

SECTION 77J ASSESSMENT: AIRPORT NOISE INFLUENCE AREA QM

PREPARED BY JOHN KYLE, DIRECTOR, MITCHELL DAYSH LIMITED

Tables 1 to 5 summarise material from the PC 14 process that addresses section 77J of the Act.

Table 1 provides a precis of material tabled during PC 14 that addresses the matters required to be assessed under s77J(3)(a). These are:

The evaluation report must, in relation to the proposed amendment to accommodate a qualifying matter,—

(a) *demonstrate why the territorial authority considers—*

(i) *that the area is subject to a qualifying matter; and*

(ii) *that the qualifying matter is incompatible with the level of development permitted by the MDRS (as specified in Schedule 3A) or as provided for by policy 3 for that area*

Table 1: Section 77J(3)(a) demonstrate (i) that the area is subject to a qualifying matter; and (ii) that the qualifying matter is incompatible with the MDRS.

Document	Reference	Summary
Section 32 Report Part 1 - Overview and High Level District Issues	Page 5 paras 1.2.2 - 1.2.4.	Outlines the framework for establishing and implementing qualifying matters.
Section 32 Report Part 2 - Qualifying Matters (District Plan Chapters 6, 8, 9, 13, 14, 18) (Part 2)	Page 19 para 2.1.6.	The Airport Noise Influence Area Qualifying Matter is assessed as an 'existing' qualifying matter.
Section 32 Report Part 2 - Qualifying Matters (District Plan Chapters 6, 8, 9, 13, 14, 18) (Part 2)	pp. 134 - 135 para 6.20.2 – 6.20.6.	It is more appropriate to utilise the best evidence available, being the recent outputs of the Regional Council-led expert review of the Airport Noise Influence Area contour, in preference to the operative noise contour. Failing to apply the Airport Noise Influence Area Qualifying Matter will enable development to MDRS levels of density, with likely reverse sensitivity effects on significant strategic infrastructure.
Section 32 Report Appendix 10 - Airport Related Qualifying Matters in the Christchurch District Plan - Section 77K RMA	Page 2 para 2 – 3.	Describes the basis for including an Airport Noise Influence Area Qualifying Matter in the district plan.
	Page 3 para 7(h).	Rationale for airport noise contours in the District Plan, and key reasons to avoid sensitive activities in the Airport Noise Influence Area.
	Page 5 paras 2 – 4.	Describes the relationship between airport noise leading to adverse amenity and health effects which can lead to reverse sensitivity effects on the noise source.

Table 1: Section 77J(3)(a) demonstrate (i) that the area is subject to a qualifying matter; and (ii) that the qualifying matter is incompatible with the MDRS.

Document	Reference	Summary
Assessment - 11 July 2022	Page 3 para 8. Page 6 para 10(c).	That the MDRS is the antithesis of the Airport Noise Influence Area Qualifying Matter and planning regime, which are designed to achieve appropriate residential amenity and to support Airport operations. Without recognition of the Airport Noise Influence Area Qualifying Matter inappropriate residential intensification will occur.
	Page 5 para 5, pp 10 – 11 paras 29 – 30.	Provides national and international examples of how the enablement of noise sensitive activities facilitates reverse sensitivity effects on airports, with reference to the associated Section 32 Report appendices below: <ul style="list-style-type: none"> • Appendix 15 - Airport Contour s77K Appendix Five: Assessment of Noise Effects: Annual Average Contour • Appendix 16 - Airport Contour s77K Appendix Six: Land Use Planning 50-55dB Ldn
	Page 9 para 23.	With reference to Section 32 Report Appendix 12 - Airport Contour s77K Appendix Two: Airbiz Report – Airport Operations and Safeguarding identifies that encroachment by urban development into areas required for airport safeguarding is an irreversible “lose-lose” situation for the airport and community, therefore a conservative long-term approach is justified and essential.
	pp. 11 – 16 paras 31 – 48.	With reference to Section 32 Report Appendix 12 - Airport Contour s77K Appendix Two: Airbiz Report – Airport Operations and Safeguarding describes the significance of Christchurch Airport and identifies potential impacts to the Airport and community arising from reverse sensitivity effects and subsequent constraints on the Airport. These factors make land in the Airport Noise Influence Area appropriate for application of a qualifying matter and incompatible with the MDRS.
	pp 16 - 21 paras 49 – 74.	With reference to Section 32 Report Appendix 13 - Airport Contour s77K Appendix Three: International and Domestic Airfreight Assessment Paling Consultants , outlines the current state and likely future growth of international and domestic airfreight services at Christchurch Airport.

Table 1: Section 77J(3)(a) demonstrate (i) that the area is subject to a qualifying matter; and (ii) that the qualifying matter is incompatible with the MDRS.

Document	Reference	Summary
		Identifies the ability to operate at night with minimal constraint is critical to enable airfreight services to expand to meet potential future demands and support the economy.
	pp 21 - 24 paras 75 – 85.	Further demonstrates that the Airport Noise Influence Area Qualifying Matter is incompatible with the MDRS by reference to Section 32 Report Appendix 14 - Airport Contour s77K Appendix Four: CIAL Operational Constraints Economic Assessment . That report sets out the substantial economic activity likely to be foregone if the Christchurch Airport were to be made subject to a night-time curfew resulting from reverse sensitivity effects deriving from the establishment of noise sensitive activities.
	pp 31 – 32 para 102 – 109.	Summary of Regional Policy Statement directions underpinning the identification of the Airport Noise Influence Area Qualifying Matter.
	pp 32 – 33 para 110 – 114.	Outlines the development of the operative district plan and the independent hearing panel's considerations around giving effect to the Regional Policy Statement by retaining Airport Noise contours and applying a restricted discretionary activity status and notification requirements to resource consent applications for noise sensitive activities that do not meet permitted activity performance standards.
	pp 37 paras 133 - 135.	Underscores the incompatibility of the Airport Noise Influence Area Qualifying Matter with the MDRS, with reference to Section 32 Report Appendix 17 - Airport Contour s77K Appendix Seven: Caselaw extracts , which summarises reasons for, and benefits of, safeguarding the Airport from reverse sensitivity effects, as considered in caselaw.
	Page 44 paras 165 – 167.	Outlines, with reference to Appendix 18 - Airport Contour s77K Appendix Eight: Section 32 evaluation , why the area in the Airport Noise Influence Area is subject to a qualifying matter.
01 Sarah Oliver Section 42A report - With Corrections - 10 October 2023	Page 80 para 12.8. pp 91 -92 paras 12.37 – 12.40.	Summarises background to the establishment of the Airport Noise Influence Area as an area subject to a qualifying matter.

Table 2 provides a precis of material tabled in the course of PC 14 that addresses the matters required to be assessed under s77J(3)(b), which are:

The evaluation report must, in relation to the proposed amendment to accommodate a qualifying matter,—

[...]

(b) assess the impact that limiting development capacity, building height, or density (as relevant) will have on the provision of development capacity.

Table 2: s77J(3)(b) Impacts of limiting development capacity on the provision of development capacity.

Document	Reference	Summary
Section 32 Report Appendix 1 - Updated Christchurch Housing Capacity Assessment	Page 4 Diagram 2.1 and Table 2.1.	Diagram 2.1 provides a visual indication of the extent to which “feasible” development capacity with <u>all</u> qualifying matters applied (i.e. not only the Airport Noise Influence Area Qualifying Matter) significantly exceeds housing demand. It also shows that “plan-enabled” development capacity with all qualifying matters applied is in the range of 544,000 dwellings in Greater Christchurch. Table 2.1 indicates that there is “feasible” development capacity in Greater Christchurch for 136,000 dwellings. Of these, 88,000 are not affected by qualifying matters, while 48,000 are affected by one or more qualifying matters.
	Page 5 - 6 section 3.	Identifies long-term (2031 – 2051) demand for an additional 68,078 dwellings in Greater Christchurch inclusive of 35,194 more dwellings in Christchurch city. Therefore, there is substantial housing capacity in Christchurch city even with a 20% competitiveness margin applied (Table 18).
	pp 16 - 20 and Table 4.3.1.	Table 4.3.1 identifies that of 875,000 “plan enabled” dwelling units, the Airport Noise Influence Area Qualifying Matter potentially impacts approximately 29,860 units (3.4%).
Section 32 Report Appendix 19 - Airport Contour s77K Appendix Nine: Housing Capacity in Greater Christchurch in relation to airport noise impacted areas only	Page 11.	Inclusion of the Airport Noise Influence Area Qualifying Matter may reduce “feasible” (as distinct from “plan-enabled”) development capacity in Greater Christchurch by 4,064 dwellings, from 93,324 to 89,260 dwellings. This compares to the projected long-term demand for an additional 68,078 dwellings in Greater Christchurch.

Table 2: s77J(3)(b) Impacts of limiting development capacity on the provision of development capacity.

Document	Reference	Summary
01 Sarah Oliver Section 42A report - With Corrections - 10 October 2023	Page 58 - 61 para 10.11 – 10.21 and page 64 para 10.31.	Given projected housing demand for the short, medium and long terms compared to development capacity: “... additional enablement is unnecessary to meet long-term projected demand. There is no need to enable “development at all costs”. Rather the most important consideration for this plan-change in my view is what constitutes a well-functioning urban environment in the context of Ōtautahi Christchurch”; and “The MDRS and NPS-UD Policy 3 response is not required to resolve a housing demand issue and the Operative District Plan already provides a level of enablement to meet long term housing demand projections... The MDRS and NPS-UD Policy 3 directs a level of enablement that is likely to meet 80-100 years of growth”
Section 32 Report Part 2 - Qualifying Matters (District Plan Chapters 6, 8, 9, 13, 14, 18) (Part 1)	Page 36 para 2.3.28.	“The proposed Airport Noise Influence Area (based on the 50dBA Annual Average contour required to protect and maintain the operation of the nationally important Christchurch International Airport) will impact approximately 3% of the total plan-enabled capacity”.
	pp. 44-45 Map 2 and Map 3.	The maps show the spatial extent potentially impacted by the Airport Noise Influence Area Qualifying Matter, by enabling comparison with (Map 3) and without (Map 2) the qualifying matter shown.
Section 32 Report Appendix 10 - Airport Related Qualifying Matters in the Christchurch District Plan - Section 77K RMA Assessment - 11 July 2022	Page 48 para 188.	Summarises the level of additional development theoretically impacted by accommodating the Airport Noise Influence Area Qualifying Matter, as approximately: <ul style="list-style-type: none"> • 1 fewer residential unit per site (accounting for the present ability to establish both a residential unit and minor residential unit per site); • 1 fewer storey on each residential unit, and more size restrictions for minor residential units; and • 15% less site coverage allowed.

Table 3 provides a precis of material tabled during PC 14 that addresses the matters required to be assessed under s77J(3)(c). These are:

The evaluation report must, in relation to the proposed amendment to accommodate a qualifying matter,—

[...] (c) assess the costs and broader impacts of imposing those limits.

Table 3: s77J(3)(c): Costs and broader impacts of imposing limits to development capacity.

Document	Reference	Summary
Section 32 Report Appendix 10 - Airport Related Qualifying Matters in the Christchurch District Plan - Section 77K RMA Assessment - 11 July 2022	Page 2 para 5 – 6.	Broader impacts that may arise from enabling significant residential intensification in the Airport Noise Influence Area include “...notable consequences in the Airport’s ability to deliver its operational outcomes, and the regional, national and international benefits that arise from that”.
Section 32 Report Appendix 14 - Airport Contour s77K Appendix Four: CIAL Operational Constraints Economic Assessment	Page 47 para 184.	Broader impacts of imposing limits to development capacity include: <ul style="list-style-type: none"> • direct environmental, economic and social benefits; • minimal economic and social costs; • protecting the Airport from reverse sensitivity effects; • maintenance of residents’ health, safety and amenity; • the benefits of limiting development capacity will far outweigh the costs; and • the counterfactual is that significant environmental, social and economic costs could be incurred if development capacity is enabled within the Airport Noise Influence Area as per the MDRS.
Section 32 Report Appendix 14 - Airport Contour s77K Appendix Four: CIAL Operational Constraints Economic Assessment	pp 9 -10 section 3.	Broader impacts include retaining the Airport’s significant positive direct, indirect and induced economic impacts.
Section 32 Report Appendix 13 - Airport Contour s77K Appendix Three: International and Domestic Airfreight	pp 13 – 16 section 5.	Broader impacts of imposing limits to development capacity include retaining economic activity that would be foregone if airport operations are restricted. This activity is estimated at: <ul style="list-style-type: none"> • \$610m annually, and \$835m per annum by 2031; • approximately 4,000 jobs regionally and 4,600 throughout the South Island; and • overall impact from 2022 to 2031 of >\$4.8B.
Section 32 Report Appendix 13 - Airport Contour s77K Appendix Three: International and Domestic Airfreight	pp 23 – 30 sections 6 - 8.	Broader impacts of imposing limits to development capacity include the future role, and scope for expansion, of Christchurch Airport in servicing international and domestic freight handling if operations are not constrained (e.g., by nighttime curfews).

Table 3: s77J(3)(c): Costs and broader impacts of imposing limits to development capacity.

Document	Reference	Summary
Assessment Paling Consultants		
Section 32 Report Appendix 12 - Airport Contour s77K Appendix Two: Airbiz Report – Airport Operations and Safeguarding	<p>Page 4 para 22.</p>	<p>Broader impacts of imposing limits to development capacity include:</p> <ul style="list-style-type: none"> • ensuring “...that CIA’s primary purpose as an important economic and community asset and that the amenity of the residents of Christchurch, Selwyn and Waimakariri is preserved”; and • avoiding irreversible deficiencies or relaxation of land-use controls that “...will result in populations living in areas affected by noise from aircraft operations, or alternatively potential pressure for restrictions on airport operations and prejudice regional and national economic opportunities”.
	<p>pp 32 – 36 para 149 – 177.</p>	<p>Broader impacts of imposing limits to development capacity include avoiding the costs of restrictions manifesting at the Airport as a curfew, as a result of reverse sensitivity effects. These costs include, but are not limited to:</p> <ul style="list-style-type: none"> • The Airport’s role as a nominated alternative airport could change; • Reduced overall runway capacity, sub-optimal use of runways and/or airspace capacity, and increased costs of operation; • Restricted opportunities for future international passenger and freight services; • Impacts on the viability of mid- to long-haul routes; • Compromised viability of the China Southern Christchurch - Guangzhou flight; • Early morning trans-Tasman departures may be reduced, retimed, or cancelled; • Late night trans-Tasman arrivals may be reduced, retimed, or cancelled; • Significant detriment to and effects on the entire national air freight network could be impacted; • The export market for high-value, perishable produce may be impacted; • Medivac services would be compromised, even if able to land or take-off at Christchurch with a dispensation; • Fixed base, small commercial operators and helicopter operators (including rescue operators) would be

Table 3: s77J(3)(c): Costs and broader impacts of imposing limits to development capacity.

Document	Reference	Summary
		<p>detrimentally affected and may have to relocate so more valuable movements can be reallocated to time in-curfew and to ensure 24/7 capability;</p> <ul style="list-style-type: none"> • Reduced flexibility for Antarctic operations to avoid unsuitable weather.
<p>Christchurch International Airport Limited #852 #2052 - Evidence Gary Sellars - Housing Capacity</p>	<p>Page 22 para 120 – 122.</p>	<p>The feasible dwelling capacity for Christchurch City of 58,188 units is reduced by 3,765 to 54,423 units because of the Airport Noise Influence Area Qualifying Matter. This is considered relatively minor when considering the location of the feasible capacity assessed by TPG.</p>
<p>Christchurch International Airport Limited #852 #2052 - Evidence Natalie Hampson - Economics</p>	<p>Page 6 para 25 Page 14 paras 55 - 56</p>	<p>The marginal costs of including the remodelled contour as part of the Airport Noise Influence Area Qualifying Matter are minor opportunity costs at the district level. They are acceptable costs in the context of potential risk to the significant economic benefits the Airport generates.</p>
		<p>Applying the Airport Noise Influence Area Qualifying Matter to the Riccarton Town Centre Zone may creates opportunity costs around the distribution of residential activities across the zone, and an overall reduction in the capacity of residential apartments. However, it does not preclude all residential activities from the centre and ensures adverse health effects arising from aircraft noise on residents are avoided and the airport safeguarded.</p>

Table 4 provides a precis of material tabled during PC 14 that addresses the matters required to be assessed under s77J(4)(a), which are:

The evaluation report must include, in relation to the provisions implementing the MDRS,—

(a) a description of how the provisions of the district plan allow the same or a greater level of development than the MDRS:

Table 4: s77J(4)(a): Describe how the district plan provisions allow the same or a greater level of development than the MDRS.

Document	Reference	Summary
Section 32 Report Appendix 1 - Updated Christchurch Housing Capacity Assessment	pp 16 - 20 and Table 4.3.1.	Table 4.3.1 identifies that of 875,000 “plan enabled” dwelling units, the Airport Noise Influence Area Qualifying Matter potentially impacts approximately 29,860 units (3.4%) in Greater Christchurch.
01 Sarah Oliver Section 42A report - With Corrections - 10 October 2023	pp 58 - 61 para 10.11 – 10.21 and page 64 para 10.31.	The report sets out that the MDRS and NPS-UD Policy 3 response is not required to resolve a housing demand issue. The Operative District Plan already provides a level of enablement that is more than sufficient to meet long term housing demand projections and exceed the capacity required by the MDRS and NPS-UD Policy 3.
Christchurch International Airport Limited #852 #2052 - Evidence Gary Sellars - Housing Capacity	Page 22 para 120	<p>The net feasible dwelling capacity resulting from implementation of the MDRS in Christchurch City <u>with</u> the Airport Noise Influence Area Qualifying Matter included is 54,423 units.</p> <p>As noted in the Council’s Updated Housing Capacity assessment (see Table 1 above), long-term (2031 – 2051) demand in Christchurch city is for an additional 35,194 more dwellings. Therefore the district plan provisions allow a greater level of development than is required by the MDRS.</p>
Christchurch International Airport Limited #852 #2052 - Evidence Natalie Hampson - Economics	pp 19 -20 para 76	The proposed Airport Noise Influence Area Qualifying Matter based on the Remodelled Contour can be applied without significantly compromising the intensification of the Riccarton Town Centre Zone.

Table 5 provides a precis of material tabled during PC 14 that addresses the matters required to be assessed under s77J(4)(b), which are:

The evaluation report must include, in relation to the provisions implementing the MDRS,—

[...] (b) a description of how modifications to the MDRS as applied to the relevant residential zones are limited to only those modifications necessary to accommodate qualifying matters and, in particular, how they apply to any spatial layers relating to overlays, precincts, specific controls, and development areas, including—

(i) any operative district plan spatial layers; and

(ii) any new spatial layers proposed for the district plan.

Table 5: s77J(4)(b): Describe how modifications to the MDRS are limited to those necessary to accommodate qualifying matters.

Document	Reference	Summary
Section 32 Report Part 1 - Overview and High Level District Issues	Page 21 para 2.2.5	Explains the mechanisms available to modify MDRS requirements to accommodate qualifying matters.
	Page 22 Diagram 1	
	Page 23 Diagram 2	
	Page 34 para 2.3.25	Detailed description of the methodology used by the Council to assess and quantify feasible development capacity impacted by qualifying matters.
	Page 35 Diagram 4	
Christchurch International Airport Limited #852 #2052 - Evidence Darryl Millar - Planning	pp 26 – 32 paras 84 - 114.	Provides a detailed summary of amendments to strategic objective 3.3.7, chapter 6.1A, scheduled activities in chapter 6.5, rule 8.6.1a, and various rules in chapters 13, 14 and 15 that are necessary to accommodate the Airport Noise Influence Area Qualifying Matter.
01 Sarah Oliver Section 42A report - With Corrections - 10 October 2023	pp 103 – 104 paras 12.63 – 12.64.	Provides reasons for using zoning as the principal method to manage housing density in areas subject to the Airport Noise Influence Area Qualifying Matter.

77L FURTHER REQUIREMENT ABOUT APPLICATION OF SECTION 77I(J)

The requirements of RMA s77L(c) (below) influence the categorisation of a matter as a qualifying matter under s77J.

77L Further requirement about application of section 77I(j)

A matter is not a qualifying matter under section 77I(j) in relation to an area unless the evaluation report referred to in section 32 also—

(a) [...]

(b) [...]

(c) includes a site-specific analysis that—

(i) identifies the site to which the matter relates; and

(ii) evaluates the specific characteristic on a site-specific basis to determine the geographic area where intensification needs to be compatible with the specific matter; and

(iii) evaluates an appropriate range of options to achieve the greatest heights and densities permitted by the MDRS (as specified in Schedule 3A) or as provided for by policy 3 while managing the specific characteristics.

The following material tabled during PC 14 provides the evaluation required by s77L(c).

- **Subsection 77L(c)(i)** is addressed as follows.

For the purposes of the Airport Noise Influence Area Qualifying Matter, the “site” comprises the land contained within the relevant air noise contour.

CIAL’s submissions and evidence seek that the Airport Noise Influence Area Qualifying Matter be applied to the extent of the remodelled Outer Envelope contour (“OE”).

The OE is identified at Appendix A(i) of [CIAL’s submission \(no. 852\)](#) as “2023 remodelled 50dBA Ldn Air Noise Contour (Outer Envelope)”.

- **Subsection 77L(c)(ii)** is addressed as follows.

The methodology used to determine the geographic area that constitutes the “site” for the purposes of the Airport Noise Influence Area Qualifying Matter is described in [the evidence of Ms Smith for CIAL](#).

Ms Smith’s evidence details the process undertaken to determine the remodelled contour at pp 9 to 12, being paragraphs 47 to 56.4 inclusive.

The report attached to Ms Smith's evidence as Appendix 1 and titled "Christchurch Airport Noise Recontouring Assessment of Noise Effects 20 September 2023" provides further detailed analysis of the geographic area to be included in the Airport Noise contour.

In particular, that report examines changes in the future anticipated aircraft noise environment and potential future changes to the receiving environment arising from housing intensification, to identify the spatial extent of the area where Airport-related noise matters require attention through the implementation of the qualifying matter.

- **Subsection 77L(c)(ii)** is addressed as follows.

An assessment of the options to achieve the greatest heights and densities permitted by the MDRS is inherently limited by the nature of the Airport Noise Influence Area Qualifying Matter.

The qualifying matter seeks to manage housing intensification in the Airport Noise Influence Area to minimise the portion of the community exposed to noise-related amenity and health effects, and to minimise the potential for reverse sensitivity effects on airport operations.

To this end, paragraph 69 (page 18) of Mr Millar's evidence for CIAL recaps the position of CIAL as (underlining added):

"The CIAL submission sought the inclusion of an Airport Noise Influence Area Qualifying Matter that reflects the outer boundary of the 2023 remodelled 50dBA Ldn Air Noise Outer Envelope contour. The spatial extent of the proposed qualifying matter is as shown in Appendix A attached to the CIAL submission. Aligned with this, the submission sought the retention of the existing residential zones and status quo development conditions".

It is evident from the material tabled that relaxing the Airport Noise Influence Area Qualifying Matter planning framework is likely to result in poor outcomes. Mr Millar describes this in the [s77K report \(Appendix 10 to the s32 report\)](#) as an irreversible "lose-lose" situation for both the airport and community.

At paragraphs 12.47 to 12.62 inclusive, [Ms Oliver's s42A report for the Council](#) discusses trade-off scenarios to facilitate more intensification than enabled under the status quo District Plan provisions, but less intensive than enabled by the MDRS.

The s42A report includes the notes that "There is significant enablement across the city even with the 50dBA Ldn OE as a qualifying matter" (paragraph 12.55(a)) and that "The status quo zoning will still achieve a reasonable level of development (population density) when fully developed to the plan-enabled densities" (paragraph 12.55(d)).

[Mr Millar's evidence for CIAL](#) at paragraphs 75 to 83 addresses these s42A recommendations. It is concluded that trade-off scenarios as described in the s42A report are likely to generate similar adverse health, amenity and reverse sensitivity effects as would arise from enabling the full scale of intensification contemplated by the MDRS. Given it is agreed that there is more than sufficient

housing capacity available in Christchurch to meet demand in all forecast scenarios, the evaluation is that trade-off options are not recommended.