

**Before Independent Hearings Commissioners Appointed by Canterbury Regional
Council and Selwyn District Council**

In the matter of The Resource Management Act 1991

And

In the matter of Applications by **Fulton Hogan Limited** for all resource
consents necessary to establish, operate, maintain and
close an aggregate quarry (**Roydon Quarry**) between
Curraghs, Dawsons, Maddisons and Jones Roads,
Templeton

**EVIDENCE OF DAVID JOHN COMPTON-MOEN
ON BEHALF OF FULTON HOGAN LIMITED**

LANDSCAPE AND VISUAL

DATED: 23 SEPTEMBER 2019

Counsel Acting: David Caldwell
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Introduction

- 1 My full name is David John Compton-Moen. I hold the position Director / Landscape Architect / Urban Designer at DCM Urban Design Limited. I have been in this position since August 2016, just over three years ago. Prior to this, I worked at Kamo Marsh Landscape Architects (18 months), Jacobs/SKM (2.5 years) and MWH NZ Ltd (now Stantec – 5.5 years).
- 2 I have been asked by Fulton Hogan Limited (Fulton Hogan) to provide evidence in respect of its application for resource consents to establish, operate, maintain and close the proposed Roydon Quarry (Proposal).
- 3 My area of expertise is the assessment of landscape and visual effects.

Qualifications and Experience

- 4 I hold the qualifications of a Bachelor of Landscape Architecture (Hons.) and a Bachelor of Resource Studies (Planning and Economics), both obtained from Lincoln university. I am a Registered Landscape Architect of the New Zealand Institute of Landscape Architects, since 2001, a Full member of the New Zealand Planning Institute, since 2007, and a member of the Urban Design Forum. I am currently studying a Masters in Urban Design through the University of Auckland. I was branch Chair of the Canterbury/ Westland Branch of the NZILA for 4 years from 2013 to 2016.
- 5 I have worked in the landscape assessment, urban design, and planning fields for approximately 20 years, here in New Zealand and in Hong Kong. During this time, I have worked for both local authorities, and private consultancies, providing expert evidence for urban design, landscape and visual impact assessments on a wide range of major infrastructure and development proposals, including the following relevant projects:
 - 5.1 2018 – I provided Landscape and Visual Evidence before Christchurch City Council and Environment Canterbury for Road Metals for a proposed extension to their current quarry at 394 West Coast Road, Yaldhurst, Christchurch City.
 - 5.2 2008-11 – I provided Landscape and Visual impact assessment services for the Pines Wastewater Treatment Plant on the outskirts of Rolleston for Selwyn District Council. The project involved extensive landscape planting around the outskirts of the site (5.6km) to provide a landscape strip to capture potential spray drift. I have attached photos in my evidence (**Annexure 1**) to show the current state of planting.

- 5.3 2008 - I provided Landscape and visual evidence for the extraction of gravel from the Kowai River and creation of a new processing plant for Winstone Aggregates, a division of Fletcher Concrete and Infrastructure Limited.
 - 5.4 2018 - I provided Urban Design, Landscape and Visual amenity evidence for QLDC on an application on Industrial land in Frankton Flats. The proposal was for a large warehouse type building with visitor parking immediately adjacent to SH6, commercial signage and a large planted landscape bund.
 - 5.5 2019 – I am currently providing Landscape and Visual impact assessment services to Christchurch City for the development of the Cashmere Valley Dam. The project involves extension earthworks, the creation of a 4m high bund, public pathways and extensive native planting.
- 6 While this is a Council Hearing, I acknowledge that I have read and am familiar with the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2014, and agree to comply with it. I confirm that this evidence is within my area of expertise, except where I state that this evidence is given in reliance on another person's evidence. I have considered all material facts that are known to me that might alter or detract from the opinions I express in this evidence.

Scope of Evidence

- 7 In my evidence I address the following, as far as it relates to my opinion on landscape and visual effects:
- 7.1 My involvement in the proposal;
 - 7.2 A description of the existing landscape character;
 - 7.3 An assessment of the potential effects of the Proposal on landscape character, visual amenity , and landscape values. ;
 - 7.4 How any potential adverse effects relating to landscape or visual can be mitigated, including how the site can be returned to a working rural property with no loss of productivity;
 - 7.5 My commentary on the Landscape and Visual Assessment – Review prepared by Mr Robertson of Beca Limited and any landscape and visual comments made in the Officer's Section 42A report, prepared by Mr Henderson of Beca Limited.
 - 7.6 A review of the submissions received relating to landscape, visual amenity and rural amenity concerns.

My involvement in the Roydon Quarry Proposal

- 8 I was engaged by Fulton Hogan in January 2018 to provide landscape and visual impact advice, including in relation to design, concepts and measures for landscape and visual mitigation, and rehabilitation. As part of my work, I prepared the Landscape and Visual Impact Assessment that is attached to the original applications for resource consent at Appendix E (**LVIA Report**). I also prepared the updated Landscape and Visual Impact Assessment figures attached as Appendix F to Fulton Hogan's August 2019 Response to additional Requests for Further Information (**Updated LVIA Figures**).
- 9 I have been involved in this proposal since January 2018 when I visited the site, prepared the design for the proposed landscape bunding and planting plan and liaised with the client, Golder and Mr Victor Mthamo to develop the proposed Rehabilitation Plan and help identify potential uses for the quarry post extraction.
- 10 I attended the public drop in sessions which were held on site and in Templeton in November 2018 and helped refine the landscape and visual assessment based on community feedback arising from these sessions and other feedback obtain by Fulton Hogan through the consultation process. It was during these meetings that the gravel path was proposed for development around the site.
- 11 Most recently I have prepared the Landscape Management Plan, outlining procedures, methods and responsibilities to ensure the health and maintenance of the grassed bunds and landscape planting, including existing shelter belts on the site.
- 12 From the beginning of my involvement with Roydon Quarry, I have worked with Fulton Hogan, Golder, Mr Mthamo and more recently the public during the technical expert sessions to develop the proposed bunds, their form and cover, proposed planting and site fencing.
- 13 Except as outlined below, my assessment and opinions of the Proposal continue to be that set out in the LVIA Report, and Updated LVIA Figures. I will cross-refer to that material throughout my evidence.

Key features of the Proposal from a landscape and visual perspective

- 14 A detailed description of the proposal is included in the Assessment of Environmental Effects. The key features of the Proposal from a landscape and visual perspective has been summarised in section 1.2 of the Landscape and Visual Assessment (30 August 2019) prepared by Beca Limited which accompanies the section 42A report (**s42A Landscape Report**). I agree with the key features, as described in the s42A Landscape Report, but disagree on the magnitude of change that will be expected.

- 15 Briefly, the Proposal is to establish a gravel quarry at a site within a block of land bound by Curraghs Road, Dawsons Road, Maddisons Road and Jones Road Templeton, an area of approximately 170Ha. The site will be excavated to a depth of up to 9.9m below ground level, and extracted and rehabilitated in a staged approach.
- 16 A fixed processing plant and stockpiling area will be established in the middle of the site, approximately 500m away from the closest road or property boundary. Material excavated from this location will be used to form the 3m high bunds surrounding the entire site.
- 17 Details of the proposed bunds and landscaping is outlined in my LVIA and summarised in this evidence. The bunds and landscaping are to be established around the entire site prior to stage 1 commencing, using material excavated from the centre. Existing shelterbelts around the site will be retained and supplemented with existing planting. The combination of bunds and landscape planting is considered an appropriate method to address landscape and visual aspects in the site's location.

The existing environment and receiving environment

- 18 I provided a detailed description of the existing environment and receiving environment at section 3.1 of my LVIA. That description continues to be accurate, except as noted below. In summary:
- 18.1 The receiving environment of the Canterbury Lower Plains zone is characterised by large open paddocks, with boundaries often delineated by well-established shelter belts of exotic species, rural dwellings surrounded by large trees, and a mix of different land uses. Overall, the topographical attributes of the receiving environment are relatively low with no defining features.
- 18.2 Vegetation types in the receiving environment are predominantly exotic species, with small amounts of native species, used predominantly for shelter belts running along the paddock boundaries. Overall, the vegetation cover in the area has a low sensitivity to change, given the high level of fast growing introduced exotic species.
- 18.3 The flat open geometric fields are back dropped by the Southern Alps. Expansive views are often possible but are equally screened by large shelter belts and buildings at various locations.
- 18.4 The natural characteristic of the environment is modified, with a rural character as opposed to a natural character.

- 18.5 Quarrying has been a past land use activity in close proximity with the SDC site on the opposite side of the Curraghs/Jones Road intersection/
- 18.6 In terms of built form, dwellings and farm or auxiliary structures are common throughout the area. There are several commercial and industrial activities fronting SH1. However, I understand that Affordable Mowers and Machinery on the corner of Dawson and Mains South Road which I mentioned in the LVIA has since been replaced by other commercial and industrial activities.
- 18.7 Overall, the receiving environment has a rural, open character, albeit one that is undergoing a significant level of change with nearby residential and rural-residential development, and infrastructure construction. Commercial enterprises are also common in the area, recognising the transformation occurring between Templeton and Rolleston.
- 19 The receiving environment is currently going through a significant amount of change due to the construction of the Christchurch Southern Motorway Stage 2 (**CSM2**), the establishment of new rural-residential activities locating along the State Highway, and the growth of Rolleston. Rolleston has grown into a town of over 20,000 people in a relatively short time. The i-zone has increased in size and the inland port has been established. The inland port often has containers stacked up to 6 high with large floodlights, estimated to be 20m in height. The inland port is located 4.3km to the southwest of the proposal site.

Potential effects on landscape character

- 20 I provided an assessment of the Proposal's effects on landscape character at section 3.2 of my LVIA. My assessment covered all aspects of landscape character, including changes to topography, identifying potential losses of existing vegetation, removal of farm buildings and the installation of plant equipment during the operational phase of the quarry. I continue to support my assessment and associated reasoning. In summary:
- 20.1 The proposal will have greater effects on landscape character during the period in which the quarry is under operation, prior to the site being rehabilitated.
- 20.2 During operation there will be a loss of groundcover, existing vegetation within the site, installation of plant equipment, and the creation of cut faces. During construction there will be a loss of some vegetation within the site, but the biggest effects will occur from permanent changes to the topography, from a flat grass paddock to an open face quarry site.
- 20.3 The most significant effects on topography will be during construction but will be mitigated by the creation of irregular, grassed slopes and the

establishment of pasture grass when the site is rehabilitated. The rural character of the site will be re-established, but the landscape character of the site will change.

20.4 The potential landscape character effects from planting shelter belts and bunding as a mitigative measure will be less than minor.

20.5 The proposed mixture of planting types and sizes will provide for more visually interesting boundary when compared to a more typical pine planting. In addition, the inclusion of a post and rail fence maintains elements of the surrounding existing open character to provide for a mitigative solution that not only mitigates adverse effects from the development, but also builds on the distinct rural character of the lower Canterbury plains.

20.6 The staging of the quarry will minimise potential adverse effects in terms of topography with exposed slopes being shaped and grassed once work has been completed in an area as progress is made into the next area.

21 Overall, I consider that the highest adverse effects on landscape character is during construction of the grass bunds, with the largest impact being changes to topography, but that any such effects will be short term until grass establishes on the bunds. With the quarrying activities being staged, and plantings on the outside of the bunds occurring prior to Stage 1 excavation commencing, all other effects on landscape character can be appropriately mitigated or remedied, with a moderate level of change. I consider that during the quarry's operation the site will retain a distinct rural character which is in keeping with the surrounding environment with minor adverse effects.

22 My assessment process covered all aspects of landscape character, identifying potential losses of existing vegetation, removal of farm buildings and the installation of plant equipment during the operational phase of the quarry. In terms of vegetation loss, my assessment found that the loss of vegetation was a negligible effect with no specimens of note on the site. The establishment of shelter belts, including native species, will result in a positive net benefit of plants, and while they will change the character of the landscape it is a permitted activity only subject to controls over shading adjacent properties or roads. I consider that the only residual effect on landscape character, post rehabilitation of the site would be the effects on topography. When the quarry is rehabilitated, as per the Rehabilitation Plan, the residual effects on landscape character will be less than minor.

Potential effects on visual amenity

- 23 I provided an assessment of the Proposal's visual amenity effects at sections 3.4 and 3.5 of my LVIA. I continue to support my assessment and associated reasoning. In summary:
- 23.1 In assessing potential visual amenity effects, I selected a series of 9 key viewpoints to show a representative sample of the likely visual effects which could result from the proposal. Viewpoints are generally located on public land, and where possible as close as possible to existing or proposed dwellings.
- 23.2 In Table 1 of my LVIA, I outline for each viewpoint the potential visual effects that visually sensitive receptors might receive and how effects may potentially be mitigated, taking into account likely sensitivity of the receptor and the likely magnitude of effect. My analysis in Table 1 shows that effects after mitigation (discussed below) range from indiscernible to less than minor.
- 23.3 The highest visual effects after mitigation will be experienced by those residential properties closest to the proposal at 151 and 153 Curraghs Road, and 319 Maddisons Road. For the Curraghs Road properties, the existing, albeit limited, semi-open views will be replaced with views contained by boundary plantings and the proposed landscape bunds. However, given that landscape plantings on the boundary are a permitted activity and could be (and have been) planted as of right (see attached photos in **Annexure 1**), I consider the magnitude of change for these residents in visual terms is very low. Views will be possible of the proposed bunds, but the resultant visual effects are less than minor.
- 23.4 The use of bunding and planting along site boundaries provides for a visual screen around the proposal that enables the site to respond to the existing rural landscape character. The layering of both exotics and native planting on the bunding preserves the visual lines provided by existing shelter belts. A row of fast-growing pittosporums, hoherias, ribbonwoods, pines, macrocarpas, and eucalyptus trees will blend in with similar vegetative mixes found in the surrounding shelter belts neighbouring the site. The re-introduction of native species in the front two rows of planting provide a variety of species that allow for both visual interest to be maintained along extended lines of planting.
- 23.5 For passing motorists, pedestrians (including walkers and runners using the new shared path between Curraghs Road and Dawsons Road being constructed as part of CSM2), cyclists and train users (TranzAlpine), views

will be possible of the proposed bunds, landscape plantings as well as a possible intermittent view into the site via the entrance opening as they move past the site. Open, intermittent views will also be possible for southwest bound motorists using the new CSM2 overpass which is currently under-construction although these views will be fleeting, intermittent and not in the direct line of sight. An internal bund is proposed at the entrance, and combined planting will restrict views into the site. The magnitude of change for these visually sensitive receptors is low, resulting in less than minor visual amenity effects.

Potential effects on landscape values

24 I provided an assessment of the Proposal's effects of landscape values, as informed by the objectives and policies of the Selwyn District Plan, at section 3.3 of my LVIA. I continue to support my assessment and associated reasoning. In summary:

- 24.1 The site and surrounding area will maintain a rural character throughout the project.
- 24.2 Quarrying is a rural activity as defined under the Canterbury Regional Policy Statement. The use of bunding and vegetation, combined with the staging of excavation and rehabilitation, to build upon the rural amenity of the surrounding landscape, will mitigate adverse effects of the development. By providing a visual screen, the proposal's scale and works are mitigated from having any effect of substance on the surrounding visual amenity values.
- 24.3 Any buildings/offices will be of a scale that will not be greater than the permitted building density in the Rural zone, adhering to bulk and location requirements. During operation, the quarry will have a lower level of built form than if the site were to be developed to its expected density under the current District Plan standards, with the open character of the site retained and generally a low-level of building density.
- 24.4 Proposed plantings will not create any shading issues. A maximum height of 5m for plantings on the Jones Road frontage is proposed to mitigate any potential adverse effects from shading on the road carriageway.

Additional comments on landscape and amenity values

- 25 In addition to matters covered in my LVIA, I provide the following additional comments regarding matters relevant to landscape and amenity values.
- 26 In terms of amenity values, focusing on aesthetic coherence, the receiving environment has a medium sensitivity to change. The area is characterised by a low density-built form, large pasture fields and transport infrastructure. Types of views

are mixed with open expansive views available to the Alps but equally common are views contained by well-established, often dense shelter belts. Housing in the area is generally surrounded by well-established vegetation, assumed to have been grown to provide shelter from strong winds, with the closest suburban residential development being Templeton, approximately 700m away to the east. It is the straight roads, rectangular shaped fields and linear shelter belts which provide the aesthetic coherence to the area, allowing an eclectic group of land-uses to be located close to one another without greatly affecting the area's aesthetic coherence or people's amenity.

- 27 While traffic is not a landscape issue, the movement of cars and the scale of road infrastructure in the immediate area is having a significant effect on aesthetic coherence and rural amenity values. Road markings, increased lane width, hard road shoulders, signage and lighting all contribute to reduce the 'ruralness' of an area and have a direct effect on people's appreciation of pleasantness. Traffic movements on Jones Road and SH1 have increased significantly over the last few years, with Jones Road no longer a quiet rural road, due to the residential, industrial and commercial growth of Rolleston, i-Zone and the inland Port. Given existing vehicle movements in this environment the vehicle movements generated by the quarry are unlikely to have a marked effect on people's amenity of the area.
- 28 An existing dwelling towards the centre of the site will be removed, but given its large setback from the road the dwelling's effect on creating a sense of community was minimal. With the development of the bunds and associated landscape plantings there will be a change in the openness of the rural landscape but not one which is considered either negative or positive in terms of amenity – the area will still be largely free of built structures.
- 29 Light pollution is an area which could potentially affect local residents' amenity of the area, but as mentioned earlier, the receiving environment is going through a significant amount of change with the development of CSM2 which will be lit to NZTA requirements. Lighting from the quarry will comply with the requirements of the District Plan. I have also read the Lighting Report prepared by Pedersen Read dated 9 August 2019, which states there will be negligible or indiscernible over-boundary spill light on adjoining properties.

How potential effects can be avoided, remedied or mitigated

- 30 In section 4 of my LVIA I described suggested mitigation measures to avoid, remedy or mitigate any potential effects on landscape character, visual amenity and/or landscape values. My description of mitigation measures remain accurate. In summary:

- 30.1 Proposed bunding at the Jones Road entrance is designed to prevent views into the site from Jones Road and users of the new shared path and the TranzAlpine line as they move past the entrance. Proposed plantings will achieve a solid screen while also improving biodiversity.
 - 30.2 A 3m high earth bund with a 1m wide flat top is to be constructed around the entire site to prevent views into the site. Immediately following construction, the bunds are to be sown with grass or hydro-seeded and watered regularly to ensure grass cover is established immediately after construction.
 - 30.3 Existing tree planting along the road boundaries of Curraghs Road and portions of Dawsons Road shall be retained, with bunding constructed behind these plantings.
 - 30.4 The proposed plantings will align with existing where required and will be a mix of exotic and natives to achieve a solid screen while also improving biodiversity.
 - 30.5 The final internal slopes of the quarry will be formed to provide an irregular form to the edge of the quarry but at gradients which allow for the placement of topsoil and grass growth.
 - 30.6 Following completion of quarry works, in the proposed staged approach, topsoil will be applied over the finished surface level and planted in accordance with the Draft Quarry Rehabilitation Plan prepared for the site.
 - 30.7 Rehabilitation of the site may result in the removing of the bunds but it is likely the bunds and planting will be retained to maintain biodiversity enhancements post completion of quarrying.
 - 30.8 After the completion of works on site, the site could be subdivided into a number rural and rural/residential lots or operated as a single farm, as per the current District Plan. The rehabilitation plan allows this flexibility. The installation of linear fence lines, planting of boundaries with shelter belts, and the eventual construction of residential dwellings and farm buildings would re-establish the rural character of the receiving environment.
- 31 A Landscape Management Plan (**LMP**) has been prepared for the project to ensure the health and maintenance of the planting. This includes details regarding topsoil specifications, irrigation, weeding, and the length of the establishment period. It requires annual checks of the bunds and landscape planting to be carried out in March of each year with a site record, including photos, supplied to Selwyn District Council for their records.

- 32 Fulton Hogan has proposed to construct a gravel shared path around the extent of the quarry site, linking through to Templeton. This is not required to address landscape or visual effects but to improve connectivity and recreational opportunities for residents. On Carraghs, Jones and Dawsons Roads the path would be constructed in the road reserve to make it as useable and open (CPTED)¹ as possible.

Landscape and visual issues raised in the s42A Landscape Report

- 33 I have read the s42A Landscape Report and have the following comments.
- 34 I disagree that the proposal will have a high magnitude of change post rehabilitation on rural character and low to moderate on rural amenity in the short term. I consider that landscape and rural character changes can largely be internalised within the site once the bund and landscape plantings have been implemented. All aspects of the receiving character, with the exception of topography, can be maintained. There are no effects on vegetation as there is no vegetation of note on the site, and where shelter belts exist these are to be retained. There will be little change in the built form of the site. Likewise with amenity, especially visual amenity, any effects can be internalised within the site with views into the site screened by the proposed bunds and landscape planting. Post rehabilitation of the site, the placement of 300mm of topsoil across the new surface will allow for rural, pastoral activities to be undertaken. The only noticeable change to rural character will be the changes to the topographical elements. Post rehabilitation there will be no adverse change to rural amenity.
- 35 I partially agree with the following comment by Mr Robertson but disagree in terms of maintaining rural character. Mr Robertson states that *'While the planting of 14,000 native plants and re-grassing of the site is a positive effect of the proposal it is not a significant positive effect nor is it a notable contribution to the enhancement of the indigenous habitat in the wider rural landscape or on rural character and amenity. Perimeter planting aside, the proposal does not include any additional enhancement/betterment of (the) site and as a result there will be no positive landscape effects of note, which is a significant lost 'end use' opportunity.*
- 36 I consider this opportunity still exists but it was never the intention of the landscape plantings to achieve an enhancement of indigenous habitat, although this will be a minor (positive) by-product. The mix proposed is suitable to establish necessary screening in a relatively short time frame, is consistent with existing plantings in the surrounding rural area (which is highly modified in terms of vegetation), and allows the site to return to a rural use following rehabilitation. In my opinion, maintaining rural character is the most important imperative for the proposed plantings.

¹ CPTED – Crime Prevention through Environmental Design

- 37 I disagree that the long-term effects of the proposal are moderate for rural character and that it is '*difficult to consider the viability of future landuse (especially pastoral) with any real degree of certainty*'. Once rehabilitated, the quarry can return to rural activities with the only change in character relating to topography. For all intents and purposes, the site will be productive farmland with a lack of built form. A rural character landscape can be a modified landscape, and often is, with importance placed on the working, productive capabilities of the land.
- 38 In regard to growth rates of proposed landscape planting, the photo below taken recently (14 August 2019) shows some existing plantings implemented as part of the Pines Wastewater Treatment Plant near Rolleston. A mix of native and exotic tree species were selected to provide a substantial screen and contain irrigation spray. The plants were planted in September 2011 and the landscape works included an irrigation system for the first two years of establishment. The plants currently range in height from 2-18m after 8 years growth. The larger trees are *Eucalyptus cordata* at 16m centres with a mix of native and exotic species forming the understorey. The plantings do not appear out of character with the surrounding rural environment, and in my opinion provide a positive level of amenity to the road corridor.



Figure 1: Photos taken 14 August 2019 showing planting along Burnham School Road, Rolleston. The species mix is similar to those proposed for Roydon Quarry



Figure 2: Photos taken in October 2018 of the existing plantings and bund along Miners Road. The pittosporums create a complete screen along this frontage without adversely shading the carriageway or adversely affecting the rural character of the road

39 I have read the consent conditions proposed in the Section 42A report and have the following comments:

39.1 Condition 10 – Planting has already commenced on site as it is a permitted activity. Requiring the certification of the final LMP by Selwyn District Council prior to any planting being undertaken appears to be unnecessary when the LMP has already been incorporated into the consent application for consideration.

39.2 Condition 13 - I am of the opinion, that where possible the proposed path should be located within the road reserve. Plantings have been established already along the Jones and Dawsons Road frontages immediately adjacent to the open style post and rail fencing. Along Curraghs Road there is a substantial existing shelter belt, which if the path were located in the site would either require removal or would require the path to be on the inside. From a CPTED perspective, this is not ideal as walkers and runners will not be visible from the road, being contained between the shelter belt and the proposed bund with landscape planting. Given the nature of the path for public use I recommend it remains in the road reserve. Fulton Hogan have offered to maintain the path to a suitable quality without cost to the council;

39.3 Condition 13 – Bunding - e. – While the term ‘tidy’ can be subjective, the purpose of the grass cover is to soften its appearance. It is not anticipated that the bunds will be maintained to a ‘golf course’ standard with a high level of stewardship but will be maintained to a standard that ensures good grass health, does not create a fire risk, and any weed species are removed (i.e. gorse, blackberry or broom);

- 39.4 Condition 13 – Planting - b. and c. – All planting and bunds are to be established prior to the commencement of excavating Stage 1.

Submitter concerns regarding landscape and/or visual effects

- 40 I have read all of the submissions relating to:
- 40.1 potential visual impact;
 - 40.2 the loss of amenity;
 - 40.3 rural amenity not being maintained;
 - 40.4 requests that the proposed bunds and plantings be established prior to any excavation work occurring on site;
 - 40.5 changes to the open character of the site and loss of views of the mountains or to the Port Hills due to landscape planting;
 - 40.6 concerns that landscape planting will not be adequately maintained;
 - 40.7 concerns that the proposed walkway will be unsafe and will not be used by local residents; and
 - 40.8 light spill at night.
- 41 My LVIA and my evidence above responds to concerns regarding visual impact and amenity. I comment on the remaining issues below.
- 42 Some submissions request that bunds and plantings be established prior to excavation work occurring. As outlined above, the bunds and landscape plantings are to be established around the entire site before excavation of Stage 1 commences. Using a combination of bunds and plantings is shown to be an effective method to successfully screen internal workings from outside, especially with the flat nature of the receiving environment. As stated in the Council's Section 42A report, I do not consider the bunds themselves to have a negative visual impact.
- 43 Some submissions express concerns about loss of views to the mountains or the Port Hills. Open views of the mountains and Port Hills are not always possible, often blocked by large, well-established shelter belts. There are no restrictions on planting shelter belts in the rural zone of the District Plan. Existing shelter belts are to be retained and maintained.
- 44 Some submissions are concerned that landscape plantings will not be adequately maintained. These have been addressed in the LMP which requires yearly monitoring of the planting in March with any defects to be addressed in the following

planting season. Following the intent of the LMP and based on experience, the most critical time for the success of the landscape planting is in the first two years. This is why irrigation and rabbit guards are proposed, allowing plants to establish and grow. After this period, the planting should largely become self-sustaining. A mix of native and exotic species has been deliberately chosen to provide a balance of fast and moderately fast growth rates, and heights to create different canopies. I consider the planting composition suitable to maintain rural amenity along the adjoining road corridors.

- 45 Some submissions express concerns that the proposed walkway will be unsafe and will not be used by local residents. The proposed walkway is a considerable improvement on current walking facilities in the immediate area and provides an ideal, safe recreational facility given there are few intersections due to the large underlying block form.
- 46 With regards to submitter concerns regarding light spill at night, I have read the Lighting Report prepared by Pedersen Read and agree with their determination that effects of two lights 500m from the property boundary will have negligible over-boundary spill based on my experience assessing visual impact.

Conclusion

- 47 Overall, I consider that with the implementation of the proposed mitigation measures, the proposal will result in the following residual effects:
- 47.1 In terms of landscape character and values of the area, the proposal will result in a moderate magnitude of change resulting in adverse effects on the existing landscape character and values during operation of the quarry. The greatest change will be on the topographical character of the plains with the creation of irregular internal slopes and a lowered ground level up to 10m below the original ground level. The residual effects reduce to low (less than minor) with the rehabilitation of the site to allow for rural pastoral purposes.
- 47.2 In terms of visual amenity, the proposed site can be seen from a number of vantage points in the receiving environment, including residents located to the north and west of the proposal, but given the proposed mitigation measures and limited existing views, any residual adverse effects are considered to range from less than minor to indiscernible.
- 47.3 I am confident in the success of the proposed mitigation measures to mitigate adverse effects to minor or less, and for the site to be rehabilitated to allow for rural activities. During the operation of the quarry, and following

rehabilitation, the site will retain a strong rural character which is in keeping with the surrounding environment.

Dated: 23 September 2019

David Compton-Moen
Director/Landscape Architect/Urban Designer – DCM Urban Design Ltd

ANNEXURE 1

CURRENT PLANTINGS

Site Notes: 21 September 2019

Two rows of landscape plantings have been completed along the Dawsons and Jones Road frontage. Species include, but not limited to:

- Pittosporum eugenioides – lemonwood
- Phormium tenax – NZ flax
- Podocarpus totaraTotara
- Griselinia littoralis – broadleaf
- Cordyline australis – cabbage tree
- Poa cita – silver tussock

The plant rows are staggered with plants at 2m centres with the largest plants being approximately 800mm.



Photos taken of the plantings which have been undertaken along Dawsons and Jones Road

ⁱ P19, paragraph 2 Underlying Geology -Landscape and Visual Assessment – Review, Beca (30 August 2019)