

PROJECT HAYES LAND USE PROPOSAL

LANDSCAPE EFFECTS ASSESSMENT REPORT

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1. INTRODUCTION

- 1.1 My name is Benjamin Espie. I reside in Queenstown. I hold the qualification of Bachelor of Landscape Architecture (Hons) from Lincoln University and Bachelor of Arts majoring in History from Canterbury University. I am a member of the Southern Branch of the New Zealand Institute of Landscape Architects. I am currently a director of Vivian and Espie Limited, a specialist resource management and landscape planning consultancy based in Queenstown. Between March 2001 and November 2004 I was employed as Principal of Landscape Architecture by Civic Corporation Limited, a resource management consultancy company contracted to the Queenstown Lakes District Council. Between December 1999 and March 2001 I was employed as a landscape architect by Earthwork Limited of Rangiora.
- 1.2 The majority of my work involves advising clients regarding the protection of landscapes and amenity that the Act provides and regarding the landscape provisions of the Queenstown Lakes Partially Operative District Plan and other district plans. I also produce assessment reports and Environment Court evidence in relation to proposed development. The primary objective of these assessments and evidence is to ascertain the effect of proposed development on the amenity of the surrounding landscape.
- 1.3 Much of my experience has particularly involved dealing with development in rural areas, both on behalf of District Councils, and on behalf of private clients. I have compiled a number of assessment reports and briefs of Environment Court evidence relating to broad scale changes to the landscape (although never specifically a wind farm), such as the creation of new residential and industrial zones in rural areas and large-scale subdivisions and recreational developments in rural areas.

2. PURPOSE OF THIS REPORT

2.1 I have been engaged by the Central Otago District Council to provide comment in order to assist the assessment of the Project Hayes resource consent application. A number of submissions have been received in response to public notification that raise issues in relation to the landscape effects assessment that accompanies the application (the Peter Rough report).

2.2 In particular, I have been asked to provide comment regarding:

- i. An overall assessment of the effects of the proposal on the landscape;
- ii. The adequacy of the Peter Rough report;
- iii. The accuracy, value and drawbacks associated with the photo-simulations that accompany the application;
- iv. Whether the landscape that includes the site of the proposed wind farm is considered to be an outstanding natural landscape for the purposes of section 6(b) of the Act.

2.3 I note that the Peter Rough report is thorough in terms of its description of the site, its context and the proposal. In this report I will not repeat the findings of the Peter Rough report that I agree with; I will concentrate on areas of disagreement between myself and the Peter Rough report and on areas that I feel require further discussion.

2.4 While heritage and historical associations are part of the landscape, I note that specific archaeological information has been provided in this regard. I have no particular expertise regarding archaeological matters and therefore I will not comment on these matters in this report, other than to point out that historical associations are part of what lead to an observers appreciation of a particular landscape.

3. THE RELEVANT STATUTORY CONSIDERATIONS

3.1 Part 2 of the Peter Rough report lists the relevant statutory and policy documents as being:

- i. The Resource Management Act 1991
- ii. Otago Regional Council Regional Policy Statement (1993)
- iii. Otago Regional Water Plan
- iv. The Proposed Central Otago District Plan (2000)
- v. The Dunedin City District Plan (2005).

3.2 The report then goes on to discuss the relevant parts of each document. I believe that the Peter Rough report correctly outlines all the broadly relevant provisions from each of these documents, except that I believe that the site of the proposed wind farm is located within an outstanding natural landscape (as will be explained in part 4 of this report). For this reason I believe that Section 6 of Part II of the Act requires particular consideration and that further Issues, Objectives and Policies of the Proposed Central Otago District Plan (PCODP) require consideration, namely; Issue 4.2.1, Objective 4.3.3 and Policy 4.4.6.

4. OUTSTANDING NATURAL LANDSCAPES

4.1 Section 6(b) of Part II of the Act requires us to give some protection to “*outstanding natural features and landscapes*”. As the Peter Rough report points out in part 4.2, in Section 6(b) of the Act the adjectives “*outstanding*” and “*natural*” apply to both features and landscapes; i.e. protection is given to outstanding natural features and to outstanding natural landscapes.

4.2 For current purposes, it is important to note this section of the Act refers to landscapes, not to parts of landscapes or areas within landscapes.

- 4.3 Categorising the landscapes of a district into outstanding natural landscapes and landscapes that are not both outstanding and natural, is a difficult exercise. Obviously, it must be done at a very large scale.
- 4.4 I believe that the provisions of the PCODP are sometimes at cross purposes regarding this matter. Objective 4.3.3, Policy 4.4.6 and the issues discussed in Part 2.3.1 are concerned with the protection of outstanding natural landscapes. Part 2.3.1 notes that the outstanding natural landscapes of the district are identified in a list and on the planning maps. However, what are actually identified on the planning maps are “*Areas of Outstanding Landscape Value*”.
- 4.5 I believe that the identified Areas of Outstanding Landscape Value are (as the name implies) areas of landscape. They are not landscapes; they are parts of landscapes or subsets of landscapes. The PCODP does not identify which entire landscapes of the district are both outstanding and natural.
- 4.6 The scale of landscapes and the scale at which landscape categorisation must be done is an issue that has been discussed at length in a number of Environment Court hearings relating to the Queenstown Lakes District Plan. Some of the associated findings of the Court provide useful guidance.
- 4.7 The C180/1999 Environment Court decision¹ dealt with a reference to the Proposed Queenstown Lakes District Plan. The referrer sought that the Plan include provisions to adequately protect landscapes in relation to Section 6 of the Act. It sought that an approach of identifying “*Areas of Landscape Importance*” be reinstated into the Plan. The Court found that this approach was flawed and went on to categorise the landscapes of that district at a broad scale.
- 4.8 The C75/2001 decision refers to the size of landscapes when discussing a particular category of landscapes that is referred to in the Queenstown Lakes District Plan. It states:

¹ Environment Court decision C180/99, Wakatipu Environmental Society Incorporated vs. Q.L.D.C.

“Perhaps the most important practical point we can make about other rural landscapes (“ORL”) in this district is that an area has to be of a sufficient size to include the qualities that enable it to be described as a “landscape”. ... Returning to the Wakatipu basin: the Domain Road triangle may or may not qualify as ORL – we have yet to determine that issue in a specific case. However any area that is smaller than that triangle would have difficulty in qualifying as an ORL or any type of landscape because it would be too small.”²

4.9 The C73/2002 decision³ gives more guidance regarding the size of landscapes. Paragraphs 7 to 22 specifically discuss the scale of landscapes and paragraph 20 states:

“That evidence suggests that in most circumstances in the district a flat area that has the following characteristics may begin to be considered as a separate landscape:

- (a) it must contain at least one (preferably more) rectangle with at least 1.5 x 2 kilometre sides;*
- (b) no part of the landscape may be more than 1 kilometre from such a rectangle;*
- (c) it must contain a minimum of 600 hectares;*
- (d) internal corners should be rounded.*

We do not decide that such a quantitative measure of scale is appropriate, but introduce it to the parties as an inference from the common stance of the landscape experts in these proceedings in case it is useful in the future. An area that meets the above area and shape characteristics is not necessarily a separate landscape, but may meet the minimum objective features.”

4.10 The C203/2004 decision discusses a strip of land between the Kawarau River and the Remarkables. The strip in question is some 5 kilometres long but it varies in width. The Court found that:

“At its very widest Mr Craig’s VAL (the relevant strip of land) may be one kilometre wide, and on average it is much narrower than that. At one point his strip narrows down to about 100 metres in width. We cannot accept that the SIL strip is large enough to be a landscape. At all points on the SIL land one

² Environment Court decision C75/2001, Lakes District Rural Landowners Society Incorporated vs. Q.L.D.C., paragraph 27.

³ Environment Court decision C73/2002, Wakatipu Environmental Society Incorporated vs. Q.L.D.C.

is aware of the massif to the south; at many points one is aware of the river, and at most points the round glacier-formed Morven Hill is prominent to the north of the river”.⁴

Consequently the Court found that the strip of land was not a landscape but was part of the landscape that surrounds and includes it.

- 4.11 I consider that the abovementioned Court findings support my belief that the PCODP does not identify which landscapes of the district are outstanding and natural when assessed as a whole. Rather, it identifies Areas of Outstanding Landscape Value. “Areas” are obviously something different to “landscapes”. Some of the identified areas in the PCODP are as small as 16 hectares.
- 4.12 I consider that the landscape of the Rock and Pillar/Lammermoor/Lammerlaw mountains is both outstanding and natural when it is assessed as a whole. Its physical landform is unmodified, highly legible and includes many features of geomorphological interest. The clutter of human influence is very limited compared to most landscapes. There is a very significant degree of indigenous vegetation and ecological patterns as well as remarkable water courses and lakes. It is eminent on a district-wide and national scale due to its dramatic aesthetic qualities, its sense of remoteness and naturalness, its transient values (due to remarkable light and weather conditions) and its memorability.
- 4.13 I believe that this finding is supported by the landscape provisions of the Dunedin City District Plan. That plan categorises all of the Rock and Pillar/Lammermoor/Lammerlaw mountains that are within the bounds of the Dunedin City District as being “*Outstanding Landscape Areas*”. When thinking about our landscapes at a regional or national level, obviously it is nonsense to suggest that the south-eastern half of the Rock and Pillar/Lammermoor/Lammerlaw mountains is an outstanding natural landscape, while the north-western half is not.
- 4.14 Having found that this is an outstanding natural landscape, I would add that the importance of this categorisation is sometimes overstated. Section 6 of the Act asks us to protect

⁴ Environment Court decision C203/2004, Wakatipu Environmental Society Incorporated vs. Q.L.D.C. paragraph 28.

these landscapes from inappropriate subdivision, use and development, not all subdivision, use and development. Also, case law has found that Section 6 is subordinate to Section 5 of the Act, i.e. the sustainable management of natural and physical resources is the end goal, not the protection of landscapes for its own sake.

5. OVERALL DISCUSSION OF THE EFFECTS OF THE PROPOSAL ON THE LANDSCAPE IN RELATION TO THE LANDSCAPE ASSESSMENT REPORT THAT ACCOMPANIES THE APPLICATION

- 5.1 In part 5, the Peter Rough report outlines the aspects of the proposal that may create potential landscape effects issues. These include the turbines themselves, the substations, transmission lines, wind monitoring towers, as well as earthmoving that will be required to form and upgrade the road network, to borrow fill material and to create turbine platforms and construction areas. In part 5.6 the report outlines measures that will be used to mitigate the potential effects of these changes to the landscape.
- 5.2 Obviously the changes that are proposed are considerable and are very large in scale. The wind-farm covers approximately 100km², involves 176 turbines that reach 160 metres in height and involves a very extensive network of roading (much of which is to be 10 metres wide).
- 5.3 Part 6 of the Peter Rough report goes on to assess the effects of these proposed changes to the landscape, particularly in terms of visibility. The report then draws conclusions from this assessment in part 7.
- 5.4 Overall, I generally agree with the quantification of visibility that forms part 6 of the Peter Rough report, although the 11 chosen viewpoints that are discussed are obviously only a

- small set of examples of possible views. There are extensive areas of land from which the wind farm will be readily visible, particularly in the Paerau Valley (by which I mean all the relatively flat land south-west of Paerau) and in the area of the Old Dunstan Road.
- 5.5 For each of the 11 selected viewpoints, the Peter Rough report includes comments under the headings “*Visibility of the wind farm*” and “*Effects on visual amenity values*”. While I agree with the quantification of visibility that the report describes for each of the selected viewpoints under the first heading, I believe that the discussions of effects on visual amenity values are often very gently worded. In regards to photo-point 3 (Old Dunstan Road, west of Logan Burn reservoir), the Peter Rough report finds that the wind farm will not dominate the landscape and that the landscape’s fundamentally rural character will remain. I believe that this is putting it rather gingerly. There will be a very significant effect in this area. Despite the fact that there is some human modification evident in this area, the landscape experience of travelling on the Old Dunstan Road is currently a very natural, remote, wild high-country experience. This experience will be very significantly altered by the very obvious, large, unnatural, sculptural structures of the turbines and by a web of wide roads.
- 5.6 The same can be said in relation to photo-point 4 (Near the Logan Burn reservoir dam). I do not agree that the proposal will allow “*essential rural character of the landscape to prevail*”⁵ or that “*the overall effect of the wind farm on visual amenity values from the vicinity of the Logan Burn Reservoir dam will be moderate*”⁶. I believe that the effect on observers in the landscape in the vicinity of the dam will be dramatic. Again, roads and the remarkable unnatural forms of the turbines (with large moving blades) will be very obvious and will contrast with the naturalness of the surrounding scene.
- 5.7 Photo-points 6 and 8 (Styx Patearoa Road, 2 km north of Paerau and Junction of Linnburn Runs and Deep Creek Roads) give an impression of the effect on the public and private parts of the Paerau valley. The Peter Rough report describes the wind farm in these views as being a very prominent and distinctive feature. I believe this is correct; it will be readily apparent to any observer and will be remarkable due to its incongruity with natural

⁵ Project Hayes, Assessment of Landscape and Visual effects, Peter Rough Landscape Architects, June 2006, page 50.

⁶ Ibid.

- landform. The extent of visibility in the Paerau valley is such that anyone entering this valley will be immediately and continuously conscious of the presence of the turbines. Again, I would not describe this effect as moderate.
- 5.8 In general, I believe that part 6 of the Peter Rough report accurately described the degree of visibility for each of the selected photo-points but then describes the effects of this visibility in careful and rather understated terms. I believe that the landscape experience of travelling on the Old Dunstan Road will change dramatically if the proposal is granted consent. I believe that the experience of being in the Paerau valley will also be significantly altered.
- 5.9 I believe that the landscape effects of the proposal on the Old Dunstan Road area and the Paerau valley are the most significant landscape effects of the proposal.
- 5.10 Part 7 of the Peter Rough report draws conclusions by discussing the landscape effects of the proposal in relation to the various relevant statutory documents. Again, I believe that these conclusions are sometimes understated. While this site may affect less people than other sites in the district, I do not believe that it is accurate to state that *'the wind farm will not change the landscape's fundamental high country and rural character'*⁷. I believe that, for observers on the Old Dunstan Road and in the vicinity of the Paerau valley, these things will certainly change.

6. PHOTO-SIMULATIONS

- 6.1 The application contains 11 photo-simulations prepared by Truescape Limited. These images are created in a very precise way to produce simulations that are as close to the views of a human eye as technology will allow. I note that I have only viewed reduced colour A3 versions of these images and not the original images known as "Trueviews".

⁷ Ibid, page 61.

- 6.2 Photo-simulations are a very useful tool when dealing with proposals of this sort. They allow some desktop assessment and are also very useful to an assessor in the field attempting to get his or her bearings.
- 6.3 They are, however, only a tool. They cannot be a substitute for a thorough on-site assessment in the field. After all, they only represent views from certain selected viewpoints and only do so in a two-dimensional way. Also, they only represent one set of light and weather conditions (whatever happened to be present on the day the photographs were taken) and give no representation of movement or transient effects.
- 6.4 The usefulness of photo-simulations has been discussed in various Environment Court proceedings. A number of decisions find the simulations to be useful, but limited in their usefulness. A representative extract comes from the Arrigato case:

“Photomontages are limited in value. Undue reliance cannot be laid upon the impressions given by them. There are many constantly changing variables that influence one’s perception of the landscape. Light is perhaps the single most important. A photograph captures only a fleeting moment and fixes the variable as at that moment. Photomontages are indicative only and even then the indication can so easily be far removed from reality occasioned by such factors as colour reproduction, type of colours, inaccurate measurements, to mention but a few.”⁸

- 6.5 It should also be noted that the photo-simulations included with the application as lodged do not include any of the proposed roading works or substations.
- 6.6 In sum, I consider that the photomontages that form part of the application are a useful tool. They are more useful than an “artist’s impression” in that they give factual information regarding the degree of visibility of the proposed turbines. However, an accurate assessment of the visual effect of all of the aspects of the proposed wind farm can only be gained through a thorough site visit; travelling through and around the entire relevant vicinity and by imagining the finished picture including roading and the motion of the turbines.

⁸ Arrigato Investments Limited vs. Rodney District Council (2000) NZRMA 241, paragraph 37.

7. CONCLUSIONS

- 7.1 The Project Hayes resource consent application is comprehensive and includes a Landscape and Visual Effects Assessment report prepared by Peter Rough Landscape Architects Limited and 11 photo-simulations prepared by Truescape Limited.
- 7.2 The Peter Rough report discusses the statutory considerations that are relevant to the assessment of landscape effects. The report then assesses the effects of the proposal and draws conclusions that relate to the various statutory considerations. The Peter Rough report finds that the wind farm site is not within an outstanding natural landscape and generally concludes that *“the wind farm will not adversely affect the landscape to a degree that its fundamental rural character will be lost or destroyed. While the wind farm will denote change to the landscape, its very existence will describe the prevailing conditions and in this context the proposal is essentially not dissimilar from other preceding endeavours in the vicinity”*⁹.
- 7.3 While I agree with the description of the degree of visibility that is included in the Peter Rough report, I believe that it’s conclusions regarding effects of the proposal on the landscape are somewhat understated. I believe that the landscape experience of travelling on the Old Dunstan Road will change dramatically if the proposal is granted consent. I believe that the experience of being in the Paerau valley will also be significantly altered.
- 7.4 I believe that the subject site is within an outstanding natural landscape. The PCODP does not identify which landscapes of the district are outstanding natural landscapes; it merely identifies *“Areas of Outstanding Landscape Value”*. The Dunedin City District Plan identifies the half of the Rock and Piller/Lammermoor/Lammerlaw range of mountains that are within its district as being *“Outstanding Landscape Areas”*. I believe that this range of mountains in its entirety is an outstanding natural landscape.
- 7.5 The photo-simulations included with the application are useful tools in that they allow a reader of the application to understand it much more clearly than they would otherwise.

⁹ Project Hayes, Assessment of Landscape and Visual effects, Peter Rough Landscape Architects, June 2006, page 62.

However, they cannot give a comprehensive depiction or indication of the magnitude of the visual effect on all observers and travellers in the landscape. This can only be gained through a thorough and careful visit to the site and its surrounding vicinity.

- 7.6 In terms of an overall assessment, I note that landscape effects are only one type of effect. The proposal will have many types of effects, both negative and positive. An overall assessment of all of these effects must be made in relation to Section 5 of the Act. To this end, the application includes reports regarding many different types of effects, including construction effects, landscape effects, ecological effects, archaeological/heritage effects, traffic effects, noise effects, recreational/tourism effects and geomorphological effects. Obviously socio-economic effects also need to be considered. In this overall consideration, I believe that the application understates the effects of the proposal on the landscape as described in this report.