MINUTES OF THE RANGIORA AIRFIELD ADVISORY GROUP HELD AT 5.30 PM ON WEDNESDAY, 25 MARCH 2026, IN THE CANTERBURY AERO CLUB ROOMS AT THE RANGIORA AIRFIELD, MERTON ROAD, FERNSIDE

PRESENT

Steve Noad (SN) [Chairperson]
John Dugdale (JD)
Buzz Harvey (BH)
Iain McPhail (IM)
Philip Redmond (PR) [Deputy Mayor]
Bruce Drake (BD)
David Harnett (DH)
Rob Kittow (RK)
Keith Vallance (KV)

GUESTS IN ATTENDANCE:

Duncan Roxborough (DR) [Waimakariri District Council]
Max Stevens (MS) [Previous Director for Civil Aviation Authority]
Shaun McCracken (SM) [Environment Canterbury]
Thea Kunkel (TK) [Waimakariri District Council]

1. WELCOME

The Chairperson welcomed the members present and declared the meeting open at 5.30 pm.

2. APOLOGIES

Owen Stewart (OS) [Waimakariri District Council]

3. CONFIRMATION OF PREVIOUS MINUTES

3.1 Minutes of the Rangiora Airfield Advisory Group – 25 February 2025

Moved: B Harvey Seconded: S Noad

THAT the Rangiora Airfield Advisory Group:

(a) **Confirms,** as a true and accurate record, the circulated Minutes of the Rangiora Airfield Advisory Group meeting held on 25 March 2025.

CARRIED

4. MATTERS ARISING (From Minutes)

DR raised the following matter arising from the previous minutes:

4.1 Cables across Ashley River

DR noted that the Rangiora Airfield Advisory Group (RAAG) had previously raised suggestion that staff lodge aviation-related concerns with the Civil Aviation Authority (CAA) regarding the installation of the new 66 kV cables across the Ashley/Rakahuri River. It had also been suggested that a briefing be arranged for microlight operators to ensure they were aware of the cables. These actions remained outstanding.

SN advised that, although not recently confirmed firsthand, there had been reports that markers had now been installed on the cables. Some members commented that they had not observed any markers over the weekend. DR was requested to confirm the status of the marker installation.

4.2 Runway 07 Designation

DR advised that, in relation to hangar development at the West end of the airfield (lots 95-98), the hangar owner had now pegged out the site in accordance with the previous RAAG request. The owner had made design adjustments to ensure the structure would fit appropriately within the available area and maintain a 20-metre separation from neighbouring hangars. Consultation with adjacent property owners had been undertaken, and no concerns were raised.

4.3 Hangar development at the west end

DR advised that, in relation to hangar development at the West end of the airfield (lots 95-98), the hangar owner had now pegged out the site in accordance with the previous RAAG request. The owner had made design adjustments to ensure the structure would fit appropriately within the available area and maintain a 20-metre separation from neighbouring hangars. Consultation with adjacent property owners had been undertaken, and no concerns were raised.

SN noted that several RAAG members had inspected the proposed layout. The RAAG expressed support for the positioning and raised no objections. It was therefore agreed that the hangar owner should proceed with submitting a building consent application.

4.4 91/95 fuel Installation Update

DR reported that progress on installing the 91 and 95 fuel tanks with Allied had not advanced while the airfield Manager was on leave. The matter remained on the staff's action list, and the RAAG would be kept updated as further information became available.

4.5 Taxiway re-opening

DR reported that the first section of the access driveway here was currently being asphalted. SN raised concerns about aircraft movements in this area, particularly given recent activity. Since the last meeting, a Cresco and a Piper Malibu had been positioned nearby for maintenance, completely obstructing the existing access route past Lot 3. Given these constraints, the RAAG discussed the need to realign aircraft traffic toward the half-round hangar (Lot 5) to ensure continued access and prevent future blockages, although there is enough room for taxiway here

DR undertook to have staff consult with the airfield users most affected by the proposed reopening of the taxiway and to report back to the RAAG.

RK noted that the RAAG should consider whether the Rangiora Airfield intended to become a qualifying aerodrome under Civil Aviation Rule Part 139, as this decision would have significant implications for future planning and operational requirements. Members were reminded that the obligations associated with Part 139 were substantial, and it was suggested that all RAAG members review the rule in full. It was emphasised that certain activities currently under discussion may not be permissible within a qualifying aerodrome environment, particularly those relating to public access and the presence of non-operational personnel within controlled airspace. It was noted that Part 139 Qualification was on the agenda for later discussion.

5. MAINTENANCE

5.1 Taxiway and runway grassing project update

DR provided an update on the runway and taxiway renovation works. He advised that Grounds and Services Ltd had been engaged several weeks earlier to undertake the agreed scope of work. This included re-grassing the southern side of the runway 07-25 and a section extending just beyond the centreline, covering slightly more than half of the runway width. The scope involved spraying off weeds, undertaking decompaction, and completing two passes of direct drilling. While on site, the contractor was also scheduled to complete a light pass along the northern side, which remained operational throughout the works.

DR noted that the taxiway renovation would focus solely on the most deteriorated central section, approximately eight metres wide. Topsoil would be applied to this area, and while the surface consolidated and new grass established, aircraft movements would be diverted around the affected section using the existing pyramid cones. The primary challenge had been scheduling the works around airfield users, including flying schools and their bookings, particularly with the Easter period approaching and increased activity expected for Warbirds operations. A range of options had been considered, including partial runway closures, shifting work to early mornings or late afternoons, and undertaking as much work as possible at night.

DR advised that, due to the weather forecast, runway spraying had been completed earlier that morning. The contractor had also secured a second piece of equipment, enabling aeration and decompaction to commence the following afternoon. The plan was for the contractor to begin work at approximately 3 p.m., with a NOTAM to be issued for that evening. Initial work would occur on the southern fringe of the runway under a watching brief, with a spotter and radio monitoring in place to ensure that aircraft movements could continue safely. Once darkness fell, the contractor would continue working into the night, starting from the centreline and progressing outward. Cones would be placed along the centreline to delineate the runway.

DR noted recent observations regarding cone placement, advising that cones positioned by Stewart Civil had remained stable despite earlier concerns that they might be displaced by prop wash. Double-stacked cones had proven effective, although it was acknowledged that larger aircraft could still move them if sufficient thrust was applied.

DH sought clarification on the timing and staging of the taxiway works, including whether the works would be undertaken in sections or completed simultaneously. DR advised that topsoiling was expected to occur after Easter, followed by grass establishment using hydro-seeding, for which an additional cost had been incurred to improve establishment. It was anticipated that the grass would take approximately five to six months to fully establish.

The RAAG discussed the need to implement a clear scheme for aircraft movements during the taxiway renovation. As only the most deteriorated sections of the taxiway would be treated, gaps would remain to allow aircraft to cross. Based on the indicative plan prepared by the Airfield Manager, approximately five crossing points were expected: two near the fuel facility, two near the club area, and one at the northern end. Given the limited space and tight manoeuvring requirements, DR sought feedback from the RAAG on how best to manage aircraft movements during this period.

It was agreed that the section of the taxiway and runway to be grassed should be cordoned off with traffic cones, along the full length, appropriately spaced to prevent aircraft from entering the area. It was noted that, to manage costs, the required cones could be leased for the duration of the works.

5.2 Airfield road upgrades works update

SN reported that the roading upgrade works had been progressing over the previous ten days and that most members would have observed the activity on site. He confirmed that, although the works had caused some disruption, they had generally proceeded smoothly. Concerns were raised about the speed of vehicles travelling through the construction area.

DR advised that the sealing had been completed earlier that evening. The asphalt chip seal, originally scheduled for the following day, was now expected to occur on Friday, 27 March 2026, although the timing had changed several times. Initial concerns had been identified regarding the shoulder where the new surface met the existing ground, as a noticeable lip had formed. Staff had raised this with the engineers, who subsequently feathered out the edge. An additional issue was identified near the water tanks, where a significant drop-off and ditch were present. Staff requested that the shoulder in this area be built up to improve safety, particularly for water unit technicians.

DR further noted that the engineers had asked whether yellow no-stopping lines should be installed along the stop-bank side of the road to discourage vehicles from travelling too close to the edge. He sought the RAAG's views, and members agreed that installing yellow lines would be beneficial, noting that the work could be completed at minimal cost while contractors were already on-site undertaking car park works. DR to instruct the contractors to proceed.

In conclusion, DR confirmed that the gravel car park areas would remain gravel and that remediation work to them was ongoing under the current contract.

5.3 Irrigation Investigations Update

DR reported that at the previous meeting, staff had raised the option of installing irrigation on the taxiway as part of the broader water supply upgrade. At that time, the RAAG had indicated a preference for prioritising irrigation of the runway. He advised that staff had since met with WaterForce, who had developed a comprehensive proposal involving pop-up sprinklers installed along both sides of the runway. However, the availability of water remained the key constraint. Several potential supply options were being investigated, including:

- Bringing the existing well near the half-round hangar back into service, noting that it does not currently hold a consent to take water.
- Increasing the allocation from the existing consented well near the pump shed, which would have spare capacity once the new water main was commissioned.
- Drilling a new well.

DR noted that obtaining consent would present a significant challenge. Although spare allocation capacity existed within the zone, the Council would need to demonstrate strong justification for any increase. Staff had already written to Environment Canterbury (ECan) to enquire whether the Council could increase its consented take from the existing well, but were awaiting a response. While the flow rate from the well was adequate, the current allocation of 54 cubic metres per day was insufficient for the scale of irrigation desired by RAAG; achieving reasonable irrigation coverage would require an increase of approximately eight-fold, to around 400 cubic metres per day. WaterForce had proposed a high-specification irrigation system capable of delivering approximately 5 mm of water per day to ensure optimal grass growth. DR noted, however, that the Council's primary objective was more modest, simply to maintain grass survival rather than achieve optimal growth. Investigations were ongoing, and staff were to report back to the future meeting.

6. HEALTH AND SAFETY

No health and safety concerns were raised.

7. AIRFIELD INCIDENTS

No incidents were reported during the period under review.

8. NOISE COMPLAINTS

No noise complaints were received during the period under review

9. GENERAL BUSINESS

9.1 Civil Aviation Authority New Zealand (CAA) presentation follow-up – Qualifying Aerodrome scheme

RK raised concerns about the time the CAA had taken to respond to the Council following the Aeronautical Study that the CAA directed the Council to undertake approximately two years ago. He noted that the Council had completed the required study; however, no determination or direction had yet been provided by the CAA. RK considered the delay unacceptable, particularly given the implications for planning and development at the Rangiora Airfield. It was understood that the Council had formally requested direction from the CAA and was awaiting a response.

DR reported that Council staff had met with CAA representatives late last year at their request to discuss Qualifying Aerodrome-related matters. Staff advised the CAA that they would need to liaise with elected members and the RAAG. He acknowledged that the process had taken considerable time. It was also noted that when the Aeronautical Study was first completed, several issues were identified, and the Council had been steadily progressing work on those matters. The discussion highlighted that, while progress had been made on items within the Council's control, direction from the CAA regarding the study's outcomes was still awaited.

Most members felt that the CAA's recent presentation to RAAG made it clear that the Authority wished Rangiora Airfield to become a qualifying aerodrome under Civil Aviation Rule Part 139.

DR noted that during the CAA presentation, several RAAG members expressed dissatisfaction with the responses provided by CAA representatives regarding the benefits of becoming a qualifying aerodrome. As a result, a request had been made for the CAA to supply a written, bullet-point summary outlining the specific benefits the aerodrome would receive under the proposed regulatory changes. DR had intended to present this information at the current meeting; however, the CAA's representative, N Jackson, had not yet provided the requested material, as he was on leave.

DH noted that one of the questions put to the CAA at the previous meeting was whether the Authority had any evidence demonstrating that the airfield's transitioning to Part 139 certification had achieved measurable improvements in safety outcomes. He reported that, when asked, the CAA representative advised that they had no such evidence to provide.

SN reiterated that his primary concern related to the safety justification for transitioning the airfield to Part 139 certification. It was noted that this question had been asked in several different ways during the previous meeting, with the intention of understanding what tangible safety improvements CAA believed would result from the change. Specific examples were raised, including:

- Ensuring pilots read NOTAMs
- Preventing take-offs from closed runways
- Avoiding conflicts with ground vehicles such as tractors
- Reducing near-miss incidents
- Improving correct radio use

SN expressed concern that the CAA did not provide clear evidence or an explanation of how Part 139 certification would directly address these operational issues or improve safety outcomes at the Rangiora Airfield.

JD noted that their earlier written comments emphasised the need for a cultural shift within the CAA, particularly around how safety issues were addressed. He expressed the view that the way CAA had handled this process to date reflected a culture insufficiently focused on listening to stakeholders or responding constructively to concerns raised by the airfield community.

It was observed that under Part 139, the aerodrome operator was required to provide and maintain a safe aerodrome environment. Many of the physical safety requirements, such as managing trees on approach paths, were already being addressed by the Council under existing obligations. It was further noted that these requirements were determined by the types of aircraft operating at the airfield and the services provided to the aviation community. The member suggested that the current work already underway demonstrated that safety management was being carried out without the need for Part 139 certification.

DH noted that after reflecting on the previous meeting, he had concerns about how the CAA characterised “near-miss” data. The CAA had referred to near-miss incidents as part of their justification for Part 139 certification. However, it was later clarified that near-miss reports were tagged to the *nearest reporting point*, meaning an incident occurring many miles away, such as offshore, may still be recorded against the Rangiora Airfield. DH questioned how Part 139 certification at the airfield could meaningfully influence incidents that occur well outside the aerodrome environment.

RK added that, despite this, the Aerodrome Director was required under the Civil Aviation Rules to conduct a safety review and Aeronautical Study, identify risks under Clauses 1 through 9, and consult with the aerodrome operator. He noted that no such report or direction had yet been provided by the Director, despite Council having responded to CAA’s initial questionnaire and having received no further communication. It was agreed that the regulatory process must begin with the director advising the aerodrome operator (Council) of the identified risks and the required actions. Without this step, members expressed concern that the process lacks a clear foundation.

DR provided background, noting that in mid-2023, the Council decided to become a qualifying aerodrome. He explained that, from this point, there were three possible pathways:

- No change – the status quo remains.
- Voluntary transition – Council elects to proceed with becoming a qualifying aerodrome.
- Directed transition – the CAA Director formally requires the Rangiora Airfield to become a qualifying aerodrome.

DR noted that anything other than the “voluntary” pathway would effectively require the Council to reconsider its 2023 decision. MS suggested that CAA may prefer this voluntary option, as it would avoid the need for CAA to justify a mandatory direction. It was reiterated that a clear, written list of the benefits to Council, as the aerodrome operator, would be essential for Councillors when making any future decision, because without a clear articulation of benefits, it was difficult to understand why a transition to Part 139 would be necessary or advantageous. In addition, DR noted that separate from aviation regulation, the Council has obligations under the Health and Safety at Work Act. In the event of an incident, scrutiny would extend across all aspects of airfield operations. While there was a distinction between ground-based risks and airborne risks, the Council must still consider its broader responsibilities as a PCBU (Person Conducting a Business or Undertaking).

The RAAG observed that holding Part 139 certification did not exempt the Council from responsibility should an incident have occurred at the aerodrome. They noted that it would have been misleading to assume that compliance with Part 139 requirements had conferred any immunity. If an accident or safety issue had arisen on the airfield, accountability would still have rested with the aerodrome operator, not with the CAA, regardless of whether the operator had met regulatory obligations or held the appropriate certification. The member emphasised that certification alone had not removed the operator's duty of care, nor had it eliminated potential scrutiny under health and safety legislation.

PR confirmed that the Council had not made a decision on whether the Rangiora Airfield would become a qualifying aerodrome under Civil Aviation Rule Part 139.

The RAAG discussed the need to formally present its views to the Council, likely through a report or similar mechanism. It was noted that under the Civil Aviation Rules, once the Aeronautical Study had been submitted, the Director was required to conduct a Safety Review before making any determination. Members agreed that this review was now essential and that the Council required it in order to understand the next steps. It was further noted that the Council had already invested a significant amount of money in completing the Aeronautical Study, reportedly over $50,000. Members expressed concern that, despite this expenditure and the Council's formal submission of the study, no direction or feedback had been received from the CAA. It was agreed that the RAAG should clearly articulate its position on Part 139.

Council staff were requested to write to the CAA Director and request a response to the Council's Aeronautical Study and his Safety Review, required to determine whether the Rangiora Airfield must become a qualifying aerodrome. This review was essential so that the Council could respond to the matters still awaiting clarification, particularly the question of what benefits, if any, Part 139 certification would provide. It was further noted that, within the qualifying aerodrome category, standards varied depending on whether the aerodrome was designated for security. As a non-security aerodrome, the Rangiora Airfield would not require security cards or identity checks, unlike major airports such as Auckland. Members emphasised that this was a separate designation and not directly linked to the Part 139 discussion.

DR outlined the way forward, with the objective to provide the CAA-produced list of Part 139 Qualification benefits to the RAAG members, to enable further discussion and for RAAG to form their own recommendation to the Council on the matter, which staff would take as a report to the Council for the ultimate decision on path forward with regard to Part 139 Qualification and whether the previous council decision would be revisited.

9.2 Global Positioning System (GPS) Landing Approach Discussion

SN noted that BH had not supported the initiative in the past; he enquired whether he had changed his mind.

The RAAG discussed the potential installation of an electronic navigation aid. It was noted that the Government had allocated funding for airfields designated as emergency landing sites. While this support was acknowledged, KV observed that such funding alone would not address situations in which cloud cover or poor visibility required an additional instrument-based aid.

BH raised a concern regarding the impact on normal aerodrome operations, particularly the possibility that training aircraft and regular users might have been required to give way to aircraft conducting instrument approaches. SN noted that electronic navigation systems required pilots to manage their own descent profiles. It was understood that all airfields selected for the programme, including Rangiora, had accepted the installation in principle.

DR questioned whether adopting a GPS-based landing approach would allow the airfield to retain its existing obstacle limitation surfaces. This meant that the airfield would continue to comply with current requirements without triggering the significantly more stringent surface requirements associated with a full instrument approach designation.

DR explained that the Aerodrome Survey had already been completed to meet the current visual-flight requirements in terms of OLS. However, if the airfield were to transition to an instrument approach under the traditional methodology, all survey data would have needed to be reassessed. This would have resulted in a substantially larger number of trees and obstacles being captured, most of which were located on land not owned by the Council and would have required mitigation at considerable cost.

SN clarified that adopting a GPS/Lateral Navigation (LNAV) approach would allow the existing obstacle limitation surfaces to remain unchanged, and the airfield should be able to comply. The necessary survey work had already been completed to meet current visual approach requirements. He noted that the current scheme being discussed was no longer to be referred to as an instrument approach system; rather, it was a GPS (LNAV) approach only, specifically for emergencies. It does not enable Instrument Landing or training for instrument approach.

It was noted that an LNAV approach has a higher decision altitude unless paired with Vertical Navigation (VNAV), which would alter the operational requirements. Under the proposed GPS approach, aircraft would descend to the GPS reference point, and if the airfield was not visible, a missed approach would be required. Profiles had been developed for how the procedure would operate between the aerodrome and Christchurch.

Members expressed support for progressing the GPS approach but emphasised the need to ensure that all relevant parties were satisfied with the Rangiora Airfield's current compliance position first, whether there were significant additional obstacles, changes to limitation surfaces, relevant and necessary removal of obstacles, or not. Clarification was sought on whether any tree removal or boundary adjustments would be required, or whether the airfield remained compliant in its current state.

Subsequent to further discussion, it was agreed as follows:

Moved: J Dugdale Seconded: B Harvey

THAT the Rangiora Airfield Advisory Group:

(a) Agrees that the Rangiora Airfield adopted a Global Positioning System (GPS) Landing Approach.

CARRIED

9.3 Ashley River stopbank upgrade and secondary stopbank proposal -Environment Canterbury

SM from ECan thanked the RAAG for attending Monday evening's consultation session on the proposed Ashley/Rakahuri River stopbank upgrade. He noted that the session had been productive from ECan's perspective. SM had been invited by DR to attend the RAAG meeting to address any follow-up questions or provide additional information as required.

In response to SN's queries about the six to seven flood management options presented during the consultation, SM advised that no preferred option had yet been identified. He emphasised that ECan was undertaking genuine consultation and was presenting all investigated options openly so that all stakeholders received the same information.

SM noted that while all options remained under consideration, internal assessments were beginning to indicate the relative feasibility of some alternatives. A key risk related to a potential breakout at the upper end of the Ashley/Rakahuri River. If water were returned to the river at the upstream location, this would necessitate associated upgrades to the downstream stopbank. Alternative options included returning water through the Rangiora Airfield or the racecourse. These options had been modelled and assessed at a district-wide engineering level; however, when considered at a local scale, the impacts were significant. This included effects on multiple private property owners, the airfield, and nearby developments.

SM advised that, for such options to proceed, both ECan and the Council would need to be satisfied that the risk-reduction benefits outweighed the substantial community impacts, an assessment considered a high threshold. While these options had not been ruled out, ECan acknowledged the scale of their impact and encouraged stakeholders not to be overly reactive at this stage. All options remained on the table for consultation, but the relative practicality of each was becoming clearer.

SN questioned the location of the expected Ashley/Rakahuri River breakout. SM clarified the current design standard for the flood protection scheme, noting that it was designed to accommodate a maximum flow of 2,300 m^3/s, equivalent to approximately a 1-in-100-year event. The mapping presented during consultation illustrated potential breakout locations during a 1-in-500-year event, estimated at approximately 3,500 m^3/s. The confluence of the Okuku and Ashley Rivers was identified as the first significant risk point, where flows combine to form a single, larger volume. Exceeding the 2,300 m^3/s design capacity was expected to result in a breakout at this upstream location.

SM noted that a previously identified high-risk point near the bridge, where the river narrows from approximately 1 km to 300 m, had already been addressed through the secondary stopbank constructed in 2014/15 along Cones Road and Milton Avenue. Based on current modelling, the confluence area was now considered the next highest-risk location within the scheme.

SN asked whether there were any engineering reasons why this area could not be strengthened. SM outlined one of the key options under consideration: strengthening and upgrading the existing stopbank along its full length, including the section extending to the coast. The advantages of this approach included:

- No impact on landowners on the landward side of the stopbank.
- No requirement for additional land acquisition.

However, two significant risks were identified:

- The lack of a secondary defence: If the upgraded stopbank were to fail, either through overtopping or scour, there would be no secondary structure behind it to intercept or redirect floodwaters back to the river.
- Increased consequence of failure: Raising the stopbank would retain a greater volume of water on the riverside. In the event of a failure, the resulting outflow would be more severe due to the increased stored water.

SM advised that balancing these risks formed a key part of the assessment process. It was noted that, particularly downstream of Rangiora, upgrading the existing stopbank was likely to be the only feasible option for at least part of the scheme.

A question was raised as to why a secondary stopbank could not be constructed on the riverside (north) of the existing stopbank, using available river gravel as fill material. The suggestion included strengthening the existing stopbank—particularly at the downstream end, where it was only about 600 mm above road level—and constructing an additional inner bank to provide redundancy.

SM explained the design philosophy underpinning the current flood-management approach. During a major flood event, the highest-velocity flows move through the open gravel channel, while vegetated berms and groynes are used to slow water adjacent to the stopbanks and reduce the risk of scour. In response to the suggestion to construct a secondary stopbank along the riverside of the existing bank, SM advised that this was not feasible. Positioning an additional bank along the edge of the gravel channel would significantly narrow the floodway, leaving insufficient capacity to safely convey an estimated 3,500 m^3/s during a 1-in-500-year event. Such a configuration would present an unacceptably high level of risk.

SM also provided an overview of gravel-bed behaviour. Historic survey cross-sections dating back to the 1950s and 1960s, supplemented by more recent LiDAR data, illustrated how the riverbed had changed over time. In the reach near Rangiora, extensive past gravel extraction had lowered the bed below the target level, while upstream sections remained slightly above target. This explained why extraction was currently occurring in the upper reach and had largely ceased downstream. SM noted that excessive gravel removal posed risks, including potential undermining of adjacent infrastructure such as vegetation, bridges, water intakes, and power lines. The management challenge was to prevent excessive bed build-up, which reduced channel capacity, while also avoiding over-extraction, which could destabilise river margins and associated structures.

In response to a question from BD regarding expected flood depths should a breakout occur, SM advised that modelled water depths across the floodplain were approximately 500 mm for a breakout flow. This depth reflected the distribution of floodwaters across the district under a 1-in-500-year breakout scenario.

A further question was raised regarding cost estimates for the various flood-management options. SM noted that the next stage of the project involved developing detailed costings, including both capital construction costs and any land acquisition or compensation requirements associated with each option. These assessments would help determine which options remained feasible and which might be removed from consideration. At present, the only cost estimate included in ECan's budget was an early, indicative figure prepared approximately three years ago, prior to detailed design work. This estimate provided for an eight-year programme valued at approximately $15 million.

BH commented on the two most land-intensive options, noting that the associated land purchase and compensation requirements would be extremely costly. It was suggested that, if these options were likely to be financially unviable, they should be removed from consideration as early as possible to provide clarity for affected landowners surrounding the Rangiora Airfield. SM advised that the next stage of the project involved assessing capital construction costs, as well as land acquisition and compensation requirements. These assessments would help determine which options remained feasible and which could be removed from the shortlist.

IM asked whether the modelling indicated that the airfield was unlikely to be flooded during a breakout event. SM explained that the map presented showed modelled flood behaviour only for a breakout occurring at the upstream location near Mount Thomas Road, based on the current stopbank configuration. Under that specific scenario, if water were to escape the stopbank at the upstream point and follow the modelled flow path, the airfield, and particularly the hangar area, would not be affected. However, SM emphasised that the modelling did not account for the possibility of a breakout occurring at other points along the stopbank system. If a failure were to occur further downstream, the airfield could be exposed to flooding. The map, therefore, represented only one breakout scenario and did not rule out risk from alternative failure points.

A question was raised about the feasibility of extending the existing wing dam near the upstream end farther into the cliff face. SM confirmed that this was one of the options under consideration. The concept involved strengthening or extending the structure to tie it more securely into the terrace, and potentially constructing an additional bank in front of properties located on the terrace side of Mount Thomas Road. This would aim to protect

residential dwellings while allowing floodwaters to remain on the rural and agricultural land to the north. SM noted that an upstream protection element of this type was included in every option currently being assessed. The existing structure already performed part of this function; the proposal would involve extending or enhancing it to improve resilience.

DH asked how secondary stopbanks could return overflow floodwaters back into the main river channel during a flood event. SM noted that for such a system to function, any secondary bank, such as one directing water through the racecourse, would need to be constructed at an elevation higher than the riverbed and adjacent banks. This would ensure sufficient fall for water to re-enter the river system. The feasibility of this depends on topography and hydraulic behaviour.

Further discussion took place regarding vegetation and tree removal along the river margins. It was observed that the upstream area contained significant scrub and mature trees. SM confirmed that vegetation management formed part of the design considerations. In particular, the wide vegetated area beneath the north terrace—some of which comprised ECan-owned pine plantations nearing maturity—may be suitable for removal or modification to improve flood conveyance. This work was considered feasible and is included in the ongoing assessment. SM also noted that the river channel narrows significantly near the cliff, increasing hydraulic pressure during flood events. At high flows, the Okuku River pushes water laterally, while the Ashley/Rakahuri River enters from another direction, increasing the force on the stopbank at that location.

BD observed that the secondary stopbank appeared to be the option with the least impact on people and the surrounding areas. He questioned the effectiveness of a secondary stopbank in protecting the Rangiora Airfield. SM advised that if floodwaters escaped the stopbank at the upstream location, they would be intercepted by the proposed secondary bank and directed back into the river channel. This would result in the full river flow passing the airfield before potentially breaking out again further downstream. Such a downstream failure could place the airfield at greater risk.

SM emphasised that for any option involving the construction of additional upstream stopbanks, a critical component would be strengthening the existing primary stopbank. Ensuring the resilience of the main bank was essential to managing increased flow volumes and preventing downstream breakout.

NEXT MEETING

The next Rangiora Airfield Advisory Group meeting was scheduled for 5.30 pm, on Wednesday, 22 April 2026.

THERE BEING NO FURTHER BUSINESS, THE MEETING CONCLUDED AT 8.35 PM.

CONFIRMED

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Chairperson

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Date