

IN THE MATTER OF

The Resource Management Act
1991

AND

IN THE MATTER OF

Applications CRC192408,
CRC192409, CRC192410,
CRC192411, CRC192412,
CRC192413 and CRC192414 to the
Canterbury Regional Council, and
Application RC185627 to the
Selwyn District Council, by Fulton
Hogan Limited to establish a
quarry operation at 107 Dawsons
Road and 220 Jones Road.

STATEMENT OF EVIDENCE OF SUSAN CLARE RUSTON

PLANNING ASSESSMENT

DATED 14th OF OCTOBER 2019

1. INTRODUCTION

- 1.1. My full name is Susan Clare Ruston. I am an environmental planner and Director of Enspire Consulting Limited¹. Enspire is a consultancy that provides, amongst other services, planning, policy and resource management advice to a range of clients across New Zealand. My responsibilities include, amongst other matters, the preparation and processing of resource consent applications; reviewing and submitting on district, regional and national planning instruments; and the preparation and presentation of expert planning evidence.
- 1.2. I hold a Bachelor of Forestry Science Degree, with honours, from the University of Canterbury (1989); and an Executive Masters in Public Administration from Victoria University of Wellington (2011). I have also completed the following papers at Massey University: Law and Mediation, Introduction to Disputes Resolution, Planning Law, and Business Law. Further to this, I have completed the University of Waikato's Legal Method paper.

¹ Hereafter referred to as 'Enspire'

- 1.3. I have over 25 years of experience in addressing resource management and planning issues on behalf of private sector companies, and central and local government. I have been in my role with Enspire for two and a half years. Prior to this role I was the Environmental Policy Manager for the South Island for Fonterra Co-operative Group Limited (during 2013 to 2016). Before my role with Fonterra Co-operative Group Limited, I held the positions of Manager Resource Management Reform; Manager Environmental Risk; and Manager Hazardous Substances and New Organisms Policy at the Ministry for the Environment (during the periods 2002 to 2005 and 2009 to 2012 respectively). During the earlier stages of my career I was an Environmental Consultant with Meritec Limited (1998 to 2001) and a Forestry Consultant with PF Olsen and Company Ltd (1994 to 1997). Each of these roles have predominantly addressed resource management, environmental risk management and planning matters.
- 1.4. I have, and continue to provide planning advice in relation to a number of resource management processes. A list of the processes that I have recently been, or am currently involved with, is attached as **Annexure 1** to this evidence.
- 1.5. I am a member of the Resource Management Law Association and the Institute of Directors in New Zealand; and am an Associate Member of the New Zealand Planning Institute and the Resolution Institute.
- 1.1. While this is a Council Hearing, I acknowledge that I have read the Environment Court's Code of Conduct for Expert Witnesses, as contained in section 7 of the Environment Court's Practice Note 2014, and have complied with it in the preparation of this evidence.
- 1.2. The data, information, facts and assumptions that I have considered in forming my opinions are set out in my evidence that follows. The reasons for the opinions expressed are also set out in the evidence that follows.
- 1.3. I confirm that the matters addressed in this brief of evidence are within my area of expertise, with the exception of where I confirm that I am relying on the evidence of another person. I have not omitted to consider material facts known to me that might alter or detract from my opinions expressed in this brief of evidence. I have specified where my opinion is based on limited or partial information and I have identified any assumptions I have made in forming my opinions.

2. SCOPE OF EVIDENCE

- 2.1. The Waipuna/Halswell-Hornby-Riccarton Community Board, on behalf of the Christchurch City Council², lodged a submission (dated the 5th of June 2019)³ to Fulton Hogan Limited's applications to Selwyn District Council⁴ and Canterbury Regional Council⁵ to establish a quarry operation (to be known as Roydon Quarry) at 107 Dawsons Road and 220 Jones Road⁶. This submission included a request to be heard at the hearing.
- 2.2. CCC has advised me that their interests in the applications to establish the proposed Roydon Quarry stem from the proposed quarry bounding the Christchurch District and the Christchurch Airshed; and CCC's ownership of 173 Maddisons Road (which is a neighbouring property to the proposed quarry). The boundary between Selwyn District and Christchurch District (and the Christchurch Airshed) is, in effect, Dawsons Road (as shown in Figure 1 of this evidence), and the two councils have a shared management arrangement for this road where it bounds both districts.

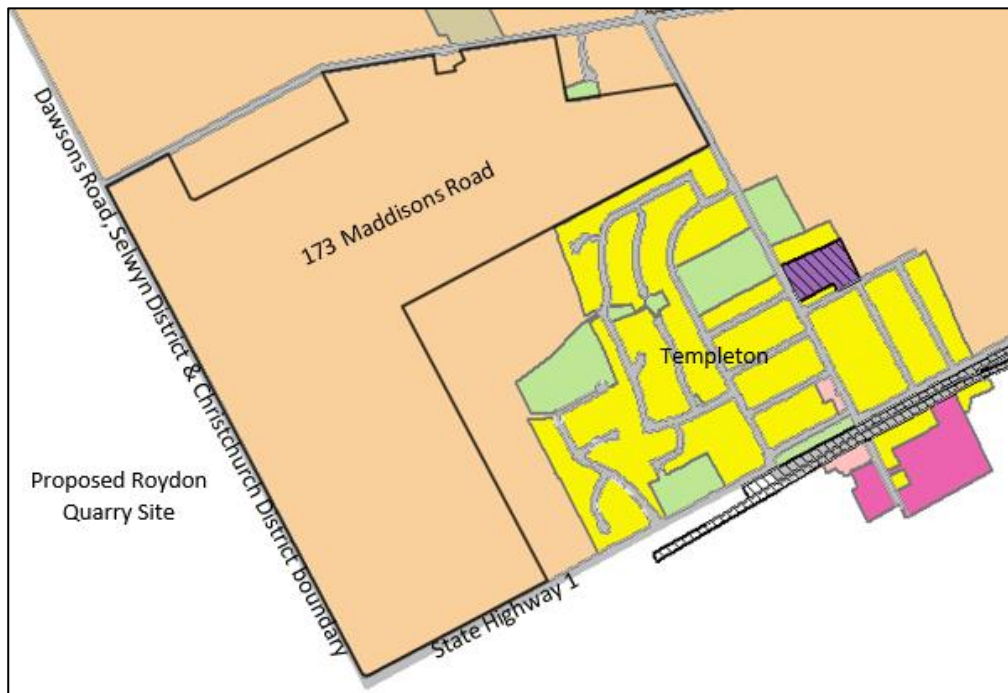


Figure 1, Location of CCC land located at 173 Maddison's Road

² Hereafter referred to as 'CCC'.

³ Hereafter referred to as 'the CCC Submission'

⁴ Hereafter referred to as 'SDC'

⁵ Hereafter referred to as 'CRC'

⁶ Hereafter referred to as 'the Site' or 'the Roydon Quarry site'

- 2.3. While CCC's submission addressed a range of concerns (and I understand that these still stand), CCC has asked me to provide independent planning evidence addressing the consistency of the proposed activity with the relevant planning mechanisms. I have not been asked to address all the matters that they cover in their submissions, but rather to address noise, landscape, dust, and traffic safety matters.
- 2.4. In preparing my evidence, I have considered the following documents:
- a) *Resource Consent Application to Establish 'Roydon Quarry', Templeton*, dated November 2019 prepared by Fulton Hogan (for the Applicant, as part of the application documents);
 - b) The submission of CCC, prepared by Mr Mike Mora, dated the 5th of June 2019;
 - c) The s92 requests of SDC and CRC, and the Applicant's responses to the same, in particular the s92 response report titled "*Fulton Hogan Limited, Roydon Quarry Proposal (Reference CRC192408-192414, RC185627), Response to additional Requests for Further Information*" dated August 2019 and prepared by Golder;
 - d) The Section 42A report for CRC, by Ms Louise Goslin, dated the 30th of August 2019;
 - e) The Section 42A report for SDC, by Mr Andrew Henderson, dated the 2nd of September;
 - f) Evidence of Mr Jon Farren, dated the 23rd of September 2019 (for the Applicant, on noise emissions);
 - g) Evidence of Mr Jeremy Trevathan, dated the 2nd of September 2019 (for the SDC, on noise emissions);
 - h) Evidence of Mr David Compton-Moen, dated the 23rd of September 2019 (for the Applicant, on landscape and visual matters);
 - i) Report of Mr Wade Robertson. Titled "*Roydon Quarry Resource Consent Application, Landscape and Visual Assessment Review*" and dated 30 August 2019;
 - j) Evidence of Ms Abigail Smith, dated the 14th of October 2019 (for CCC, on landscape and visual amenity effects);
 - k) Evidence of Mr Roger Cudmore, dated the 23rd of September (for the Applicant, on air quality);
 - l) Report of Ms Deborah Ryan, dated the 28th of August 2019 (for CRC, on dust emissions);

- m) Evidence of Andrew Alan Metherell, dated the 23rd of September 2019 (for the Applicant, on traffic effects);
- n) Evidence of Timothy Martin Kelly, dated the 23rd of September 2019 (for the Applicant, on traffic effects);
- o) Evidence of Mr Timothy Wright, dated the 14th of October 2019 (for CCC, on traffic safety);
- p) Evidence of Mr Kevin Bligh, dated the 23rd of September 2019 (for the Applicant, on the project and consent conditions);
- q) Resource Management (National Environmental Standards for Air Quality) Regulations 2004⁷;
- r) Canterbury Regional Policy Statement (operative on the 15th of January 2013)⁸;
- s) Canterbury Air Regional Plan (operative on the 31st of October 2017)⁹;
- t) Selwyn District Plan (operative on the 3rd of May 2016)¹⁰; and
- u) Part 2 of the Resource Management Act 1991¹¹.

3. EXECUTIVE SUMMARY

- 3.1. This evidence addresses Fulton Hogan Limited's applications to SDC and Canterbury Regional Council to establish a quarry operation at 107 Dawsons Road and 220 Jones Road. It provides an independent planning assessment of the consistency of the proposed activity with the relevant planning mechanisms; it was requested by CCC; and it is limited to addressing noise, landscape, dust, and traffic safety matters only.
- 3.2. With respect to these four matters, I understand that the applicant has made a number of changes to the application following the s42A Officers' Reports of SDC and CRC. The changes include mitigations to address some of the concerns raised in the Officers' Reports.
- 3.3. Having considered the documents identified in Section 2 of this evidence, and with respect to the potential effects of the proposed activity from the discharge of noise (Section 5 of my evidence), it is my opinion that the Applicant has taken considerable steps to mitigate such potential effects. An exception to this relates to a difference in

⁷ Hereafter referred to as '**the NES-Air**'

⁸ Hereafter referred to as '**the RPS**'

⁹ Hereafter referred to as '**the CARP**'

¹⁰ Hereafter referred to as '**the SDP**'

¹¹ Hereafter referred to as '**the Act**'

the proposed timeframes for day time and night time noise limits (and associated mitigations) between the Applicant's proposals and the SDP's noise limit timeframes. Upon resolving this discrepancy (and I have identified a conservative approach to such resolution within my evidence), it is my opinion that the proposal, with respect to noise matters, is consistent with the relevant objectives and policies of the SDP.

- 3.4. With respect to the potential effects of the proposed activity on the landscape values (Section 6 of my evidence), I understand that the 3-metre-high earth bund and associated plantings are key to mitigating the potential effects of the proposed activity. In my opinion, to be consistent with the relevant objectives and policies of the SDP, the proposed consent conditions need to give certainty to the early establishment of the mitigation plantings, and to their maintenance in perpetuity. I have identified in my evidence changes to the proposed consent conditions that could assist in achieving this outcome.
- 3.5. With respect to the potential effects of dust from the proposed quarry (Section 7 of my evidence), I understand that if the activity is found not to comply with Regulation 17(1) of the NES-Air, then the hearing panel would have no choice but to decline the application. However, if the application is able to be granted, I consider that the activity is generally consistent with the relevant objectives and policies of the RPS and CARP, and I have also identified a change to the proposed conditions of consent that could provide greater certainty in this regard.
- 3.6. With respect to traffic safety matters, in my opinion, the potential effects of the proposed activity (Section 8 of my evidence) include a number of issues that remain unresolved. These primarily relate to issues at the SH1/Dawsons Road roundabout; certainty of the choice of options for the Dawsons Road/Jones Road intersection; and uncertainty of the scale of risks and any necessary mitigations associated to the Dawsons Road level crossing approach to SH1 and the Jones Road cycle and pedestrian refuge. These issues are discussed within the body of my evidence, and until they are fully resolved, and there is confidence that safe and efficient use of the roads will result, it is my opinion that the land use consent should not be granted.

4. THE ACTIVITY

- 4.1. Firstly, I consider that it is important to clarify what I understand the details of the proposal to be. Since the lodgement of the application, and following requests for further information from both the SDC and the CRC, and the release of the SDC and CRC s42A Officers' Reports, many of the details of the application have changed. Having considered the application documents, the further information requests and responses, the Officers' Reports, and the Applicant's evidence, I understand that Mr Bligh's evidence, for the Applicant (dated the 23rd of September 2019 and which includes proposed conditions of consent) provides a summary of the details of the proposed activity as it stands today.

5. NOISE

- 5.1. With respect to noise matters, I have considered the expert evidence of Mr Farren (Principal, Marshall Day Acoustics) as provided by the Applicant, and Mr Trevathan (Director, Acoustic Engineering Services Limited) as relied upon in SDC's s42A Officer's Report.
- 5.2. In my opinion, the key planning provisions that need to be considered with respect to noise discharge are Objective B3.4.2; and Policies B3.4.1, B3.4.3 and B3.4.13 of the SDP (I have provided the objectives and policies themselves in Annexure 2 of this evidence). In addition, under Section 7(c) of the Act, particular regard must be had to "*The maintenance and enhancement of amenity values.*"¹² Read together, I consider that these provisions support a variety of activities being undertaken in the rural area, provided the rural character and amenity values of the rural area are maintained.
- 5.3. I understand that the Applicant has proposed the following noise limits:

"All activities on the site (other than construction), measured in accordance with the provisions of NZS 6801:2008 "Acoustics – Measurement of environmental sound", and assessed in accordance with NZS 6802:2008 "Acoustics – Environmental Noise", shall not exceed the following noise limits at any point within any other site, during the following times:

¹² Section 2 of the Act defines amenity values as "*those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes*". The effects of noise can impact appreciation of an area, and therefore can be considered to impact amenity values.

- a. Daytime 0700 to 1800 hrs 55 dB L_{Aeq}
- b. Evening 1800 to 2000 hrs 50 dB L_{Aeq}
- c. Night 2000 to 0700 hrs 45 dB L_{Aeq} and 70 dB L_{Amax}

In order to permit vehicle access onto the site, the noise limits above shall not apply to vehicle movements when measured within 250 m of the site's heavy vehicle entrance.”¹³

5.4. Based on Mr Trevathan's evidence and the evidence of Mr Farren, I understand that both of these experts support the adoption of these limits. Further to this, Mr Trevathan has advised that compliance with the daytime limit will provide adequate protection of rural and residential amenity, and that this limit is more stringent than the general noise limit in the SDP, except for the period of 7am to 7.30am.¹⁴ I understand that the exception is due to the SDP's night time limit ending at 7.30am, while the Applicant's proposed night time limit ends at 7.00am.

5.5. During the period of 7am to 7.30am, Mr Trevathan notes that the ambient noise levels in the area are commonly high, however he is not explicit about the potential implications of the difference between the proposed limits and those in the SDP. This leaves me unclear of the potential effects of proposed higher noise discharges during the period of 7am to 7.30am. Without this matter addressed in the evidence, and given that the SDP night time period extends to 7.30am, in my opinion, the proposed activity would be more consistent with the objectives and policies previously identified by aligning the night time limits in the Applicant's proposal with the SDP's night time hours. This would lead to the following change in proposed condition 43 and thereby were be extended to 7.30am as follows:

- a. Daytime 07~~30~~0 to 1800 hrs 55 dB L_{Aeq}
- b. Evening 1800 to 2000 hrs 50 dB L_{Aeq}
- c. Night 2000 to 07~~30~~0 hrs 45 dB L_{Aeq} and 70 dB L_{Amax}

5.6. With respect to the proposed evening limit, Mr Trevathan has advised that it is *“reasonable and is more restrictive than the Selwyn Plan and equal to the Christchurch Plan limit”* for the period 6pm to 8pm; and that *“It will ensure that noise from the site*

¹³ Mr Bligh's evidence, Proposed Condition 43 in the land use consent

¹⁴ Mr Trevathan's evidence, paragraph 38

is typically lower than other ambient noise in the area".¹⁵ On this basis, I am satisfied that no adjustments to the limits are needed for the evening hours.

- 5.7. With respect to the night time limit, I understand from Mr Trevathan's evidence that, generally, these are considered to be appropriate as they "*allow occupants to sleep with their windows open and provide adequate protection of rural and residential amenity*"; and that the exemption for vehicles on the site access is "*reasonable*".¹⁶
- 5.8. However, at the same time Mr Trevathan has raised a number of concerns about potential noise effects at the more sensitive sites of neighbouring dwellings. I understand that these dwellings are located at 4 Dawsons Road; 1090 Main South Road, 153 Curraghs Road (also referred to as 151 Curraghs Road); and dwellings on the northern side of Jones Road and to the west of the Site (and within 300 metres of the Site); and that the potential source of the noise is from quarry trucks passing near these dwellings.
- 5.9. With respect to the dwelling at 4 Dawsons Road, Mr Trevathan notes that, based on a night time¹⁷ limitation of 30 quarry trucks per hour (as proposed by the Applicant in their August 2019 response to a s92 request and confirmed in Mr Bligh's evidence`), he considers that "*the presence of additional noise from night time quarry trucks from time to time will only have a minor cumulative effect*".¹⁸
- 5.10. With respect to the dwellings on the northern side of Jones Road and to the west of the Site (and within 300 metres of the Site), Mr Trevathan noted concerns that these may experience increases in their night time ambient noise levels by up to 4 to 5 dBLAeq (dependent on truck movements).¹⁹
- 5.11. With respect to the dwelling located at 1090 Main South Road, Mr Trevathan notes that any potential impact from truck noise would be mitigated by preventing the heavy truck access to the Site being any closer than 250 metres of this dwelling.²⁰

¹⁵ Mr Trevathan's evidence, paragraph 39

¹⁶ Mr Trevathan's evidence, paragraphs 40 and 41

¹⁷ The Applicant's proposed night time hours are 8.00pm to 7.00am

¹⁸ Mr Trevathan's evidence, paragraph 101

¹⁹ Mr Trevathan's evidence, paragraph 71

²⁰ Mr Trevathan's evidence, paragraphs 50 and 103

5.12. With respect to the dwelling located at 153 Curraghs Road, Mr Trevathan is of the opinion that quarry trucks using Curraghs Road during night time hours would generate noise levels of over 45 dB L_{Aeq} at the dwelling.²¹

5.13. To address these concerns, the Applicant has proposed the following condition of consent (condition 22 to the land use consent in Mr Bligh's evidence):

Heavy vehicle movements leaving or accessing the Roydon Quarry between the hours of 8.00 pm and 6.00 am shall not travel on the following roads:

- a. Jones Road west of access (between the access and Curraghs Road)*
- b. Dawsons Road north of Jones Road (between Jones Road and Maddisons Road)*
- c. Jones Road east of Dawsons Road (between Dawsons Road and Railway Terrace)*

5.14. I understand that this condition will effectively route night time quarry trucks away from the sensitive sites on Jones Road, Curraghs Road and Dawsons Road. In addition, the Applicant has also proposed that the heavy vehicle access be located at least 250 metres from the dwelling at 1090 Main South Road (proposed condition 14 in Mr Bligh's evidence); that the night time quarry truck movements be limited to a maximum of 30 per hour (proposed condition 21 in Mr Bligh's evidence); and that quarry trucks, at all times will be diverted away from Templeton unless delivering materials into Templeton (proposed condition 38 in Mr Bligh's evidence).

5.15. In addition, the Applicant's proposed consent condition 20, of the land use consent, prevents aggregate processing or transportation from the proposed quarry site prior to the opening of the Christchurch Southern Motorway Stage 2, thereby further avoiding the use of local roads.²²

5.16. In my opinion, the Applicant's proposed conditions of consent adequately address the night time noise effects identified by Mr Trevathan for the period between 8pm and 6am. However, as discussed previously, SDP's noise limits recognise the night time period to extend to 7.30am. Again, the potential impact of trucks passing the sensitive sites between 6am and 7.30am has not been explicitly addressed in the evidence. This

²¹ Mr Trevathan's evidence, paragraph 87

²² The Christchurch Southern Motorway Stage 2 is scheduled for opening in the first half of 2020.

leaves me unclear of the potential effects of truck movements in this period and accordingly I am of the opinion that the following change to the Applicant's proposed condition 22 would better align the proposed activity with the relevant SDP objectives and policies:

Heavy vehicle movements leaving or accessing the Roydon Quarry between the hours of 8.00 pm and ~~6.00~~ 7.30 am shall not travel on the following roads:

- a. *Jones Road west of access (between the access and Curraghs Road)*
- b. *Dawsons Road north of Jones Road (between Jones Road and Maddisons Road)*
- c. *Jones Road east of Dawsons Road (between Dawsons Road and Railway Terrace)*

5.17. Consistent with the preceding paragraph, I am also of the opinion that proposed condition 21 should be amended as follows:

Truck movements outside the hours of ~~7.00~~ 7.30 am to 8.00 pm Monday to Saturday shall be restricted to no more than 30 vehicle movements per hour.

5.18. Further to Mr Trevathan's concerns about night time hours, he also raises concerns about day and evening noise effects at 153 Curraghs Road resulting from quarry trucks using Curraghs Road. He considers that these concerns stem from the assessments provided by the Applicant not addressing the potential scenario of high usage of the road by quarry trucks. To address these concerns, Mr Trevathan recommended that the quarry trucks be prohibited from using that portion of Curraghs Road that passes 153 Curraghs Road during the day and evening.²³

5.19. As previously discussed, I consider that the Applicant's proposed condition 22 (with my recommended amendment) addresses the potential night time noise effects. With respect to the potential day time noise effects, Mr Farren has responded by explaining that the heavy vehicle distributions identified in the *Integrated Transport Assessment* (prepared by Stantec and provided as part of the Application documents) estimated a maximum daily quarry truck passing on 153 Curraghs Road at between 0 and 5 truck movements per day. This estimate was based on a maximum volume of heavy vehicle movements from the proposed quarry of 1,500 per day (I note however

²³ Mr Trevathan's evidence, paragraph 89

that the Applicant has since reduced this maximum to 1,200 per day). While accepting this estimate from the *Integrated Transport Assessment*, Mr Farren adopted a conservative approach and assessed the potential noise generated by 56 quarry truck movements on Curraghs Day between 6am and 8pm. On this basis, he has advised that the potential change in ambient noise levels at 153 Curraghs Road will be in the order of 1 dB, and he considers this to be “negligible” and “not noticeable”.²⁴

- 5.20. In the absence of details on the potential truck movements and associated noise effects that Mr Trevathan considers may occur on Curraghs Road, and based on Mr Farren’s assessment, I consider that the scale of potential effect does not warrant Mr Trevathan’s recommended prohibiting of quarry trucks from using that portion of Curraghs Road that passes 153 Curraghs Road during the day and evening.
- 5.21. Based on the preceding assessment, and subject to the night time hours ceasing at 7.30 am as previously referred to, I consider that the proposed activity is consistent with Objective B3.4.2; Policies B3.4.1, B3.4.3, and B3.4.13 of the SDP; and with Section 7(c) of the Act.

6. LANDSCAPE

- 6.1. With respect to landscape matters, I have considered the expert evidence of Mr Compton-Moen (Director, DCM Urban) as provided by the Applicant; the report of Mr Robertson (of Beca Limited) titled “*Roydon Quarry Resource Consent Application, Landscape and Visual Assessment Review*” and dated the 30th of August 2019, that informed the SDC’s s42A Officer’s Report; and the expert evidence of Ms Abigail Smith (Landscape Architect, CCC) as provided by CCC.
- 6.2. In my opinion, the key planning provisions that need to be considered with respect to the potential effects of the proposed activity on landscape values are Objectives B3.4.1 and B3.4.2; and Policies B3.4.3, B3.4.6 and B3.4.17 of the SDP. In addition, under Section 7(c) of the Act, particular regard must be had to “*The maintenance and enhancement of amenity values*”; and further to this I note that, within the area of Greater Christchurch (within which the proposed activity is located), the RPS defines “*Rural activities*” as including “*Quarrying and associated activities*” (amongst other activities). Read together, I consider that these provisions support quarrying being

²⁴ Mr Farren’s evidence, paragraphs 65 to 69

undertaken within the rural area, provided that the rural character and amenity values of the rural area are at least maintained (amongst other matters beyond landscape effects).

- 6.3. Overall, Mr Robertson has advised that, in his opinion, the short-term effects of the proposal will be low to moderate for rural amenity and high for rural character, predominantly as a result of construction and establishment works. He also considers that the long-term effects of the proposal will be very low for rural amenity and moderate for rural character, predominantly due to significant modifications to the landform and fundamental changes to the appearance and use of the site over the 40-year quarry operation. On balance, Mr Robertson concludes that the landscape and visual effects of the proposal are considered to be *“low, albeit at the upper end and trending towards moderate”*; and he notes that, in his opinion, this represents minor to more than minor landscape and visual effects.²⁵
- 6.4. Contrary to this, while Ms Smith agrees with Mr Robertson’s assessment, she considers that the *“potential adverse effects during construction and establishment works”* is *“at least moderate to high for landscape character”*; and that following the establishment of the mitigation planting *“the potential adverse impact on landscape character and visual amenity of the proposed quarry will decrease”*.²⁶
- 6.5. Mr Compton-Moen is of the opinion that *“The most significant effects on topography will be during construction”*, particularly during the construction of the earth bunds; *“The proposal will have greater effects on landscape character during the period in which the quarry is under operation”*; and following rehabilitation *“The rural character of the site will be re-established, but the landscape character of the site will change”*.²⁷
- 6.6. I understand that the key mitigations for landscape impacts include the construction of a 3-metre-high earth bund around the perimeter of the Site (that in addition to mitigating the visual impacts of the quarrying activities, also helps to mitigate potential noise effects), and plantings to mitigate the visual impact of the bunds and to assist with dust control.

²⁵ Mr Robertson’s evidence, paragraphs 11 to 13

²⁶ Ms Smith’s evidence, paragraphs 5.3 and 5.4

²⁷ Mr Compton-Moen’s evidence, paragraphs 20.1 and 20.3

- 6.7. In considering the potential landscape effects of the 3-metre-high earth bunds, Mr Robertson considers that the proposed bunds will provide an effective screen for ground level views into the site, and that as excavation occurs the ground level will progressively fall and activities will be increasingly difficult to see over the top of the bunds. Further to this, he notes that bunds *“are not entirely foreign in the rural environment and tend to be associated with residential developments adjacent to SH1 (e.g. Rolleston), stop banks adjacent to waterways and quarries”*.²⁸ In contrast, Ms Smith considers that *“the earth bunds are not an expected feature in the rural open plains landscape, they are a un-natural, modified feature that signals an activity is occurring behind them”*. She considers that the mitigation planting needs to provide full screening of the earth bunds and the quarrying activity that will take place behind them.²⁹
- 6.8. With respect to the proposed mitigation plantings, Mr Robertson is of the opinion that *“there is every likelihood that the species and number of plants required and the ability to implement the entire planting programme over 2-3 planting seasons will be achieved”*.³⁰ However, he raises concerns that the proposed conditions effectively allow the establishment of the Site without being required to first establish the bunds and plantings.³¹ Ms Smith is also concerned about the potential effects of the quarry activities prior to the establishment of the mitigation plantings.³²
- 6.9. I understand from Mr Bligh’s evidence that establishment of the site first involves 2 to 5 years of activity in the Site’s centre developing of the processing and stock piling area. Based on my site visit I am aware that some perimeter planting and mulching has been undertaken. This will provide at least 2 to 5 years of growth from the existing planting and further plantings (as set out in the Landscape Management Plan) prior to any works adjoining the boundary of the Site (other than at the accessway). Further to this, I note that the Applicant’s proposed condition 12 to the SDC land use consent (in Mr Bligh’s evidence) requires that *“The commencement of Stage 1 of quarrying operations shall not begin until landscape works defined in the approved LMP are established on-site.”* On this basis, I understand that the potential effects of the

²⁸ Mr Robertson’s evidence, paragraphs 63 and 93

²⁹ Ms Smith’s evidence, paragraph 5.6

³⁰ Mr Robertson’s evidence, paragraph 68

³¹ Mr Robertson’s evidence, paragraph 79

³² Ms Smith’s evidence, paragraph 7.4(b)

bunding, planting and central quarry activities will be short term (that is approximately 5 years).

- 6.10. With respect to the timeliness and fullness of the mitigation plantings, Ms Smith raises a number of concerns that relate to species choice, the size of plants to be planted, the size of the planting area, use of mulch, longer-term irrigation and long-term monitoring of planting success rates and replacement needs.³³ I have considered these concerns and whether they are best addressed through more prescriptive consent conditions, or through the Landscape Management Plan³⁴ that the Applicant has proposed in condition 10 (of Mr Bligh's evidence). In my opinion, much of the detail that Ms Smith considers is necessary to ensure fit for purpose establishment of the mitigation plantings is best provided for through the process of SDC's certification of the LMP (which is included in the Applicant's proposed consent conditions). At the same time, however, I consider that the proposed conditions relating to the LMP require strengthening to ensure that the potential effects of the proposed quarry result in less than minor effects on the 'rural character and amenity values of the rural area'. I believe that this can be achieved by the following amendment to proposed condition 10, (or words of similar effect):

Establishment of landscape works (predominantly bunding and planting) shall not occur until Selwyn District Council has certified a final LMP in general accordance with the Landscape Management Plan, Project No. 2017_031|B prepared by DCM Urban. The purpose of the ~~Landscape Management Plan (LMP)~~ is to ensure the successful establishment ~~and long-term success of the proposed on-site landscape works of bunding and vegetation that screens, from beyond the Site, the visibility of the quarry activities being undertaken within the Site; and mitigates the potential for noise and dust to migrate from the Site. The choice and form of the vegetation to be established must be consistent with the rural character and amenity values of the surrounding area.~~

- 6.11. Ms Smith also has concerns with respect to the currently proposed staging of extraction works. The current proposal is to start in the Dawsons Road/Jones Road cell, and the Site boundary for this cell does not have an existing shelter belt. In contrast, the Curraghs Road boundary already has a full height shelterbelt that could

³³ Ms Smith's evidence, paragraphs 8.2 to 8.4

³⁴ Hereafter referred to as 'the LMP'

provide visual mitigation in the early workings of the Site and provide time for the plantings on Dawsons Road to fully establish prior to working that side of the Site.³⁵

- 6.12. This concern contrasts with the previously discussed opinion of Mr Robertson's that *"the proposed bunds will provide an effective screen for ground level views into the site, and that as excavation occurs the ground level will progressively fall and activities will be increasingly difficult to see over the top of the bunds"*³⁶; and as previously discussed, I understand from Mr Bligh's evidence that the first 2 to 5 years of quarry activity will take place in the centre of the Site, thereby providing opportunity for the mitigation plantings to gain some height (albeit less than full height). On this basis, I consider that relocating Stage 1 of the excavations from the Dawsons Road/Jones Road area to the Curraghs Road boundary will not result in significantly different effects.
- 6.13. Ms Smith is also concerned about the potential for removal of the mitigation plantings after the quarrying activities are finished and rehabilitation is completed. She recommends a requirement be set that requires their retention for the long term, including after the closure of the quarry activities.³⁷ Mr Robertson considers that at the completion of quarrying activities on the Site, a *"notable and potentially significant change in character"* will result, and that the long term effects on rural character of the Site will be *"moderate"*³⁸. On this basis, I consider that it is reasonable to consider that the mitigation plantings are a necessary component of reducing the impact on the rural character area over the long term, and that any consent granted should provide for this. I believe that inclusion of a condition of consent that requires that the mitigation plantings be maintained in perpetuity, and a condition of consent that requires the consent holder to enter into a bond for performance of the landscaping and rehabilitation conditions of the consent (should one be granted) would provide greater certainty of the proposed activity being consistent with the objectives and policies previously identified.
- 6.14. Based on the preceding assessment, and provided that the changes to the consent conditions (as discussed) are adopted, I consider that the proposed activity is

³⁵ Ms Smith's evidence, paragraphs 9.1 and 9.2

³⁶ Mr Robertson's evidence, paragraph 63

³⁷ Ms Smith's evidence, paragraph 9.

³⁸ Mr Robertson's evidence, paragraphs 87 and 93

consistent with Objectives B3.4.1 and B3.4.2; and Policies B3.4.3, B3.4.6 and B3.4.17 of the SDP; and with Section 7(c) of the Act. I understand that the 3-metre-high earth bund and associated plantings are fundamental mitigations for addressing the potential effects of the proposed activity on landscape values. Without the changes to the consent conditions discussed, in my opinion, the consistency of the proposed activity with the SDP objectives and policies, and Section 7(c) of the Act, may be significantly weakened.

7. DUST

- 7.1. With respect to dust matters, I have considered the expert evidence of Mr Cudmore (Principal, Golder Associates Limited) as provided by the Applicant; and the report of Ms Ryan (Technical Director for Air Quality, Pattle Delamore Partners Limited), that informed the SDC's s42A Officer's Report.
- 7.2. In my opinion, the key planning provisions that need to be considered with respect to potential discharges of dust are:
- a) NES-Air, Regulation 17(1);
 - b) Canterbury Regional Policy Statement, Objectives 14.2.1 and 14.2.2; and Policies 14.3.1(2), (3);
 - c) Canterbury Air Regional Plan, Objectives 5.2, 5.4, and 5.7; and Policies 6.1(a), 6.6, and 6.9; and
 - d) Section 7(c) of the Act.
- 7.3. Read together, these provisions support a variety of activities being undertaken in the rural area, provided the rural character and amenity values of the rural area are maintained. As previously referred to, Section 2 of the Act defines amenity values as *"those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes"*. I understand from the report prepared by Ms Ryan, and from the evidence of Mr Cudmore, that the potential effects of dust discharged from the quarry relate to human health and nuisance effects; and these effects can impact amenity values.

- 7.4. Ms Ryan and Mr Cudmore have identified that the potential human health effects from the proposed activity result from the possible discharge of crystalline silica³⁹, and particulate matter of the fraction PM_{2.5} to PM₁₀.
- 7.5. In terms of RCS and PM_{2.5} Mr Cudmore has advised that the ambient levels of RCS and PM_{2.5} fractions are likely to be increased by the proposed activity but only to the point where the cumulative ambient levels of RCS are negligible and the PM_{2.5} levels are well within the World Health Organisation's guideline values for acute and long-term exposure.⁴⁰ Ms Ryan's advice is consistent with Mr Cudmore's on this matter. Ms Ryan notes that the CRC commissioned Yaldhurst monitoring study found no elevated health risk to the surrounding communities of the Yaldhurst quarries from RCS exposure; and that based on the Yaldhurst monitoring data, and the similar nature of the proposed activities and underlying materials present at the proposed Roydon Quarry, RCS exposure *"will not be an issue for people in the community around the Royden Quarry site"*. With respect to PM_{2.5}, Ms Ryan notes that this size of particulate matter is *"mainly associated with combustion sources, whereas dust such as from quarrying, is associated with the PM_{2.5} to PM₁₀ fraction or larger. The quarry will have minimal impact on PM_{2.5} concentrations in air and there will be less than minor adverse health effects associated with PM_{2.5}"*.⁴¹
- 7.6. With respect to the discharge of PM₁₀, the proposed quarry is located on the boundary of the Christchurch Airshed, which is deemed to be polluted for PM₁₀ under Regulation 17(4) of the NES-Air.⁴² Regulation 17(1) of the NES-Air requires that a consent authority decline an application for a resource consent to discharge if the discharge would *"be likely, at any time"* to increase the concentration of PM₁₀ by more than 2.5 µg/m³ in any part of a polluted airshed.
- 7.7. Ms Ryan states that, in her opinion, the proposed activity could, *"at least at sometime within the life of the consent"* result in an increase in the concentration of PM₁₀ by more than 2.5µg/m³.⁴³ Based on Ms Ryan's advice, Ms Goslin (CRC's Reporting

³⁹ Hereafter referred to as 'RCS'

⁴⁰ Mr Cudmore's evidence, paragraphs 113 to 117, and paragraphs 120 and 121

⁴¹ Ms Ryan's report, paragraphs 66, 70, 71 and 83(c)

⁴² Christchurch Airshed is deemed to be polluted under Regulation 17(4) of the NES-Air because it experiences more than one high pollution day reported per year (a high pollution day is where the NES-Air threshold of 50µg/m³ for PM₁₀ measured as a 24-hour average is exceeded).

⁴³ Ms Ryan's report, paragraph 75

Officer) has recommended that the application be declined due to the requirements of Regulation 17(1) of the NES-Air.⁴⁴

- 7.8. I am not certain that this is the correct application of Regulation 17(1) of the NES-Air. I understand that the trigger within Regulation 17(1) is whether the discharge referred to is “*likely, at any time*”. I understand, from the Oxford Dictionary, that “*likely*” means “*probable or expected*”.⁴⁵ Therefore my understanding of Regulation 17(1) is that it only requires that an application be declined when an increase in the concentration of PM₁₀ by more than 2.5µg/m³ is probable or expected. In this instance, the application includes a Dust Management Plan (provided in Appendix D of the 2018 application documents), and mitigations to monitor and manage the discharge of dust at the Site. Ms Ryan has assessed the Dust Management Plan and the additional mitigations proposed by the Applicant, and has advised that, in her opinion, the proposed activity “*complies with good practice management, control and monitoring for dust discharges at quarries*”.⁴⁶ Accordingly, it could be argued that, while possible, it is not ‘probable or expected’ that the discharge triggers in Regulation 17(1) of the NES-Air will be reached.
- 7.9. Mr Cudmore notes that it is “*likely that the requirements of the NEW regulation 17(1) for 24 hour PM₁₀ can be met*”, and that there is the potential for offsetting discharges at the proposed Roydon Quarry by reducing activities in other quarries owned by the Applicant and located within the Christchurch Airshed (meaning that under Regulation 17(3), Regulation 17(1) would no longer apply).⁴⁷ However, no specific details of an offsetting arrangement have been proposed by the Applicant, and therefore, in my opinion, the possibility of offsetting cannot be relied upon.
- 7.10. Should it be proven through this hearing process that it is likely that an increase in the concentration of PM₁₀ by more than 2.5 µg/m³ in any part of the Christchurch Airshed will result from the proposed activity, then I concur with Ms Goslin, that the hearing panel has no choice but to decline the application.
- 7.11. With respect to potential nuisance effects resulting from the proposed activity, Ms Ryan considers “*the applicant’s proposed set of mitigation measures, that if applied*

⁴⁴ Ms Goslin’s s42A Officer’s Report, paragraphs 548 and 549

⁴⁵ https://www.oxfordlearnersdictionaries.com/definition/english/likely_1?q=likely

⁴⁶ Ms Ryan’s report, paragraph 126

⁴⁷ Mr Cudmore’s evidence, paragraphs 131.2 and 131.3

*as indicated, will avoid more than minor adverse effects from dust deposition at neighbouring properties”.*⁴⁸ However, she also notes that *“There is uncertainty as to how well the range of measures will be applied in practice, with many of the measures relying on human judgement.”*⁴⁹ With this, she notes the closeness of the dwellings at 319 Maddisons Road and 153 Curraghs Road to the proposed workings, and supports *“use of continuous dust monitoring around the Royden Quarry, which will allow real-time dust management, trigger additional dust controls, and reduce the subjective human judgement element as to if controls are adequate”.*⁵⁰ Further to this, I understand from the Air Quality Assessment (prepared by Golder Associates and provided as Appendix D to the 2018 application documents) that there are 15 properties within a 250-metre distance from the Site that may be sensitive to the discharge of dust. In this regard, I understand that the CRC’s recommended monitoring requirements and PM₁₀ trigger levels have been accepted by the Applicant (as seen in Mr Bligh’s proposed conditions 20 to 24 to the CRC discharge to air consent).

- 7.12. Having considered the other consent conditions proposed in Mr Bligh’s evidence, I consider that to ensure consistency with the relevant objectives and policies previously identified, the Applicant’s proposed condition 7 (that addresses the Standard Operating Procedures for inclusion in the Dust Management Plan) needs to be extended to also include the management of potential dust discharges from the construction and life of the earth bunds, and the recontouring of slopes that is proposed as part of the rehabilitation activities.
- 7.13. Based on the preceding assessment, if the proposed activity is found not to comply with Regulation 17(1) of the NES-Air, then I understand that the hearing panel has no choice but to decline the application. If this scenario does not result, then subject to adoption of the changes to proposed condition 7 discussed in the preceding paragraph, I consider that the proposed activity is consistent with Objectives 14.2.1 and 14.2.2; and Policies 14.3.1(2), (3) of the RPS; and Objectives 5.2, 5.4, and 5.7; and Policies 6.1(a), 6.6, and 6.9 of the CARP; and Section 7(c) of the Act.

⁴⁸ Ms Ryan’s report, paragraph 102

⁴⁹ Ms Ryan’s report, paragraph 98

⁵⁰ Ms Ryan’s report, paragraph 100

8. TRAFFIC SAFETY

- 8.1. With respect to the potential effects of the proposed activity on traffic safety, I have considered the expert evidence of Mr Metherell (Transportation Engineer, Stantec New Zealand) and Mr Kelly (traffic engineer and transportation planning consultant), as provided by the Applicant; Mr Carr (Director, Carriageway Consulting Limited) as relied upon in the SDC s42A Officer's Report; and Mr Wright (Director, QTP) as provided by CCC.
- 8.2. With respect to the potential traffic safety effects of the proposed activity, in my opinion, the key planning provisions that need to be considered are:
- a) Canterbury Regional Policy Statement, Objectives 5.2.1(2)(f), 5.2.3 and 5.3.2(3)(b); and Policies 5.3.7(1) and 5.3.8(1)(b);
 - b) Selwyn District Plan, Objectives B2.1.1 and B2.1.2; and Policies B2.1.3, B2.1.4(b), B2.1.10, B2.1.11, and B2.1.26; and
 - c) The Christchurch District Plan, Objective 7.2.1(a)(ii).⁵¹
- 8.3. Together, these objectives and policies require the safe design and use of roads within the Selwyn District, including safe and efficient uses that reflect the roading hierarchy. Further to this, there is a clear expectation that heavy vehicles will be encouraged to bypass townships.
- 8.4. Having read the evidence previously referred to, I understand that potential traffic safety issues relate to:
- a) The State Highway 1⁵²/Dawsons Road roundabout;
 - b) The Dawsons Road/Jones Road intersection;
 - c) The Dawsons Road level crossing and the approach to SH1; and
 - d) The Jones Road cycle and pedestrian refuge.
- 8.5. I address each of these in turn in the following sections.

⁵¹ While the Site that the application applies to is located in the Selwyn District, given its close proximity to Christchurch District, and given the shared management arrangement between SDC and CCC for Dawsons Road, I consider that the objectives and policies in the Christchurch District Plan also warrant consideration in this instance.

⁵² Hereafter referred to as '**SH1**'

- 8.6. With respect to the SH1/Dawsons Road roundabout, Mr Wright has advised that the quarry will increase the occurrences of queues from the level crossing extending back to, and blocking SH1, when a train is passing the crossing. As northbound users of SH1 will be unlikely to expect stationary traffic on this portion of the road, they may be unprepared to stop and accidents may occur as a result. Mr Carr, Mr Metherell and Mr Kelly generally agree with this possibility.
- 8.7. Mr Kelly has advised that modelling indicates that there is low probability of this occurring, with and without the proposed quarry operating. He states that *“The potential consequence of such queuing extending back into the intersection is that there will be some occasional but short duration disruption to traffic movements and a potential safety hazard arising from slow-moving or stationary traffic on the SH1 approaches to the roundabout”*. In Mr Kelly’s view, the potential effects of such queuing would be minor since *“The roundabout will be located within an 80km/hr speed limit area”* and therefore *“drivers will already have an expectation of needing to slow or stop in response to other vehicle movements”*; and due to *“the good sight-lines in this area”*.⁵³
- 8.8. Mr Carr, while acknowledging that it may be a low probability event, considers that it could result in a high impact.⁵⁴ Based on this, he concludes that *“the operation of the quarry in conjunction with the railway level crossing, will have significant adverse effects on road safety on State Highway 1”*.⁵⁵
- 8.9. Mr Metherell and Mr Wright have both recommended that activated queue warning signs be installed at this intersection⁵⁶; while Mr Kelly has proposed that in the first instance CCTV be installed to record (possibly when triggered by rail closures) the extent and frequency of queuing; and that if queuing is found to result, then electronic queue warning signs could be installed on the SH1 approaches at that time.⁵⁷
- 8.10. Mr Wright, however, disagrees with waiting for monitoring to be undertaken and considers that a queue warning system should be a requirement of the consent. Further to this, he recommends that the system be activated based on the rail barrier

⁵³ Mr Kelly’s evidence, paragraphs 19 and 20

⁵⁴ Mr Carr’s evidence, paragraph 67

⁵⁵ Mr Carr’s evidence, paragraph 76

⁵⁶ Mr Wright’s evidence, paragraph 7.16; and Mr Metherell’s evidence, paragraph 137.6.

⁵⁷ Mr Kelly’s evidence, paragraphs 22 and 23

detection system. This is due to the short queuing space available and the long length of the trucks that will be bound for the quarry site. With the rail barrier as the activator, the north bound traffic will be provided more time to slow and possibly stop before encountering stationary vehicles.⁵⁸

- 8.11. Mr Henderson (SDC's Reporting Officer) has recommended that the land use consent application be declined unless "*appropriate measures to avoid adverse effects arising from trucks queuing between the Main Trunk railway line crossing and the State Highway*" are provided for⁵⁹. While I understand from the experts' evidence that the probability of collisions at this intersection may be low, the potential consequences could include serious harm or fatality⁶⁰. The proposed queue warning system would reduce the potential traffic safety effect at the roundabout, and linking this to the rail barrier detection system would further reduce the potential for collision. However, at this point in time, there appears to be no certainty about the installation of such warning systems (particularly given that agreement from third parties is needed).
- 8.12. With respect to the Dawsons Road/Jones Road intersection, Mr Carr notes that the Integrated Transportation Assessment has identified the Dawsons Road/Jones Road Intersection as the key intersection through which the bulk of traffic will pass; it already has a poor crash record; and consequently, Mr Carr considers that it is critical that it functions with an appropriate level of service.⁶¹
- 8.13. The Applicant has proposed two options to upgrade this intersection. Option 1 is a standard four-arm roundabout that uses land presently owned by CCC (and CCC has advised me that they do not intend to agree to this option, as indicated in Annexure 3 of my evidence); while Option 2 is a three-arm roundabout with Jones Road east of Dawsons Road forming a give-way intersection, and this option is located on land owned by the Applicant.
- 8.14. In terms of traffic safety, Mr Wright is of the view that Option 2 is preferable for the following reasons:

⁵⁸ Mr Wright's evidence, paragraph 7.16

⁵⁹ Mr Henderson's recommendation (i) in the SDC's s42A Officer's Report

⁶⁰ Mr Carr's evidence, paragraph 67

⁶¹ Mr Carr's evidence, paragraph 62

- a) The road hierarchies of both the Christchurch and Selwyn District Plans place Dawsons Road higher in the traffic movement function than Jones Road, and Option 2 encourages this outcome. In contrast, Option 1 would facilitate through-routing on Jones Road;
- b) Option 2 will provide greater discouragement to heavy vehicles from using Jones Road to route through Templeton;
- c) Option 2 has the advantage of providing little impediment to northbound traffic on Dawsons Road approaching the roundabout which must give way only to the relatively few right-turners southbound on Dawsons Road. This reduces the risk of queued vehicles blocking back from the roundabout to the railway line; and
- d) The northbound queueing space available between the roundabout and the level crossing is significantly greater (approximately double) for Option 2 than Option 1.⁶²

8.15. Mr Carr does not offer an opinion on a preferred option.

8.16. Related to Option 2, Mr Wright supports banning the right turn from Dawsons Road into Jones Road immediately north of the rail crossing (that is vehicles heading in the direction of Templeton). He notes that this is necessary to prevent "*right-turners giving way to oncoming traffic*" from blocking northbound through-vehicles which could result in queueing back across the level crossing.⁶³

8.17. Based on the preceding assessment, should the hearings panel consider that the wider issue of traffic safety is able to be addressed and be inclined to grant the application, then Option 2 appears, to me, to be more consistent with the the objective of minimising traffic safety issues.

8.18. With respect to the Dawsons Road level crossing approach to SH1, Mr Wright has identified the potential for south bound traffic heading from Dawsons Road to SH1 to que back to, and possibly block, the level crossing. He is concerned that the increased traffic at this intersection, together with the length of the quarry trucks, could make estimation of the length of gap between the que and the rail crossing more difficult and consequently place vehicles and trains at risk of collision.⁶⁴ This matter does not

⁶² Mr Wright's evidence, paragraph 8.5

⁶³ Mr Wright's evidence, paragraph 8.6

⁶⁴ Mr Wright's evidence, paragraphs 9.2 and 9.4

appear to have been considered by the Applicant or SDC's Section 42A report. Further, while Mr Wright has identified the risk, he has not recommended a solution in this regard. In my opinion, this risk requires further information from the Applicant as there remains uncertainty on the scale of the safety risk and what mitigations may be needed.

- 8.19. With respect to the Jones Road cycle and pedestrian refuge, Mr Wright has identified the potential for the increase in the number of heavy vehicles passing within close proximity to cyclists that are using the 1.5-metre-wide central refuge in that part of Dawsons Road between Jones Road and the railway (as provided for in the NZ Transport Agency's plans for the CSM2) to compromise cyclist safety. He notes that quarry trucks can be intimidating to cyclists and without a feeling of safety, cyclists may choose not to use the Southern Express Major Cycle Route. Mr Wright recommends that the central refuge be sufficiently wide to accommodate cyclists safely, and to allow cyclists to feel safe when using the refuge. He also recommends that the safety audit proposed in the conditions of consent in Mr Bligh's evidence be extended to include the safety of users of the cycleway crossing.⁶⁵
- 8.20. Mr Carr considers that by shifting Jones Road/Dawsons Road intersection towards the north (as proposed in the intersection redesign options) the crossing of Dawsons Road will be *"less complex than it is today"*.⁶⁶ I understand this to mean that some improvement in safety will result, however, there remains uncertainty on the scale of residual safety for cyclists at this crossing.
- 8.21. Based on the preceding assessment, in my opinion, there is considerable uncertainty with the overall design solutions and necessary agreements (from the relevant land and infrastructure owners) that are needed to ensure that traffic safety is sufficiently provided for to meet the relevant objectives and policies of the RPS and SDP. Given the considerable increase in vehicles on the roads that will result from the proposed activity, and their size and weight, it is my opinion that more certainty is needed with respect to traffic safety matters prior to granting, or declining, the application.

⁶⁵ Mr wright's evidence, paragraphs 11.3 and 11.4

⁶⁶ Mr Carr's evidence, paragraph 83

9. CONCLUSION

- 9.1. Having assessed the potential noise, landscape, dust and traffic safety effects of the proposed activity in terms of the activity's consistency with the relevant planning mechanisms, I conclude the following.
- 9.2. With respect to the discharge of noise, it is my opinion that considerable steps have been taken by the applicant to mitigate the potential nuisance effects of the quarry operations and quarry generated traffic. The area of discrepancy that remains in my mind is when should the night time noise limits (and mitigations) switch to the day time limits and mitigations. It is not clear to me (from the evidence referred to) what the effects would be of commencing what would otherwise be day time activities, earlier than the SDP currently identifies as day time. In the absence of such an assessment, I believe that a conservative approach should be adopted to ensure that the proposed activity is consent with the relevant SDP objectives and policies, and this would lead to the Applicant's night time limits and mitigations being extended to 7.30 am. With this adjustment, it is my opinion that the proposed activity can be considered to be consistent with the relevant noise related objectives and policies in the SDP.
- 9.3. With respect to landscape values, I understand that the 3-metre-high earth bund and associated plantings are key to mitigating the potential effects of the proposed activity. The pace and fullness of plant growth, and the ongoing maintenance of the plants, is critical to minimising the landscape effects of the proposed quarry. In my opinion, greater certainty of successful mitigation plantings can be achieved by strengthening the Applicant's proposed condition 10 so that the purpose of the LMP is more explicit about establishing bunding and vegetation that screens, from beyond the Site, the visibility of the quarry activities being undertaken within the Site, and that the choice and form of the vegetation to be established must be consistent with the rural character and amenity values of the surrounding area. In addition, I believe that the proposed activity would be more consistent with the relevant objectives and policies of the SDP if there was a clear requirement for the mitigation plantings to be maintained in perpetuity and for a related performance bond to be required in the consent conditions. With these adjustments, it is my opinion that the proposed activity can be considered to be consistent with the relevant landscape related objectives and policies in the SDP.

- 9.4. With respect to the potential effects from the discharge of dust at the proposed quarry, I understand that if the activity is found not to comply with Regulation 17(1) of the NES-Air, then the hearing panel would have no choice but to decline the application. However, if the application is able to be granted, I consider that the Applicant's proposed condition 7 (to the air discharge consent) should be strengthened (to better align with the relevant objectives and policies) by requiring that the Standard Operating Procedures (for inclusion in the Dust Management Plan) be extended to include the management of potential dust discharges from the construction and life of the earth bunds and the recontouring of slopes that is proposed as part of the rehabilitation activities. With this adjustment, it is my opinion that the proposed activity can be considered to be consistent with the relevant dust related objectives and policies in the SDP.
- 9.5. With respect to the potential traffic safety effects of the proposed activity, I consider that a number of potential effects remain unresolved. These primarily relate to issues at the SH1/Dawsons Road roundabout; certainty of the choice of options for the Dawsons Road/Jones Road intersection; and uncertainty of the scale of risks and any necessary mitigations associated to the Dawsons Road level crossing approach to SH1 and the Jones Road cycle and pedestrian refuge. Given these uncertainties, I consider that it is not possible to confidently conclude that the proposed activity complies with the relevant objectives and policies in the RPS and SDP. Until these issues are fully resolved, and there is confidence that safe and efficient use of the roads will result, it is my opinion that the land use consent should not be granted.

I thank the Commissioners for affording me the time to present this evidence.



Susan Ruston

14th of October 2019

ANNEXURE 1: EXAMPLES OF RECENT PLANNING PROJECTS AND PROCESSES OF S RUSTON

Expert planning evidence hearings planning deciding consent application for NPD site in Cromwell.

Expert planning evidence to the Environment Court regarding Ballance Agri-Nutrients Limited's submissions on the proposed Southland Water and Land Plan.

Planning services to King Country Energy Limited when submitting on Proposed Waikato Regional Plan Change 1 – Waikato and Waipa River Catchments.

Planning services to Amuri Irrigation Limited with respect to consent applications for water takes and discharges.

Planning services to Simons Pass Station Limited with respect to resource consent applications for water takes and discharges, discharges of contaminants and earthworks.

Planning services to Trustpower Limited with respect to an application to change existing consent conditions for the discharge of water; and an application to take water for dewatering testing related to land slippage.

Planning services to Graymont NZ with respect to applications for the take and use of water.

Planning services to Pioneer Energy Limited with respect to an application to change existing consent conditions related to damming and diversion of water.

Planning services to NZSki with respect to an application to change existing consent conditions related to the discharge of contaminants.

Planning services to Clutha District Council with respect to resource consent applications for the take of water and discharges of contaminants. This included advising on planning matters and drafting of consent application documents.

Planning services to Bay of Plenty Regional Council with respect to processing of resource consent applications.

Planning services to Gisborne District Council with respect to processing of resource consent applications.

ANNEXURE 2: KEY PLANNING PROVISIONS REFERRED TO IN THIS EVIDENCE

Selwyn District Plan

- Objective B3.4.1 The District's rural area is a pleasant place to live and work in.*
- Objective B3.4.2 A variety of activities are provided for in the rural area, while maintaining rural character and avoiding reverse sensitivity effects.*
- Policy B3.4.1 Recognise the Rural zone as an area where a variety of activities occur and maintain environmental standards that allows for primary production and other business activities to operate.*
- Policy B3.4.3 Avoid, remedy or mitigate significant adverse effects of activities on the amenity values of the rural area.*
- Policy B3.4.6 Maintain low levels of building density in the Rural zone and the predominance of vegetation cover.*
- Policy B3.4.13 Recognise temporary noise associated with short-term, seasonal activities as part of the rural environment, but ensure continuous or regular noise is at a level which does not disturb people indoors on adjoining properties.*
- Policy B3.4.17 Ensure buildings and trees do not excessively shade adjoining properties.*
- Objective B2.1.1 An integrated approach to land use and transport planning to ensure the safe and efficient operation of the District's roads, pathways, railway lines and airfields is not compromised by adverse effects from activities on surrounding land or by residential growth.*
- Policy B2.1.2, SDP Manage effects of activities on the safe and efficient operation of the District's existing and planned road network, considering the classification and function of each road in the hierarchy.*
- Policy B2.1.3, SDP Recognise and protect the primary function of roads classified as State Highways or Arterial Roads in Appendix 9, to ensure the safe and efficient flow of through traffic en route to its destination.*
- Policy B2.1.4(b) Avoid or mitigate adverse effects on the safe flow of traffic along State Highways and Arterial Roads from new property access or*

new/expanded activities which generate a high level of traffic movements.

Policy B2.1.10 Ensure vehicle crossings, intersections, pathways, roadside signs and noticeboards are designed and positioned to ensure good visibility for all road users, and to allow safe passage, access and egress.

Policy B2.1.11 Ensure roads are designed, constructed, maintained and upgraded to an appropriate standard to carry the volume and types of traffic safely and efficiently.

Policy B2.1.26 Encourage heavy vehicles to use routes which bypass townships, where practical and appropriate, and avoid new residential development along heavy vehicle bypasses.

National Environmental Standard-Air

Regulation 17(1) A consent authority must decline an application for a resource consent (the proposed consent) to discharge PM₁₀ if the discharge to be expressly allowed by the consent would be likely, at any time, to increase the concentration of PM₁₀ (calculated as a 24-hour mean under Schedule 1) by more than 2.5 micrograms per cubic metre in any part of a polluted airshed other than the site on which the consent would be exercised.

Canterbury Regional Policy Statement

Objective 5.2.1(2)(f) Development is located and designed so that it functions in a way that: ... is compatible with, and will result in the continued safe, efficient and effective use of regionally significant infrastructure

Objective 5.2.3 A safe, efficient and effective transport system to meet local regional, inter-regional and national needs for transport...

Objective 5.3.2(3)(b) To enable development... which... integrate with... transport networks, connections and modes so as to provide for the sustainable and efficient movement of people, goods and services, and a logical, permeable and safe transport system.

Policy 5.3.7(1) In relation to strategic land transport network and arterial roads, the avoidance of development which...adversely affects the safe efficient

and effective functioning of this network and these roads, including the ability of this infrastructure to support freight and passenger transport services...

Policy 5.3.8(1)(b) Integrate land use and transport planning in a way: that promotes...the safe, efficient and effective use of transport infrastructure.

Objective 14.2.1 Maintain or improve ambient air quality so that it is not a danger to people's health and safety, and reduce the nuisance effects of low ambient air quality.

Objectives 14.2.2 Enable the discharges of contaminants into air provided there are no significant localised adverse effects on social, cultural and amenity values, flora and fauna, and other natural and physical resources.

Policy 14.3.1 (2) Where existing ambient air quality is higher than required by the standards set, to only allow the discharge of contaminants into air where the adverse effects of the discharge on ambient air quality are minor.

(3) To give priority to ensuring that PM10 ambient air quality improvements are achieved in ... Christchurch....

Canterbury Air Regional Plan

Objectives 5.2 Ambient air quality provides for the health and wellbeing of the people of Canterbury.

Objective 5.4 Degraded ambient air quality is improved over time and where ambient air quality is acceptable it is maintained.

Objective 5.6 Amenity values of the receiving environment are maintained

Objective 5.7 Discharges from new activities are appropriately located to take account of adjacent land uses and sensitive activities.

Policy 6.1(a) Discharges of contaminants into air, either individually or in combination with other discharges, do not cause: (a) adverse effects on human health and wellbeing

Policy 6.6 Maintain ambient air quality in locations where the quality is acceptable when assessed against an ambient air quality standard set in a national ambient air quality standard or guideline.

Policy 6.9 Discharges into air from new activities are appropriately located and adequately separated from sensitive activities...

ANNEXURE 3: KEY PLANNING PROVISIONS REFERRED TO IN THIS EVIDENCE

4 October 2019

QTP Ltd
PO Box 106
Christchurch 8140

Attention: Tim Wright

Dear Tim

Roydon Quarry - roading layout proposal Option 1

I understand that you are preparing expert traffic safety evidence for the upcoming resource consent hearings on Fulton Hogan's application to Selwyn District Council and Canterbury Regional Council for Roydon Quarry.

The applicant has proposed two options for redesigning the Jones Road / Dawson Road intersection. Option 1 involves land that is currently owned by Christchurch City Council at 173 Maddisons Road.

The Council is [preparing a development plan](#) for this land that allows for about two-thirds of it to be used as a cemetery and for the remaining third to be used as a sports park.

Based on this, the Council currently has no intention to agree to the road layout that is proposed in Option 1 of the application.

Yours faithfully

A handwritten signature in blue ink, appearing to read "Andrew Rutledge".

Andrew Rutledge
Head of Parks
CHRISTCHURCH CITY COUNCIL

cc. Susan Ruston of Enspire Consulting