

Decision No. A 153 /2006

IN THE MATTER of the Resource Management Act 1991  
(the Act)

AND

IN THE MATTER of an appeal under section 120 of the Act

BETWEEN BROOKBY QUARRIES LIMITED

(ENV A 196/05)

Applicant/Appellant

AND

MANUKAU CITY COUNCIL

Respondent

BEFORE THE ENVIRONMENT COURT

Environment Judge J A Smith (presiding)

Environment Commissioner D H Menzies

Environment Commissioner S J Watson

Hearing at Auckland on 17-21 July and 22 August 2006

Appearances

Mr R E Bartlett for Brookby Quarries Limited (**Brookby**)

Mr N D Wright and Ms A A W Hogg for the Manukau City Council (**Manukau City**)

Mr R B Brabant for Mr and Mrs Reid, Mr Oates, Mr MacLean, and Whitford Residents  
and Ratepayers Association and the Ara Kotinga Residents Group (collectively  
referred to as **the Residents**)

## DECISION

### *Introduction*

[1] Brookby seeks to increase the number of truck movements to and from their quarry in order to more fully utilise their existing quarry consent. Brookby appeal a refusal of consent for an increase in truck movements.



Currently there is a maximum limit of 90 truck movements per day, from Monday to Saturday inclusive, to a total of 300 truck movements per week.

[3] Brookby Quarry is located at the end of Kimptons Road in the western foothills of the Hunua Ranges, 3-4 km northeast of Brookby, in the Clevedon Ward of Manukau City. The quarry operations commenced 50 years ago in 1945 under different owners and have continued since then. Kaipara Limited purchased Brookby Quarry in the 1990's. Brookby Quarries Limited is a wholly owned subsidiary of Kaipara Limited.

[4] The quarry site totals 37.5 hectares comprising Lot 1, DP 93001 and Lot 1 DP 187529 and access is gained to the site by a right of way through Lots 1 and 2 DP 171172. The quarry is zoned Rural 1 under the operative Manukau District Plan.

[5] The resource consent application seeks to increase the number of quarry truck movements onto or off the site to a maximum of 36 truck movements per hour, a theoretical maximum per week of 360 per day or 1,800 truck movements per week (900 laden trucks departing the site). The impact of this is to increase six-fold the theoretical maximum tonnage that could be removed by road from the quarry weekly. The theoretical annual volume could increase from around 200,000 tonnes to approximately 1.2 million tonnes (MT). The existing consent would permit quarry production at or near this volume while complying with conditions relevant to adjoining owners, including noise limits on boundaries

[6] This appeal arises from a refusal by a Manukau City-appointed commissioner to permit the increase in truck movements. The hearing focussed particularly on the impacts of noise from the trucks, and effects on the character and amenity of this rural area.

### *The application*

An application was made for variation of the existing consent under section 127 of the Act. Originally the application was for up to 900 truck movements per day based upon achieving relevant noise limits of 55 dBA  $L_{eq}$  at the nearest residential interface. This, in turn, was based upon no improvement in the acoustic screening of relevant



critical properties, which were identified as the Reid cottage and the Stehr house. With an acoustic wall or bunding, a significantly higher level of truck movements could occur whilst still achieving a 55 dBA  $L_{eq}$  at the relevant buildings.

It was this application which was refused by the commissioner. In preparing for the hearing before this Court, Brookby significantly reduced the scope of the application. Brookby now seeks a maximum of 36 trucks an hour over a period of ten hours per day on five days per week.

The Brookby application was prompted by the need to dispose of 700,000 tonnes of clay and brown rock overburden<sup>1</sup> (for which there is currently a demand) as well as to supply the increasing demands for aggregate.

[10] There were a number of changes to the conditions and proposals incorporated within the variation application to attempt to avoid, remedy or mitigate adverse effects. New conditions 4, 8 and 10 to the existing consent were sought as follows:

New condition 4:

*That there shall be no more than 36 quarry truck movements (18 in and 18 out) per hour. No quarry truck movements may take place on Ara Kotinga Road. Kimptons Road shall be the sole route for any quarry truck movements to ingress or egress the public roading network. The maximum size of any truck transporting aggregate from the Quarry along Kimptons Road shall be 50 tonnes (gross laden weight).*

New condition 8:

*The hours of operation for on-site quarry operations (including extraction, operation of machinery, but excluding blasting, load out activities, maintenance works and quarry truck movements associated with load out activities) shall be as follows..*



Mr S Riddell in cross-examination.

*Monday - Friday*            *0700 hours to 1630 hours*  
*Saturday*                    *0700 hours to 1200 hours (noon), except there shall be  
no overburden removal activities during this period.*

New condition 10:

*The hours of operation of load out activities and associated "quarry truck movements" shall be as follows.,*

*Monday - Friday*            *0730 hours to 1730 hours.*

Other conditions or alternatives would be necessary to achieve the amended proposal before the Court but no wording was provided.

[11] Key aspects of the amended proposal are:

- (a) the cessation of truck movements on Saturday and reduction in hours of truck movements on Monday to Friday to between 7.30 am and 5.30 pm;
- (b) operations at the quarry on Saturday are reduced to grading from pit sources only, rather than removal of over-burden and general preparatory activities;
- (c) significant upgrading of Kimptons Road to achieve a sealed width of some 3.5 metres per lane, with one metre sealed shoulders (nine metres);
- (d) an offer of acoustic fencing and/or bunding on the properties of residents who are concerned about noise;
- (e) a voluntary code to control drivers using the quarry to reduce road speed, noise and interference with residents;
- (f) installation of dust suppression methods, including watering loads, particularly of over-burden and requiring fixed coverings for trucks carrying soil over-burden (Pap).



*The status of the application*

[12] All parties agreed that the application is discretionary and that the criteria of section 104 apply. There was some debate as to whether it was a variation consent under section 127. The parties also agreed that the 2003 version of the Act is the applicable version for the purposes of this decision. Accordingly we are directed to the provisions of section 104(1).

*The parties*

[13] Brookby Quarries Ltd operate their quarry in conjunction with a newly acquired holding area for material storage in Tamaki, some distance from this site. Brookby holds an existing land use consent (P17070) for quarrying. A feature of the operation is the extent of buffer land around the quarry, which was acquired to secure long term operation.

[14] At hearing the Council accepted that the modified proposal would result in noise from traffic not exceeding 50 dBA  $L_{eq}$  (1 hour). Their case was that this criterion was not the correct basis for assessing the effects of the proposal and that adverse effects on the environment arising from the proposal justified refusal of consent. Manukau City had already agreed on a schedule of traffic works with Brookby and envisaged agreement on financial contribution elements for road upgrading and maintenance costs should the Court grant consent. Manukau City identified the sole 'factual' consideration at issue between themselves and Brookby as being the acoustic effects of the proposed increase in heavy traffic. Even though the proposal before the Court was reduced in scale from the Council hearing, they supported that decision refusing consent.

[15] Mr and Mrs D and C Reid, Mr J Oates, and Mr B MacLean (section 274 parties) are neighbours of the quarry: all rural residential dwellers. Their concerns were the effect that the increase in heavy traffic would have on their amenities and, in particular, the effect of noise of trucks on their enjoyment of the outdoors. They raised issues of safety on the roads and driveways, truck fumes, vibration caused by trucks, and concerns of impacts from an increase in quarry operations. They also raised safety issues relevant to horse riders on the road margin and pedestrian safety.



[16] The Whitford Residents and Ratepayers Association (Inc) and the Ara Kotinga Residents Group were also section 274 parties. They presented evidence through Mr P Alderdice, a committee member of the Ratepayers Association. Their case was mainly based on traffic safety, dust and loss of amenity, and countryside living impacts. They also raised other issues such as market demand and the quarry activity levels.

*The issues*

[17] A number of witnesses for parties, including those for the Council, referred to whether or not the effects of the activity were minor. For example, Mr M T Simpson, a planner, in his evidence-in-chief of some 50 pages and over 100 pages of attachments, concludes:

*. . . the effects of the proposal on the acoustic environment would be more than minor and would comprise a significant adverse effect on amenity values.*

[18] Considering all the evidence for Manukau City and the objectors in the round, there appears to be an assumption that if expert witnesses conclude there are adverse effects, it follows that consent should be refused. Effects are one of the matters that the Court must consider and adverse effects are part of that assessment. Although the extent of these adverse effects was a matter in dispute before the Court, the following was not in dispute:

- (a) the proposed increase in the numbers of vehicles will create an adverse effect both in terms of the noise environment and detraction from the character and amenity of the area;
- (b) quarrying is seen in the Plan as an activity generally appropriate within the rural area (as a rural activity) but not on every site or at any scale;
- (c) quarrying is a discretionary activity but is already established as an existing use on this site.



[19] The issue therefore for this Court is whether or not the present application goes too far in compromising the noise environment and rural character and amenity of the

area in achieving the legitimate purpose of operating the quarry. Chapter 12.14.1 of the Operative Plan sets out general criteria for discretionary activities. These are annexed as “A”. Tellingly they include (h) impacts on quarries not of quarries. Thus the Plan seeks to ensure quarry operations, including on a lawfully established mineral extraction site, are not unduly restricted by reverse sensitivity issues for new accommodation uses. This requires new accommodation to be considered as to its achieving a raft of criteria (covering one page) taking into account the actual quarry operations. Special criteria do not apply from 12.14.2 but similar activities (Cleanfill 12.14.2.4) do. Of these criteria:

- 12.14.1(a)(i) detraction from rural character and amenity;
- (v) effect on physical and natural environment [nearby];
- (vi) traffic generation;
- 12.14.1(b)(iv) effect [of trucks] on visual character;
- 12.14.1(d)(i) effect [of trucks] on recreation - cyclists and horse riders

are directly relevant.

12.14.1(h) is also of interest though inserted to avoid reverse sensitivity issues.

[20] Some aspects of the application did not appear to be seriously in dispute. So far as Manukau City was concerned, impacts of traffic, roading, dust and noise from the quarry operation itself and vibration effects associated with blasting were essentially non-contentious. The residents raised some quarry-related issues but were primarily concerned with the effects of the increased number of trucks proposed.

***The variation application***

[21] This application was made as a section 127 variation application and was treated, at the first instance, in that way. Manukau City raised issues as to whether or not the application should be treated as an application in whole for an entirely new activity. Mr Brabant for the residents contends that the application fits within the scope and purpose of section 127 for conditions, and accordingly should not be treated as a new application.



[22] We have concluded that not a great deal turns on this issue. Mr Bartlett for the quarry operators accepts that it is open to the Court to change any relevant conditions of the existing consent it considers necessary to properly address the application before it. For example, he accepted that it would be open to the Court to impose a maximum extraction volume limit on the quarry if it were otherwise minded to grant an increase in truck movements. We have proceeded on this basis.

[23] It cannot be the intention of the Act that, through section 127, a party can develop by successive applications a situation far in excess of that which might have been granted as an application had all matters been considered at the same time. In this case Mr Bartlett accepts that the Court must be content that the overall activity meets the purposes of both the Plan and the Act. Thus we cannot see that an applicant would gain anything by dealing with an application for variations under section 127 over a new application.

[24] In this case, however, Brookby is not seeking to change the quarry operation but to enable them to transport a greater amount of material from the site. Currently the quarry is able to produce a significantly greater amount of material than can be removed by trucks under their existing conditions of consent.

[25] Some significant factors seem to have come in to play more recently:

- (a) the closure of other quarries in the region has led to greater demand for material from this quarry;
- (b) Brookby has obtained a consent to develop a stock-pile/storage site at Tamaki. This would allow for a 24 hour seven day a week supply off-site, thereby smoothing the delivery requirements of use off-site; and providing for an unforeseen upsurge in demand. This also enables the quarry to provide for demand on the weekends at Tamaki, provided material can be moved to the stockpile during the week;
- (c) the quarry has moved into a new excavation area on the quarry site and thus has been involved in removing a great deal of over-burden to gain access to new materials for the next development phase;





- (d) there is a significant amount of overburden to be moved to expose rock beneath. If this cannot be removed from the site, it must be relocated within it. This leads to on site fill/compacting activities with commensurate effects.

[26] The estimate of the volume of overburden is around 700,000 m<sup>3</sup> annually for this stage of site development. To date this has been stockpiled as till on the site because of the limitation on vehicle movements. If all this material could be removed from the site, it would require some 24,000 vehicle movements. At the current levels of 300 truck movements per week (150 laden), this would take over 18 months to dispose of compared with something in the order of six months if the increased vehicle numbers are permitted. This assumes nothing but overburden was carted at maximum permitted volumes.

[27] The transport and spreading of fill from the current working face to a nearby valley already appears to be imposing some constraints on the quarry, not only in terms of complaints but also in terms of available areas for the fill.

***The locality - the existing environment***

[28] The quarry is in the Brookby area between State Highway 1 and Whitford. The general area is zoned Rural 1 within the Manukau City Operative Plan and broadly exhibits features of a rural locality within a rural working landscape. There is a quarry buffer area marked around the quarry on the Planning Map 62, though the quarry and buffer remain Rural 1. Overall the area is either in native bush, production forestry, pasture or quarry. However, like other rural areas throughout the country, it reflects the diverse mosaic of features that make up rural New Zealand. There is a pervasive influence of residential activity, more noticeable on Twilight and Ara Kotinga Roads, but also on Kimptons Road. There is a diversity of general rural activities, including a number of horse training establishments, an equestrian centre, and a plant growing enterprise (Liberte Palms) on Kimptons Road.

[29] A more unusual feature of this part of the district is the number of activities which do not involve pastoral production. Clevedon Quarry, which is around four to



five kilometres to the south-east, the Whitford Quarry (around two to three kilometres away) and the Whitford Landfill as well as forestry, animal boarding facilities and horse riding schools are all in this general area. A designation for another quarry commences around one kilometre from the buffer boundary of Brookby Quarry.

[30] In addition, the beacon for the Auckland International Airport No. 1 runway is sited near Ara Kotinga Road, less than one kilometre away from the site. We were told (and observed) that aircraft use the quarry as a point in lining up for the airport runway at Manukau. The 55 dBA  $L_{dn}$  airport noise contour shown in the Plan overlays lies several kilometres to the west of the site. Even if the noise effects from aircraft were experienced as individual aircraft events, there is nothing to indicate to us that there is a restriction of over-flights during night periods. We were advised of (and observed during our site visit) helicopter over-flight of the area. We understand this to be associated with a training school from Ardmore Airport.

[31] The quarry itself has a consent enabling it to produce noise up to 50 dBA  $L_{10}$  at its outer buffer boundaries, including a point adjacent to the Reid property. The permitted quarry truck movements are also part of the existing environment.

[32] Kimptons Road is a cul-de-sac and does not have significant traffic volumes. The heavy vehicles associated with the quarry constitute a large proportion of existing traffic movements and would be the majority if consent were granted.

[33] Kimptons and Twilight Road are well-formed sealed public roads. Twilight Road is shown on the Plan as a district arterial road but is not heavily travelled, with less than 1,000 movements per day.

[34] There has been a gradual build-up of residential activity throughout the area, bringing with it the inevitable impact upon roading. However, we understand that all roads are within their current design carrying capacity. The Plan does not set noise controls for traffic on roads.



*Existing environment overlain by permitted activities*

[35] In light of the decision of the Court of Appeal in *Queenstown Lakes District Council v Hawthorn*<sup>2</sup>, we heard evidence as to whether there was likely to be a future change in this environment. Overall it did not appear to us that the character of this area is likely to change significantly under the Plan. Although there are likely to be more aircraft movements to Auckland International Airport, these may be accommodated on a new runway and might not use the quarry as a mark-point. There is the potential for more residences to be constructed in the area, but the number likely to be directly affected by this proposal is relatively minimal. There is also likely to be a build-up in general road traffic levels over the years as a result of the intensification of permitted activities. Similarly the quarry is a well-established part of the rural character of this area and the continued exercise of this consent is part of *the environment* and *permitted baseline*.

[36] We note that the existing forestry area will need to be milled in some fifteen years and there is currently no restriction on the consequent truck logging movements.

*Rural character and amenity*

[37] This environment has rural character and amenity. However, our understanding of that phrase is somewhat different to that of a number of witnesses who appeared before us. We do not intend that phrase to indicate that the environment is necessarily quieter, more pristine or better than other types of environment, for example, urban. It simply exhibits features which are more consistent with rural zones:

- (a) agricultural activities;
- (b) agricultural noises (agricultural machinery, quarry machinery, trucks, stock, forestry and other);
- (c) less building coverage;
- (d) larger areas of pasture and tree coverage.



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<sup>2</sup> *Queenstown Lakes District Council v Hawthorn Estates Ltd & Ors*, [2006] NZRMA 424.

[38] Overlying this are the noise features created by aircraft and helicopters. Those, although not unique, are common in rural areas, as are the noises, effects and sights associated with the quarry. The Plan says at Chapter 12.2.2, page 5:

*While much of the rural area has a particular character and amenity values it is also an area where the natural and physical resources are used to sustain economic activity such as farming, forestry and quarrying. These activities in fact contribute to that character. There will be effects which some residents may find objectionable, but which are consistent with normal rural practice and which it would therefore be unreasonable or impossible to mitigate. An alternative approach is to reduce the potential for conflict by avoiding incompatible activities.*

[39] Issues relating to dust, for example, arise frequently in the rural area, and could therefore be considered typical of its character although perhaps not seen as a desirable attribute. The following are also rural features which may not be termed desirable:

- (a) rural weed and plant species;
- (b) roads without areas for pedestrians or cyclists;
- (c) narrow bridges;
- (d) waterways without riparian planting;
- (e) prominent residential buildings with little shelter or screen planting;
- (f) large utilitarian buildings and machinery prominently in view;
- (g) large areas of exposed soil - cropping, grazing;
- (h) animal noises and smells including cattle; separated calves; deer; bulls; ostriches in breeding season; piggeries;
- (i) cropping activities (i.e. preparing silage, stubble burning);
- (j) rectangular layout of paddocks, marked by fencing;
- (k) heavy truck movements for farming, forestry and quarrying;
- (l) machinery noise (tractors, cooling sheds);
- (m) sprays, fertiliser dressing or effluent spreading.

[40] Many of these features are typical or even expected within the rural area and they contribute to a person's appreciation and understanding of its amenity. The same



can be said of other areas, including urban areas, where certain features may be viewed by some as beneficial and by others as a detraction. An example might be footpaths in an urban area seen as providing access or, alternatively, as providing a non-impervious and unattractive element to the landscape. The vehicle movements associated with this quarry are seen as a negative or intrusive element by residents. By those involved in the contracting industry, for example, they might be seen as a sign of employment and economic activity.

[41] In this case we are aided by a Plan which is operative and relatively clear in the way it deals with these issues.

*The Plan provisions*

[42] We do not intend to identify in this decision all the provisions of the Manukau Operative District Plan which are relevant to this application. This was done for us by a number of witnesses. However, it is clear that the Plan recognises the tension between residential expectations within the rural area and the rural business expectations (i.e. that it is a zone in which goods are produced). The Plan recognises that quarrying is a legitimate activity within the Rural Zone. It recognises the potential tension that this activity can cause with persons living in the Rural Zone on a residential basis. That tension is a factor in this case. We refer to the earlier quotation at 12.2.2, page 5, to show a preference for the rural activity where the effects cannot be reasonably mitigated.

[43] The residents and residents' associations did not appear to represent people from the farming community. Rather, those individual residents who were section 274 parties were largely residents in a rural area. Some had larger than average residential properties which they described as farms but their concerns and focus were relevant to the residential amenities they experienced on their properties. The witnesses we heard held occupations not associated with the farming or the rural service community, and so may have had more difficulty coming to terms with the range of rural activities normally occurring in a rural environment.



[44] We have concluded that the Plan resolves the tension between activities in favour of legitimate rural activities, including quarrying. Within very broad parameters people residing in this Rural Zone must then accept that this is not an urban zone and that the rural activities within the Rural Zone have preference. The Plan indicates that there is a lower expectation of amenity where it conflicts with legitimate rural activities (including forestry and quarrying). This is subject to the important qualification that *reasonable* steps to avoid, remedy or mitigate the adverse effects must be undertaken. We have already described issue 12.2.2 and the relevant discussion. The issue identified is:

*Activities occurring in the rural area, or which seek to locate in the rural area, can have an adverse effect on the rural character, landscape qualities and amenity values of the rural area.*

This is reflected in objective 12.3.3 which states:

*To protect and enhance the rural character and amenity values of the rural area.*

As we have already noted, importantly this includes quarrying as part of that rural character and amenity values.

[45] Policy 12.4.6 states:

*Activities should not generate adverse noise, dust and odour effects not in keeping with the character of the rural environment.*

The explanation and reasons again emphasises the rural activities:

*The effects of activities such as odour, noise and dust will also be assessed to ensure that rural amenity values particularly the pleasantness of the rural area are not diminished. However, those choosing to live in a rural area where operating farms and forests exist must expect and accept a certain level of odour, noise and other effects which are characteristic of those activities and therefore contribute to rural character. However, those involved in primary*



*production activities also have a responsibility to take **reasonable** steps to avoid the adverse effects of their activities.*

[Emphasis added]

[46] We have emphasised the word *reasonable* to show that the Plan recognises a judgement must be exercised as to what level of mitigation is appropriate for rural activities. Although this area is not zoned as part of the Quarry Zone, several of the provisions of the mineral extraction activities (Chapter 17.8) are helpful in understanding this issue. Issue 17.8.2.1 notes:

*Mineral extraction activities have the potential to cause adverse effects on the environmental qualities of the City.*

Issue 17.8.2.2 also notes:

*Access to mineral resources can be affected by encroaching development which may create conflicts which impede the efficient long term extraction of mineral resources.*

The accompanying explanation comments:

*... Mineral resources are sourced from limited defined locations and distributed to a range of points of use throughout the City. The volume of trucks increases with distance from the resource with a consequent increase in adverse effects on such matters as traffic safety and noise.*

[47] Objective 17.8.3.1 notes:

*To protect the environment including people and communities from the adverse effects of mineral extraction activities.*

Policy 17.8.4.1 has two relevant provisions:



*Mineral Extraction Activities should avoid, remedy or mitigate adverse effects on the environment in a way that:*

- (a) minimises adverse effects on existing amenity values as far as practicable.*
- ...
- (e) keeps adverse effects of the transportation of industrial aggregates to an acceptable level.*

This introduces two more concepts beyond the use of the word *reasonable*, being *practicable* and *acceptable*. Again, we have concluded that these words have similar connotations in showing levels of judgement in reaching a conclusion as to the level of avoidance, remedy or mitigation necessary.

[48] From the residents there appears to be a general expectation that the general Rural Zones will provide a higher level of amenity for residents than Urban Zones. We are unclear as to the source of this expectation. It is not one reflected in the Manukau Operative District Plan. Practice within rural areas has meant that the preference for low intensity pastoral activities has resulted in relatively minimal impacts upon residential activities. However, the growing intensity of residential activity in the rural area has led to complaints and tension (i.e. between farmers and people complaining of silage, dust, spraying, machinery noises, cattle movements, dogs barking, etc). Here, we have an activity which has operated for some 50 years on a relatively low, scale with a consequent expectation by residents that it will continue unchanged. However the Plan contemplates changes to rural activities in the Rural Zone.

***Actual and potential negative effects of increase in truck movements***

*Noise increase*

[49] Evidence was presented by four acoustic experts: Mr G W F Warren, Mr N I Hegley, Mr J K C Cawley and Mr V C Goodwin.

[50] Marshall Day was engaged originally by Manukau City Council to prepare an acoustic report on the quarry's application. That report was overseen by Mr Warren, who was then invited by Manukau City's planning officer to support Manukau City's





decision to decline the consent before the Environment Court. Mr Warren declined this invitation and was subsequently engaged by Brookby to review the acoustic evidence.

[51] The Marshall Day report submitted originally to Manukau City (MDA report 04A259 (v2)) had considered the then level of 55 dBA  $L_{eq}$  one hour to be acceptable in the circumstances proposed. Mr Warren's opinion was that the 50 dBA  $L_{eq}$  one hour under the amended proposal with the new limit on truck numbers was a more stringent noise limit and one that would have no more than minor noise effects for residents. The Plan provisions are for a daytime 7.00 am to 6.00 pm noise limit of 45 dBA  $L_{10}$  and 65 dBA  $L_{max}$  at the notional boundary for household units and 50 dBA  $L_{10}$  and 70 dBA  $L_{max}$  for business and recreational activities. Both  $L_{max}$  are alternatively background plus 30. Importantly, the Plan contains no controls over vehicle noise on public roads.

[52] In cross-examination Mr Warren stated that a noise limit must be related to background noise generated, and his opinion was that it was inappropriate to set traffic noise limits lower than the normal activity noise. While the change in truck noise levels may be annoying to residents, his opinion was that people become habituated to noise levels and that noise levels generated by trucks also diminish generally with time as technology and road maintenance improves.

[53] Two joint statements were submitted in evidence: one containing evidence of Messrs Goodwin and Hegley and the other containing statements by Messrs Goodwin, Hegley and Cawley. The two joint statements were prepared as a response to the Environment Court's Practice Note for Expert Witnesses 2004. The Practice Note states that expert witnesses have a duty to confer with other expert witnesses to seek to reach agreement and to prepare and sign a joint witness statement on matters on which they agree and do not agree, and reasons for their disagreement. However, the reports presented tended to obfuscate rather than clarify matters. The witnesses did not appear to even agree on the evaluation method for noise levels and, while some matters had been agreed between parties, the joint statements were not particularly helpful. This was compounded by two of the experts' failure to provide clear evidence for the Court, relying heavily on the opinions of one of the residents.



[54] The issue for these experts was that the current noise environment on those sites is low. Thus is such a change (even if acceptable in general terms) reasonable? We agree that we obtain no assistance from the Transit New Zealand Guidelines for the Management of Road Traffic Noise - State Highway Improvements 1999 (the **Transit Guidelines**). More assistance is obtained from the existing quarry consent limit at the Reid boundary of 50 dBA  $L_{10}$  and the Plan provisions. When we consider the ability to reduce noise levels by acoustic walls and double glazing (should the Reids and Stehrs wish) we must conclude such a change is reasonable. We keep in mind the existing overflights, quarry operations and vehicle movements.

[55] Mr Hegley also submitted a separate statement as a consequence of issues raised by Mr Cawley since the preparation of the joint statement. Mr Hegley and Mr Cawley conducted field measurements near the Reid home and rented cottage, and Mr Hegley monitored noise from the quarry. This confirmed that the quarry was operating within their consent of 50 dBA  $L_{10}$  and that truck noise is not heard in the Reid front garden. The monitoring also established that at 30 metres from source the typical truck noise is 66 dBA  $L_{max}$ .

[56] The impact on the Reids, relevant to inside their house and in their garden and tennis court on the south side of their property, was assessed by Mr Hegley. He considered potential nuisance 'caused by truck noise, as opposed to the level set in the Plan of 50 dBA  $L_{10}$ . His opinion was that the maximum level that the Reids might experience in their garden is 54 dBA  $L_{max}$  with the maximum number of trucks proposed operating, (a level similar to the existing environment).

[57] This noise level, Mr Hegley said, could be controlled to a lower level if an acoustic barrier were to be constructed. An acoustic barrier positioned on the road boundary could control the noise level to 45 dBA  $L_{max}$  or less at the notional boundary of the Reid's house. Mr Hegley had calculated that a 1.8 metre high acoustic barrier could achieve a reduction of 9 dBA at the Reid cottage, and would also reduce other noise received from Kimptons Road.



[58] Brookby have offered to double glaze windows in the Reid house and cottage and install an acoustic barrier to minimise annoyance effects. The Reids appear disinterested in this offer. We did not hear from the residents of the Reid cottage.

[59] We have carefully considered the evidence of Mr Cawley and Mr Goodwin. There were deficiencies in their evidence, from apparent lack of understanding of their role to a reliance on the opinion of one witness without checking the opinion of the most affected residents in the rental cottage. While noise measurement is objective, the perception of noise impacts is a subjective matter which must consider the opinion of receivers. We also note that some people are much more noise sensitive than others. Noise level limits should reflect general standards for an area and the Plan. Acknowledgement of ambient noise levels as well as standard practice and sensitivities within the Rural Zone are matters relevant to noise evaluation. Importantly, Mr Goodwin did not offer an opinion on the appropriate noise levels for traffic effects, saying this was a policy matter for the Court.

[60] Overall we prefer the opinion of Mr Hegley who along with Mr Warren had originally recommended a level of 55 dBA  $L_{eq}$  one hour but now recommended a 50 dBA  $L_{eq}$  one hour limit to acknowledge the possible effect on amenity and concerns of residents. We accept this opinion. We consider that this is a conservative limit reflecting a reasonable, practicable and acceptable mitigation of effects. It recognises the legitimate interests of both the residents and the quarry operator. We note the proffering of further noise reduction methods. We consider that offer in itself is a reasonable, practicable and acceptable mitigation. If necessary we would have concluded that the levels after mitigation met the criteria of the Plan for mitigation, In these circumstances that is not necessary though we intend to require the offer to remain extant for a reasonable period if consent is granted.

#### *Road safety*

[61] The residents and the association raised traffic safety concerns although they did not present any expert evidence. Their concerns were that people riding on horseback to the pony clubs and equestrian areas may be frightened or injured by trucks on the road; that children and other pedestrians had little margin for safety on the road; and that the



increase in truck movements also created further danger at intersections and for residents emerging from driveways.

[62] Two traffic experts, one a Senior Traffic Engineer with Opus Consultants Limited, Mr T J Neill, presented evidence. Mr Neill said that the increase in truck numbers has the potential to give rise to traffic safety issues, and that as traffic volumes increase so do accidents. He had some practical suggestions concerning road upgrading which the applicant has agreed to undertake. His opinion was that cessation of truck movements on Saturday would benefit recreation such as cycling, horse riding and jogging, and recommended that the quarry should be limited to weekday operations and should be closed on public holidays. We concur with his view on these limitations and proceed on the basis they would restrict the consent if granted.

[63] Mr P R Brown has provided traffic management advice to Brookby since 1999. His view was that both relevant intersections would operate at an acceptable performance level with the increase in trucks proposed. He noted that the intersection, and Kimptons and Twilight Road were to be upgraded.

[64] The one-way bridge does impose a restraint. Mr Brown had researched manuals and, finding no definitive limit, had suggested a limit which would permit the bridge to function in an acceptable manner. The limit he had applied is 460 vehicles per hour, which in turn allowed for 92 trucks per hour, more than the 36 truck movements per hour applied for. Manukau City disputed this calculation and were concerned that an additional bridge or lane may be needed. A means to address this possible concern would be to include a review clause in the consent, to monitor bridge traffic and to address the matter after two years if there is an issue which needs to be resolved. Again we will proceed on the basis that there would be such a review clause in the conditions of consent if granted.

[65] We accept Mr Brown's opinion that the road network is able to accommodate the proposed truck movements with the road improvements planned, that it should be a Monday to Friday operation to protect recreational use in the weekends, and that there are no traffic related reasons why the consent should be refused.



*Dust*

[66] Manukau City evidence was that concerns had been expressed by residents about the potential for an increase in dust, and therefore a negative effect on air quality would occur as a result of the proposed increase in truck movements. However, their planning expert, Mr Simpson, expressed the opinion that dust effects can be adequately mitigated by the modification of existing conditions or the imposition of further conditions.

[67] Mrs C Reid had greater concerns about dust generation. She said that there was often dust inside and outside her house and that they collected their domestic water from their roof. She was concerned about dust generation from the road and its potential to contaminate their water supply. She said that dust was a greater issue in dry months.

[68] Brookby responded to this concern by two suggested mitigation measures which they offered as conditions of consent. The first was to establish a process to water all outward bound loads to suppress dust. In addition they offered to cover all loads of overburden, in addition to dampening their loads. Both measures they submitted would provide the residents with security against dust.

[69] We concur with Manukau City, in that there appear to be dust mitigation measures which would be effective. Again we proceed on the basis that such conditions would be included in the consent if granted.

*Rural amenity and pleasantness*

[70] The residents and Manukau City described the issue of the trucks to be both an issue of noise and one of impact on rural amenities and pleasantness. Residents spoke of the comparative peace and attractive homes and properties, in comparison to the impact of the trucks on mothers pushing prams along the road, children and others pursuing recreation in the countryside such as horse and cycle riding, and the enjoyment of tennis and gardening on their properties. All these pleasant pursuits they said would be affected by the six-fold increase in trucks on the road.



[71] The rural character and amenity were aspects that residents indicated they valued and to which they did not want to have negative change occur. They all appeared to value aspects of peace and tranquillity attributable to the countryside. However, before considering the effects on amenity, we note our comments made above on rural character and that this is a rural as opposed to a countryside living zone. We also note that pleasantness is a subjective matter and that opinions vary with context. This is confused by anticipation of what level of truck movements will occur.

[72] While planners have provided their expert opinion, they too note that pleasantness is a matter of perception rather than quantifiable aspects such as accident records or acoustic values. Mr Simpson, the planner for Manukau City, also noted that it is the perceptions of the residents which are important in assessing impact on amenity values and that observations and perceptions of the level of effects from existing activities are valid.

[73] The residents expressed concern that the noise would become more continuous and would have even greater impact on amenities than intermittent noises.

[74] We have considered the views of the residents as well as those of the acoustic witnesses, particularly Mr Goodwin, who relied on the perceptions of the residents. We agree, and it was not contested, that there will be an impact on amenity. We conclude however that the effects will be consistent with those expected in the Rural 1 zone under the Plan. We have also considered the effects with respect to the perception of openness and spaciousness in this area. Were the perception of noise effects on amenity the sole consideration, then the expected degree of change would not affect the balance of our decision. However, we also consider overall effects on amenity in a wider sense. On balance we consider the effects are reasonable and the mitigation practicable and ones which minimise adverse effects.

[75] Another aspect of amenity raised was that of recreation and pleasantness. We accept evidence from residents that there are perceived conflicts between recreational walkers and riders and that horses and cyclists do not fit well with heavy trucks. We view the offered mitigation of no transport of material on the weekend as being a significant mitigation. While cyclists and horse riders will still need to address the



safety hazard of speeding cars and other traffic, they would not face the Brookby trucks on the weekends, when recreation use is highest. We do not accept that the effects of increased trucks midweek, but removal of trucks on Saturday, will have a marked negative effect on amenities.

*Cumulative effects*

[76] Two different types of mooted cumulative effects were drawn to our attention. The Whitford Residents referred to the effect that an increase in production from the Whitford Quarry would have in conjunction with traffic effects from the Brookby Quarry. However, traffic engineers' opinions were that the roads had the capacity to carry the proposed increases.

[77] There was also concern raised by Mr Simpson, as a result of residents submissions, that an increase in trucks would in turn lead to an increase in activity at the quarry, resulting in further dust, noise and vibration and this would lead to a cumulative effect on amenities.

[78] The quarry has an existing consent which has conditions limiting emissions from the quarry. Expert evidence was that the quarry is currently operating within their consent. Manukau City monitors this consent so no cumulative effect could be anticipated within the bounds of this consent. There is no application to modify the quarry operation, but only to change conditions relating to truck movements.

[79] We accept that an annual tonnage limit would clarify the maximum scale of activities envisaged for road traffic associated with the quarry. However, we do not consider we should dictate overburden/aggregate volumes. The appropriate control relates to the 1.2 million tonnes annual tonnage (rolling annual total) taken by road from the quarry. We agree a condition in the consent would clarify this aspect of the operation and proceed on the assumption that a condition will be inserted if consent is otherwise appropriate.



[80] Our opinion is that there will be no negative consequential or cumulative effects that are more than minimal with an annual tonnage condition for road transport of 1.2 million tonnes.

*Positive effects of the proposal*

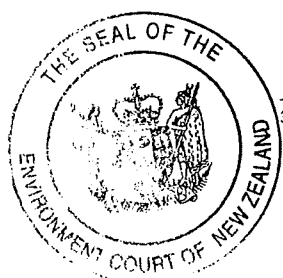
*Road upgrading*

[81] Manukau City agreed that road maintenance is overdue on Kimptons and Twilight Roads. This may have exacerbated the concerns of the residents as evidence was presented that the noise of un-laden trucks hitting potholes was particularly annoying. Manukau City had been awaiting the outcome of this consent application in order to base upgrading on anticipated use (and presumably to negotiate cost sharing should approval be given). Mr P R Brown, the traffic expert called by Brookby, agreed that the standard of road formation proposed was superior to the current formation and to normal standards for this type of road. The improvement works planned include intersection upgrading, increasing the width of traffic lanes, curve delineation and advisory speed signs, improving the night time delineation of the route and improving the bridge approaches.

[82] This upgrading work would improve safety standards for all users and would be of benefit to recreation users of the road such as cyclists in the weekends. Although we do not attribute an overwhelming benefit to road upgrading as maintenance is due whether approval is given or not, the upgrading will still be a positive effect.

*Infrastructure development benefits*

[83] While the residents disputed the need for Brookby to increase their production, evidence was presented that there was a significant short-fall of aggregate supply in the Auckland Region<sup>3</sup>. This shortfall related to both volume and the particular quality of the metal.



Evidence of Mr S Riddell.



[84] Evidence was presented by Mr D N Hay for Brookby, that the high growth rate of Manukau City has resulted in a high demand for aggregate. He referred to the number of planned or current projects which required aggregate during their construction phase and stated that Brookby was able to deliver product to these markets efficiently owing to its location. He also noted the demand for clean fill in the area and drew our attention to Objective 17.8.3.2 which aims:

*To enable the efficient prospecting, extraction, processing, distribution and transportation of mineral resources.*

His evidence was that use of the overburden as a clean fill product, rather than treating it as an on-site disposal problem, would respond to market demand and be an efficient use of the resource. We agree.

*Benefit of local supply of material on use of the motorway .*

[85] At present 20% of the construction aggregates used in the Auckland region are imported, mostly from the Waikato region, at a significant cost for cartage<sup>4</sup>. There have been recent announcements by Government of a planned acceleration in the State Highway construction program for both Auckland and Waikato. In addition, the Auckland International Airport has plans for the construction of a second runway. This will create heavy demand and possibly an increase in cost of aggregate for Auckland. The evidence presented was that the most cost-efficient solution to this anticipated demand is a significant increase in aggregate production in Auckland. Brookby could make a contribution to supply of aggregate suitable for both highway and airport construction.

[86] Residents gave their opinion that the needed aggregate could easily come from beyond the region. Evidence from experts was that this was not economically efficient, and would create further traffic impact on the highway. In the broader sense issues of efficiency arise under section 7(b) as well as effects under the Act.



<sup>4</sup> Evidence of Mr J P O'Brien.

[87] Our view is that if a local supply can respond to increasing demands, and take pressure off longer haulage on the roading network, then it is a benefit we must consider. Brookby seems well placed to help to alleviate this issue.

### *Overview of Planning Regime*

[88] The Auckland Regional Policy Statement (RPS) was drawn to our attention and contains provisions which encourage mineral extraction for the development of the Region while avoiding, remedying or mitigating adverse effects on the environment.

[89] We note that we are considering effects arising from operation of an existing quarry and no concerns were raised over impact on coastal environment, natural or cultural aspects or elite lands. Nor would effects of natural hazards be exacerbated.

[90] The objectives and policies of the Operative Manukau City District Plan do not explicitly address quarrying activities in the Rural Zone. Quarrying activities are recognised in the Plan as an appropriate rural activity where the resource exists.

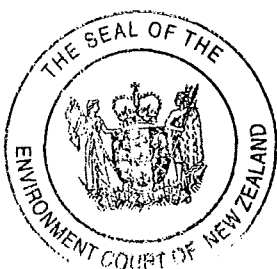
[91] Chapter 17 of the Plan addresses mineral extraction activities setting out objectives including the protection of people and communities from the adverse effects of mineral extraction activities. We also note Objective 12.4.6. Objective 12.3.3 states the following aim:

*To protect and enhance the rural character and amenity values of the rural area.*

[92] As discussed previously, rural character and amenity is formed through a variety of agricultural and forestry and recreational activities within the rural area, one of which is the existing quarry with its consented use.

[93] Policy 17.8.4.1 sets out matters which are relevant to this case. Clauses (d) and (e) are most pertinent. They are:

*(d) to minimise adverse effects on the existing amenity values as far as practicable; and*



- (e) *to keep potential adverse effects of the transportation of industrial aggregates to an acceptable level by controlling access, volume of heavy traffic and limiting choice of routes.*

[94] We have addressed the potential adverse affects on existing amenity values already, and note that the clause provides for this *as far as is practicable*, not to preserve current amenity.

[95] We did not hear any evidence about limiting choice of routes so conclude that this is not an issue. However we also conclude that if access is limited to weekdays and within a restricted time range to minimise conflict with regular commuter use, and the volume is limited by both numbers of trucks and the noise effects to 50 dBA  $L_{eq}$  one hour then policy (e) is addressed.

[96] A large quantity of other plan provisions were drawn to our attention. These include policies aimed at mineral extraction efficiency. The policies and objectives we have specifically referred to seem to encapsulate the issues we are addressing. In general terms they follow the theme of recognising the tension between residential and other rural uses by allowing reasonable changes in effects.

### ***Proposed Plan Change 1***

[97] An aspect of Plan Change 1 raised and considered by Manukau City had been the control of logging trucks in the Hunua Ranges, to limit the effect on amenity values and road safety. Mr Hay noted that Manukau City had decided against controlling logging truck numbers and had noted that Kimptons Road is an access route from Whitford Forest and that no limits have been put on truck movements from the Forest.

[98] We note however that forestry is a permitted activity whereas the current issue of quarry truck numbers is a matter for our consideration. We also consider that logging operations are different to ongoing quarry operations. Logging occupies a short, concentrated period of activity. In the end the permitted nature of that activity, although part of the environment, is not determinant of the amenity in this area.



*Proposed Plan Change No 8 Whitford Rural*

[99] A potential plan change to provide for countryside living in this general area was also raised and this change was aligned with issues of countryside living in the area of the quarry. However, the change does not apply to the area we are concerned with, which would remain Rural and so cannot be regarded as a countryside living zone. That proposed change is at an early stage and we cannot be confident the zone changes will remain intact through the statutory process. Change 8 is likely to have negligible impact on Kimptons Road. Traffic engineers did not regard this change as giving rise to concerns for this application.

[100] There appeared to be an assumption that, in due course, Kimptons Road would also become Countryside Living. We doubt that this area would ever be appropriate for use as Countryside Living given its proximity to the Brookby Quarry. The Auckland Regional Council has undertaken exhaustive work in identifying areas for future residential growth around Auckland. This area was not identified. We are concerned that legitimate rural activities (in this case quarrying) are being ignored by the residents, based perhaps on an assumption the activity will cease. Given that the quarry has well in excess of a century's resources we consider such an assumption would be ill-founded.

*Other matters*

*Transit guidelines*

[101] Mr Hegley referred briefly to the Transit Guidelines and Mr Simpson raised concerns if this was used as a basis of consideration. However, Mr Hegley made it clear that he had not relied on this guideline and we conclude that it is of minimal relevance. Certainly we have not relied on it in reaching a conclusion as to noise levels on and around Kimptons Road.

*Noise standards and research*

[102] We note that parties referred to noise standards, acoustic research and other data in their assessment of acoustic matters. We note that Mr Hegley was aware of this research in forming his opinion.



[103] Although we conclude the Transit guidelines have no applicability on this occasion, we do not see the 50 dBA  $L_{eq}$  as having invariable application either. Mr Hegley's proposition was originally that 55 dBA  $L_{eq}$  was appropriate at this site. Because of the quarry operations and the aircraft movements we can see some particular force in his propositions. When we take into account that significant mitigation could be achieved with an acoustic bund or wall provided by the applicant we would have been minded to such a resolution (i.e. 55 dBA  $L_{eq}$  with offer of acoustic fencing).

[104] In the result the proffered limit of 50 dBA L, (excluding any acoustic fencing) maintains particularly low noise level notwithstanding the other influences on the noise environment. This limit gives us a high level of confidence in the continuing noise environment for the rural area as being reasonable and acceptable.

*Consistency with other decisions*

[105] The Council acknowledge that, as a discretionary use, issues of integrity were of less force. This is not a situation where the discretionary status is akin to non-complying. However Mr Brabant argued that allowing this number of traffic movements per day would be inconsistent with other decisions such as Clevedon Quarry<sup>5</sup> where 200 movements per day for 35 days and for 200,000 tonnes per am-rum was granted; or Whitford at 200 per day with 100 per day for a six month average (total 500,000 tonnes). It is trite to say each case must be considered on its own merits. We note that for Clevedon Quarry, Warren Fowler only sought 200 movements per day (page 68 of the decision) and this was granted for only 35 days per year. For a volume of 1.2 million tonnes this would extrapolate to 1,200 per day or 600 generally. Accordingly such comparisons do not assist us in exercising our discretion beyond noting that traffic movements will be related to quarry volume removed.



<sup>5</sup> *Warren Fowler and Ors v Manukau City Council*, C213/99.

*Part II matters*

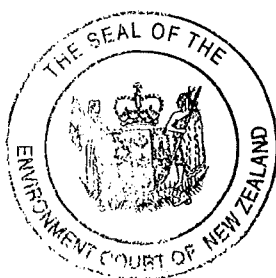
[106] The Court must come to a conclusion after assessing all relevant aspects in the light of the single purpose of the Act of promoting sustainable management of the natural and physical resources, and set out in section 5 of the Act.

[107] The single matter we have to consider is what should be the limit on truck numbers from Brookby Quarry. We note that the road has sufficient capacity for the number of trucks sought and traffic safety reasons were not held to be a reason for more stringent controls by the traffic experts.

[108] Acoustic expert advice was that the increase in noise would be to an acceptable level with respect to the current Plan limits, measured background levels, and current and anticipated effects. The major contention was that the effects of the increase in trucks movements proposed would have a more than acceptable effect on the amenities of the area, including effect on noise perception and enjoyment of recreational and rural amenities.

[109] We take into account that the Act is an enabling one while providing for avoiding, remedying or mitigating adverse effects. Brookby has reduced the original application with a reduced maximum noise effect of trucks, a limit on truck numbers as well as a limit of movements to week days with some time constraint to recognise commuter traffic needs. Brookby also propose road upgrading and mitigation to address the effect of dust. They have also offered mitigation measures including window glazing and acoustic barrier fencing to lower the noise effects of trucks at the most affected property identified: the Reid property.

[110] The mitigation measures proposed would address negative effects although we accept that there may be effects on amenities for some residents of the immediate area. We also take into account the existing and anticipated demand for aggregate as well as clean fill in the Auckland and Waikato region. We have concluded that this demand from the wider community would be efficiently met in part by approval of the increase in truck movements proposed.



*Overall analysis and decision*

[111] Brookby have sought a change in the conditions of their existing consent to permit an increase in truck movements to a maximum of 36 trucks per hour Monday to Friday inclusive 7.30 am to 5.30 pm. They have offered conditions relating to road upgrading and maintenance payments, dust mitigation and other measures.

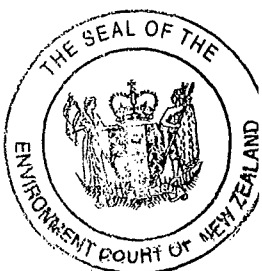
[112] We understand that conditions of consent would include:

- (a) maximum rolling annual tonnage limit (1.2 million);
- (b) road upgrading and contributions;
- (c) noise limits 50 dBA  $L_{eq}$  one hour and an offer of acoustic fences/upgrading for a period or in circumstances not entirely clear. It may be that it is an offer for improvements only to the Reid cottage and Stehr house but that can be clarified by the applicant;
- (d) Monday to Friday operations 7.30 am - 5.30 pm - no movements on Public Holidays or weekends;
- (e) Review condition for bridge traffic; and
- (f) Dust controls, watering and cover.

[113] Our decision, after considering local amenity and all other aspects raised by parties, is that approval as now sought be given. The appeal is therefore granted.

[114] The applicant is to circulate amended conditions to all parties within 20 working days of the receipt of this decision. After conferring with parties a final draft of conditions is to be forwarded to the Court within a further 20 working days of this decision, with explanation, if there is disagreement on any condition, as to the rationale for any disagreement. The Court will then issue a decision on the wording of conditions of consent if not agreed.

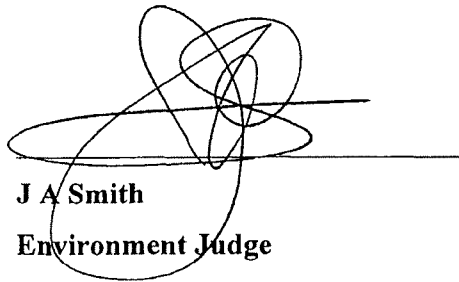
[115] We note that Brookby and Manukau City had not reached final agreement on the quantum of payment for road maintenance provisions. If agreement still has not been reached this aspect should also be referred to the Court.



*Costs*

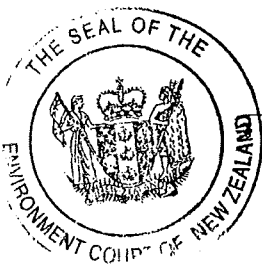
[116] Costs are reserved. If any party wishes to seek costs, an application is to be filed within 15 working days; any response within ten working days, and final reply (if any) within five working days thereafter.

**DATED** at CHRISTCHURCH this 20<sup>th</sup> day of November 2006

  
J A Smith  
Environment Judge



Issued<sup>6</sup>: 22 NOV 2006



Smithje/Jud\_Rule/D/Brookby



## 12.14 ASSESSMENT CRITERIA: DISCRETIONARY ACTIVITIES AND ADDITIONAL DEVELOPMENT AND PERFORMANCE STANDARDS FOR PARTICULAR DISCRETIONARY ACTIVITIES

### 12.14.1 General Assessment Criteria

For all discretionary activity resource consent applications in the rural zones Council will have regard to the following assessment criteria and relevant matters set out in s.104 of the Act and will consider Rule 5.21 where it is applicable:

#### (a) Effects on People and Communities

- (i) Whether the proposal will detract from the rural character and amenity values of the area;
- (ii) Whether the proposal has the potential to adversely affect the mana and amenity values of marae and papakainga housing in the vicinity;
- (iii) Whether regard has been given by the applicant to the cultural, historical and spiritual significance of the area to tangata whenua;
- (iv) Whether the proposal has the potential to adversely affect sites and features of cultural, historical and spiritual significance;
- (v) Whether the proposed activity is likely to have any effects on the physical and natural environment or community such that some form of financial contribution for public services is necessary and should be imposed as a condition of consent.
- (vi) Whether the activity is an intensive traffic generator and whether a large number of people would normally be attracted to the site to the extent that detracts from the amenity values of the area. Refer also Assessment Criteria 8.25 parking and access, Chapter 8, Transportation.

#### (b) Landscape and Visual Effects

- (i) Whether the proposal will adversely affect the rural and open space character of the surrounding area;
- (ii) Whether the proposal modifies landscapes which are sensitive to modification;
- (iii) Whether the proposal will detract from high quality landscapes;
- (iv) Whether the proposal will have adverse effects on the visual character of the area;
- (v) Whether the proposal has the potential to detract from significant landforms in the area;
- (vi) Whether the proposed building or activity is sympathetic to and compatible with the surrounding landscape qualities and characteristics and sensitivity to modification.



**(c) Effects on Ecosystems**

- (i) Whether the proposal will result in the damage or removal of significant areas of native vegetation;
- (ii) Whether the proposal will result in the damage or destruction of any habitats in the vicinity;
- (iii) Whether the proposal will have an adverse effect on the natural coastal environment and on public access to the coast;
- (iv) Whether measures have been taken to ensure that potential adverse effects on the ecosystems will be avoided, remedied or mitigated.

**(d) Effects on Natural and Physical Resources with Aesthetic, Recreational, Scientific Historical, Spiritual or Cultural Value**

- (i) Whether the proposal will have an adverse effect on any recreational and natural values of the area and public open spaces;

**(e) Discharge of Contaminants to the Environment**

- (i) Whether the proposal will generate unreasonable levels of noise, which may be noise levels which exceed the limits stated in rule 12.11.1.5
- (ii) Whether the proposal will generate dust, smoke, fumes or other discharges to air which potentially would detract from the amenity values of the area.

**(f) Risk of Hazards**

- (i) Whether the proposal will expose people to high levels of risk from existing hazardous facilities;
- (ii) Where a development proposal is likely to lie over a gas or fuel pipeline the likely effect of the proposed development on the safety and security of the pipelines.

**(g) Consideration of Alternative Locations**

- (i) Whether possible alternative locations (including possible locations in urban areas) have been considered for activities which give rise to significant adverse effects on the environment.

**(h) Effects on Mineral Extraction Activities**

Whether a proposal which will result in the establishment of either short term or permanent accommodation will result in adverse effects on the mineral extraction activity (e.g. pressure to change operational characteristics of a site due to complaints over noise, vibration or dust), in particular within the Mineral Extraction Buffer Area shown on the Planning Maps (including Appendix 9 of the Planning Maps) applying to a Quarry Zone or a lawfully established mineral extraction site having particular regard to the following mitigating factors:

- (a) Geographical, climatic, and development conditions
  - (i) Whether the potential for sensitive uses to locate close to a quarry operation is low.



- (b) Noise
- (i) Whether the quarry operates within acceptable hours.
  - (ii) Whether there is no blasting.
  - (iii) Whether there is limited machinery operation.
  - (iv) Whether low levels of distribution truck traffic are confined to industrial or main roads.
  - (v) Whether topography does not require use of low gears and heavy braking by truck traffic.
  - (vi) Whether there is a sound barrier (e.g., mounding) established between noise source and sensitive uses.
  - (vii) Whether noise sources are able to be orientated away from sensitive uses.
- (c) Dust
- (i) Whether there is minimal dust distribution by climatic conditions.
  - (ii) Whether material is less susceptible to wind erosion (e.g., rubble).
  - (iii) Whether stockpiles are stabilised and not exposed to wind erosion.
  - (iv) Whether low levels of equipment movement on stabilised pavements are less sensitive to wind erosion.
  - (v) Whether transport of material has loads covered and wash down facilities provided.
- (d) Vibration (Blasting)
- (i) Whether there is limited impact due to geological conditions.
- (e) Safety
- (i) Whether geographical conditions provide a natural barrier to public access or fencing prevents access.
- (f) Visual Impact
- (i) Whether screening and rehabilitation effectively minimises visual impacts.
- (g) Stormwater
- (i) Whether detention, filtration, and settling facilities are provided to improve water quality and minimise flooding potential during peak flows.
- (h) Mitigation
- (i) Whether any proposed mitigation will satisfactorily avoid any more than minor adverse effects on the proposed short term or permanent accommodation.

This may include the acceptance of a caveat or covenant on the certificate of title that the proposed accommodation is located in proximity to an activity which may generate adverse effects and that such effects are accepted.

Advice Note:

For the guidance of the Council when assessing an application for resource consent the Council will request the quarry owner or operator to provide an assessment of the level of effects of quarrying activities received or likely to be received at the proposed site for which the resource consent is sought. This assessment will be provided at the cost of the quarry owner or operator.

[AM 36]

