Westport Airport Relocation

Next Steps

Report to Buller District Council

25 November 2023

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1 Overview

Mike Haines Aviation (MHA) provided a Westport Airport Airfield Relocation Option Report, dated 15 November 2023, to the Buller District Council (BDC).

The report concluded that based on the onsite visit and the information provided by BDC an alternative location for Westport Aerodrome is feasible. [redacted]

High level assessment of a possible site and the associated obstacle limitation surfaces does support a Code 3 aerodrome and the location also has good transportation links. Appendix A provides a proposed Code 3 aerodrome layout and Appendix B provides a standard obstacle limitation surface. (Both are from the Options Report)

2 Phases of work

As per previous advice there are four phases to the Westport Aerodrome Relocation. Phase One is completed and some elements of Phase Two are in the Relocation Option Report, as highlighted.

Appendix C provides an overview of key components of the next stage related to aviation aspects.

Phase One: Feasibility Study - COMPLETE

- Assessment of operational, financial and environmental information
- Site options and alternatives with high level SWOT
- Transportation links to location
- Land ownership and future expansion
- Airport operations e.g. general aviation, air transport, supporting activities
- Aviation system assessment overview: airspace, routes, site constraints
- Use current airport as baseline

Phase Two: Site selection and preliminary planning -

[redacted]

- Capital and operating costs estimation

[redacted]

- Site environmental, social and nature considerations
- Geographical analysis especially terrain and obstacles

[redacted]

- Capital and operating costs estimation

[redacted]

Financial assessments are for BDC to undertake.

Stage 2 Key documents:

- Environmental Report
- Airspace Concept of Operations
- Aerodrome terrain and obstacle assessment for aerodrome obstacle limitation surface and applicable instrument flight procedure designs
- Meteorological data collection and assessment
- Initial noise contours and assessment
- Engagement with air operators on aircraft and operational requirements

Phase Three: Facility and infrastructure planning

- Airport Master Plan
- Airport infrastructure, layout and physical characteristics design
- Airport facilities and operational requirements e.g. security, passenger terminals
- Aircraft infrastructure design
- Aeronautical suitability
- Geographical analysis especially terrain and obstacles
- Detailed Aviation system assessment: Communications, Navigational, Surveillance (CNS), Air Traffic Management (ATM)
- Environmental Considerations including water, energy, waste, emissions, noise, visual amenity
- Regulatory assessment
- Airport support facilities e.g. engineering, fuel, car parking

This phase should begin when all Phase Two areas are completed and approval for detailed planning is given.

Phase Four: Construction

- Specific conditions
- Construction programme

3 Summary

Construction of a new aerodrome is a major undertaking requiring extensive assessment and planning to underpin the project. The initial aviation work is promising, and the site has great potential.

Stage 2, if approved, will require more detailed survey of the land, the airspace and the probable operations of a new aerodrome.

Appendix D is the possible workstreams under the programme.

We look forward to further discussion on this project in 2024.

Please contact us for any other assistance or information as required.

Mike Haines – Aviation Consultant

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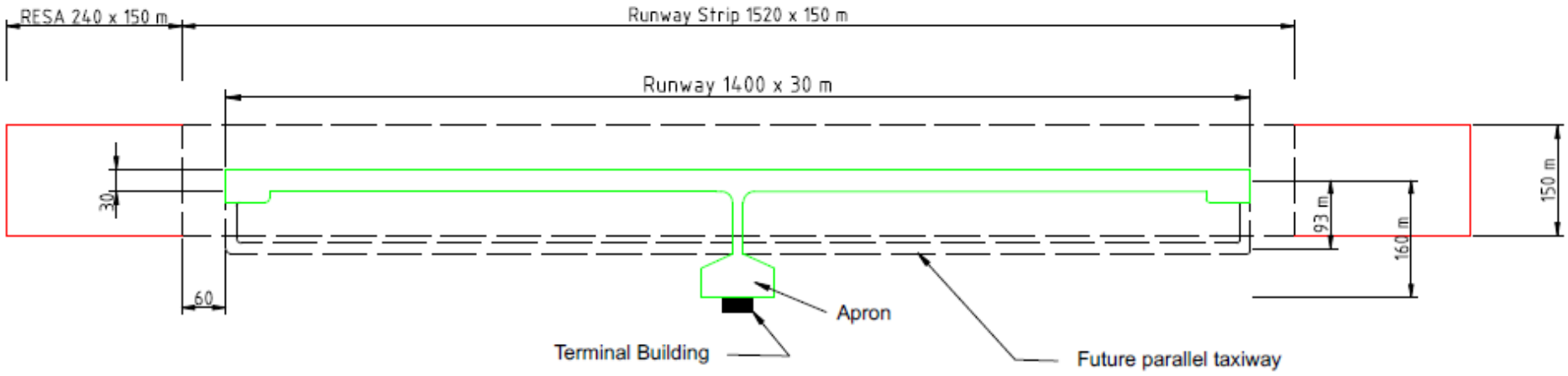
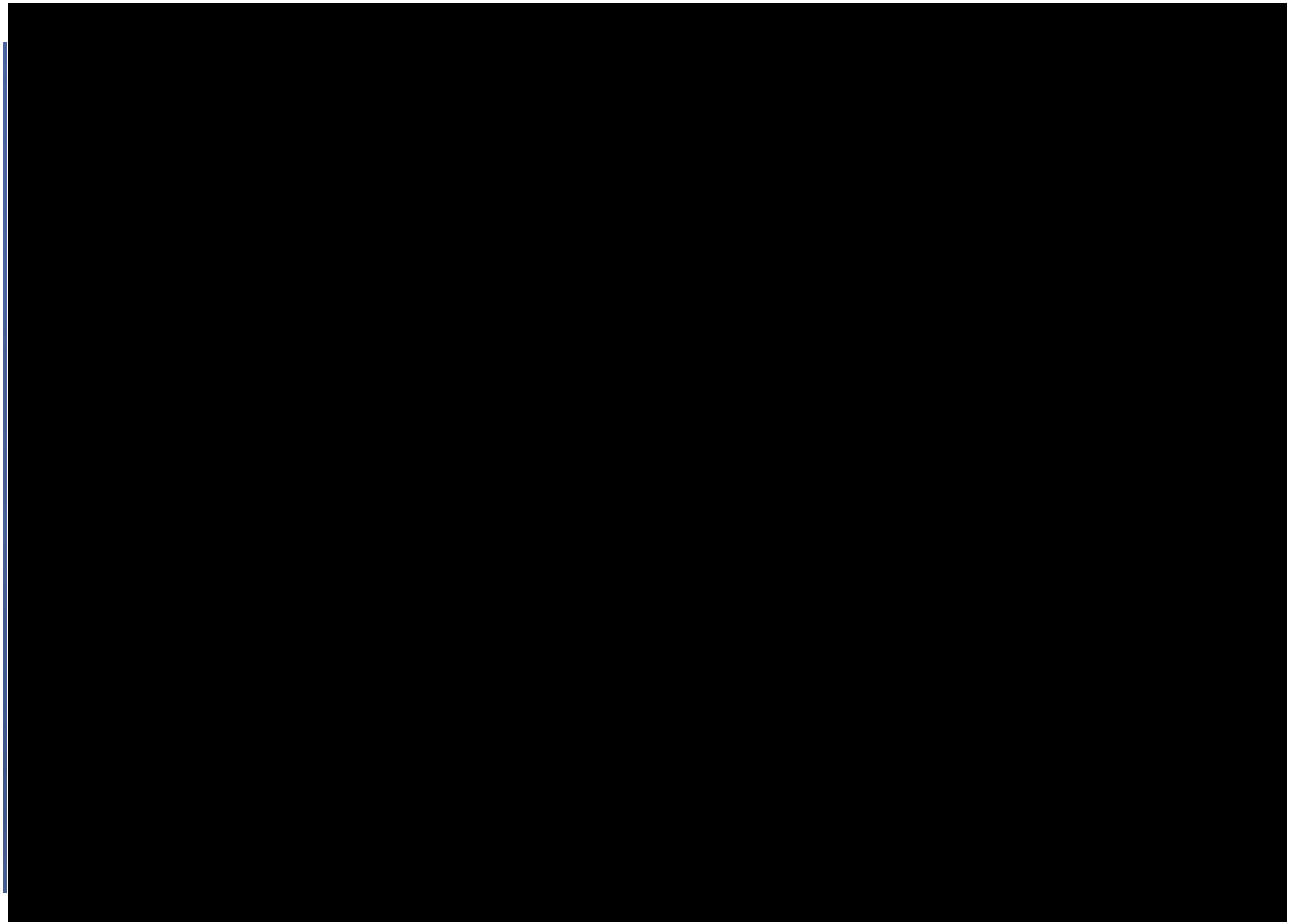
25 November 2023

Appendix A – Proposed Aerodrome Layout



Total land area approximately
2000 x 400 m (80 hectares).



Appendix C – Key Aviation Areas for Next Stage

Area	Options Report Assessment	Next Stage
Climatic	Generally acceptable runway orientations based on the prevailing weather conditions.	Confirm the climatic conditions at site.
	No specific climatic issues regarding low cloud or fog.	Installation of Weather Station to obtain accurate data
Terrain	No specific terrain issues and initial OLS assessment clear of obstacles.	Detailed survey of site to the Obstacle Limitation Surface and instrument flight procedure design criteria.
	Extensive earthworks will be needed for levelling of aircraft movement areas.	3D mapping to show site, survey areas and possible obstacles
Airspace	Aircraft flight paths and procedures could be designed for the runway	Airspace concept including concept of operations and instrument procedures required.
	The airspace is not busy with no low level instrument routes and is mainly uncontrolled. The airspace is not complex.	
	[redacted]	
Runway	The current runway length could be constructed with compliant slopes, runway strip and runway end safety areas.	Further design of the runway and operational assessment. Engagement with air operators on possible future aircraft option including Air NZ, Sounds Air, Air Chathams, NZDF.
	The alignment would remain as per the current runway which is best for prevailing wind.	
	A longer runway to accommodate ATR-72 aircraft could be constructed.	

Aircraft Operations	Aircraft climb gradients and approach slopes would be standard.	Further assessment of aircraft operational needs. Engagement with air operators on specific aircraft operational requirements including Air NZ, Sounds Air, Air Chathams, NZDF.
	Instrument procedures should be able to be designed with no specific limitations due to terrain or obstacles.	
	Aircraft performance and engine-out requirements should be standard.	
	Standard left hand and non-standard right hand aerodrome circuits would be possible.	
Environmental	No specific noise sensitive areas outside the standard aerodrome noise zones.	Aerodrome noise contour assessment and profile of noise levels for surrounding areas Assess any ground environmental issues through an Environmental assessment including wildlife, geology, land use, and specific areas of interest.
	No identified specific environmental constraints.	

Appendix D – Programme Workstreams

						
Engagement	**Feasibility**	**Airport Operations**	**Regulatory**	**Environmental**	**Planning and Design**	**Transportation**
Community and Iwi	Social, economic and environmental	Airspace and flight tracks	Environmental Study	Land use	Airport Development Strategy	Regional transport requirements
Aviation (Industry)	Aviation demand	Aeronautical safeguarding	CAA Certification	Energy and emissions	Site Infrastructure Requirements	Surface Access Strategy
Non-Aviation (Industry)	Financial and Business Case	Meteorological study	Buller District Council requirements	Carbon considerations	Airport Master Planning	Planning and design
Government	Economic assessment	Aircraft Noise	Ministry of Transport	Water quality and use considerations	Land Use Plan and Zoning	
Civil Aviation Authority	Commercial planning	Aircraft emissions	Local Government	Waste control and management	Site Planning and Design	
Interested parties		Aircraft operations and types			Site Preparation	