced with both vineyards and cherry orchards alongside horticultural operations. This managed landscape transitions into the bony hill country and high runs of the adjoining mountain range.



The proposed airport site sits at the eastern edge of a river plain or terrace created by historic changes in the course and flow of the Clutha (Mata-Au) River, as well as alluvial deposits.

This terrace is currently used as farmland (mostly dairying) with its almost flat terrain criss-crossed by shelterbelts. The river terrace which the site sits on is enclosed by the wider array of landforms.

The airport site is framed by the 'working' nature of most of the landscape enclosing it.

## Outstanding natural features are legally protected

The Resource Management Act currently governs how New Zealand's landscapes and features are managed. It requires decision-makers to provide for the protection of outstanding natural features and landscapes.

This is achieved by such features being identified as Outstanding Natural Features of Landscapes (ONF or ONL) or Significant Amenity Landscape (SAL) in district plans and regional policy statements. This can impact the ability to carry out development in or near those areas.

Large parts of rural land within Queenstown Lakes District are also designated as ONF or ONL.

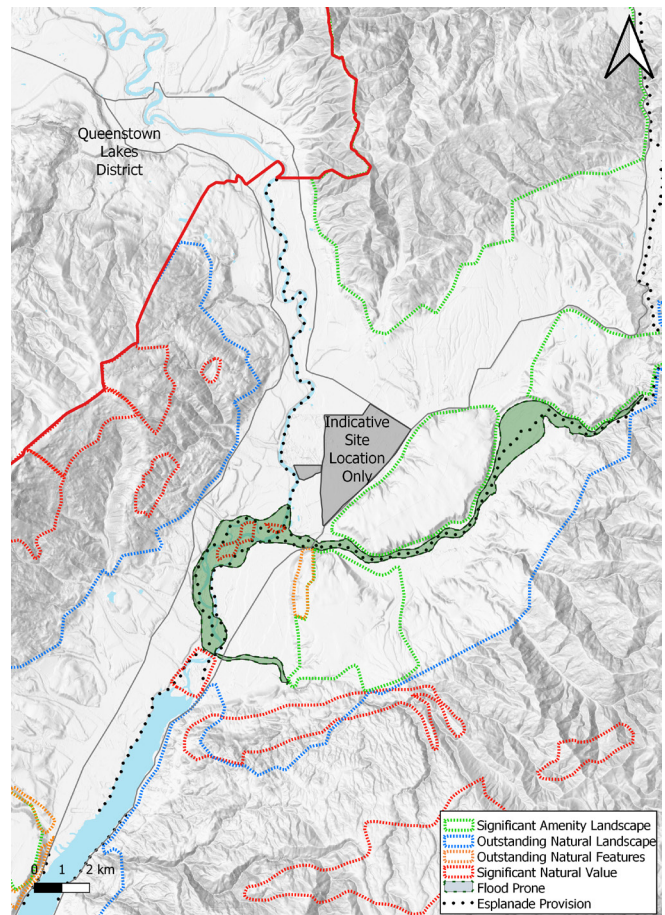
The proposed airport site is subject to the provisions of the proposed Otago Regional Policy Statement (pORPS) and the Central Otago District Plan.

The pORPS does not identify the airport site or its immediate surrounds as having any particular landscape or amenity values, and related sensitivity.

By contrast, the Central Otago District Plan identifies the faces and crest of part of the Bendigo Terrace (which is south-west of the airport site) as ONFs and both the Pisa Range and Dunstan Mountains as ONL. It also identifies the top of the Bendigo Terrace, two terrace plateaux and the

foothills north of Bells Lane (SH8A) as being SALs.

The proximity of these ONLs and SALs will be relevant to the assessment of any landscape effects the proposed airport may cause.



## Landscape values and amenity effects can be subjective but are important

The project will need to assess not only the visibility of the proposed airport and aircraft traversing the area, but also the values and meaning attached to the landscape and place.

This may necessarily be subjective and include rural character and landscape values.

Although the range of effects can potentially be very broad, a number of key effects are expected to be of greater relevance and require assessment, these include:

- Amenity effects in relation to Tarras – including its school, and other local facilities as well as residential occupants of local farms and lifestyle properties surrounding the site;
- Any effects in relation to the Bendigo Terrace ONF and the SALs; and
- Any effects in relation to the natural character of the Clutha (Mata-Au) River.

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## The visible effects on landscape will depend on vantage point

The airport itself – including its terminal, control tower, hangars, runway and ancillary buildings are likely to have quite a low profile.

The area's topography means the airport site is viewed at a flat angle from most immediately surrounding areas of public activity (including the state highways) and most of the residential occupation areas near the site.

Those areas are considered as separate catchments and audiences for assessment purposes.

Those physically close to the site are more likely

to be directly exposed to both the airport's visual effects and aircraft movements and will require assessment.

This does not mean other areas won't be affected by the airport, but those further away from the site are likely to be more effected by the arrival and departure of aircraft than by the airport itself.

Where the airport might be less intrusive, consideration still needs to be given to the perception of Tarras as a small rural settlement and of its surrounds as a rural area if the project proceeds.

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## The choice of runway alignment will alter the effects of the proposed airport

The degree to which each catchment would be exposed to the proposed airport will depend upon the runway and flight path alignment ultimately selected.

If the preferred Lindis Valley-Lake Dunstan alignment (04/22) becomes operational, it is likely to have slightly more of an impact on the village of Tarras because of the closer proximity of this option's northern approach path. This may also increase the effect on properties down SH8 and on the highway itself. Catchments closer to the

Clutha (Mata-Au) River, including the northern end of Māori Point Rd and the edge of the Pisa Range, together with parts of SH6, would have lesser visual contact with the airport.

By comparison, it is likely the Hāwea Valley-Lake Dunstan alignment (01/19) would have a much greater impact on the lifestyle properties on Māori Point Road and on the lifestyle areas emerging across the Pisa Range foothills. It would also more likely have a slightly greater impact on motorists using SH6 beneath these same foothills.

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## Good design and mitigation can reduce any impacts

Good design practices and a mitigation strategy could help reduce the magnitude of effects on environments in closer proximity to the proposed airport site.

This could include locating buildings to capitalise on a 'natural advantage' that the site currently has.

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A mounding / earth-working and planting strategy could be developed for the entire airport so that future development is integrated with a buffering and enhancement strategy for the entire site.

## Well-designed and placed buildings can sit with the existing landscape

Christchurch Airport has worked with architects to demonstrate how a modest terminal and associated buildings might sit within the local landscape if the Lindis Valley – Lake Dunstan alignment (04/22) is ultimately selected.

Solely to demonstrate this scale in the landscape, CIAL has deliberately selected a 32,000m<sup>2</sup> sized terminal concept. This is likely to be larger in scale to any likely footprint, which would be considered in more detail during the design stage.

Modular design would mean incremental improvements would have limited additional impact on the landscape.

Note this is indicative only and has been produced solely for the purpose of demonstrating the form and scale of the structures in the context of the surrounding landscape.



The proposed airport would have quite a low degree of visual presence. By way of comparison, the proposed airport would occupy a north-south aligned river valley not unlike Dunedin Airport

on the Taieri Plain. That airport is also flanked by rising hill country to the east and west and is firmly ensconced within farmland that occupies most of the surrounding valley floor.

The information provided in this Information Paper is of a preliminary and general nature and for informational purposes only. Information may change as further more detailed investigations are undertaken.