

BEFORE THE ENVIRONMENT COURT

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of appeals under Clause 14 of the Act in
relation to Manawatu Wanganui Regional
Council's proposed One Plan

BETWEEN **MERIDIAN ENERGY LTD**

ENV-2010-WLG-000149

AND

MIGHTY RIVER POWER LTD

ENV-2010-WLG-000147

AND

TRUSTPOWER LTD

ENV-2010-WLG-000145

AND

GENESIS POWER LTD

Env-2010-WLG-000159

AND

MANAWATU WANGANUI REGIONAL COUNCIL

RESPONDENT

STATEMENT OF EVIDENCE BY STEPHEN KENNETH BROWN

INTRODUCTION

1. My name is Stephen Kenneth Brown. I hold a Bachelor of Town Planning degree and a post-graduate Diploma of Landscape Architecture. I am a Fellow and the current President of the New Zealand Institute of Landscape Architects, an Affiliate Member of the New Zealand Planning Institute, and have practised as a landscape architect for 29 years.

2. During that period I have specialised in landscape assessment and planning. This has included undertaking the evaluation of the landscape effects associated with a wide variety of development proposals, including:
 - The Waterview Connection (SH16 & SH20) motorway projects;
 - The Marsden Point port development;
 - Eden Park's redevelopment for Rugby World Cup 2011;
 - The Sylvia Park commercial centre;
 - Project West Wind for the NZ Wind Energy Association;
 - Te Hauhiko O Wharauoa Wind Park near Raglan in the western Waikato for D & P Walter ;
 - The proposed Sidonia Hills Wind Farm in west-central Victoria for Hydro Tasmania and Roaring 40s;
 - The Moorabool Wind Farm in Victoria for West Wind PTY Ltd;
 - Project Central Wind for Meridian Energy Ltd; and
 - Project Mill Creek Wind Farm review for Wellington City Council.

3. More strategically, I have undertaken and participated in many landscape assessments aimed at identifying landscape values at the district and regional levels. This has included undertaking assessments of the Auckland Region's landscape (from 1982 – 1984), Auckland's urban coastlines (1995), eastern Manukau City (1995), North Shore City (1997 - 2000), Waitakere City's Northern Strategic Growth Area Study (2000), the Mahia Peninsula and Wairoa District (2003), the Kawhia and Aotea Harbour catchments (2006), the Thames Coromandel District (2006/7) and Otorohanga District (2009/10) – among others. I was a key participant in the assessment and identification of the Auckland Region's outstanding landscapes (2002 - 2005), and in 2006 I was part of a team under the 'umbrella' of Urbis Ltd that was awarded the (UK) Landscape Institute's Strategic Planning Award for the "*Landscape*

Value Mapping Study of Hong Kong” for the Hong Kong Government. My contribution included development of an assessment method and evaluation criteria that were employed in that study.

4. Very recently, I also completed a district wide assessment of landscape and natural character values across the Buller District to inform the Environment Court about the values associated with the Mokihinui River corridor in its evaluation of the Mokihinui hydro-electric project application. That assessment – employing a process and criteria agreed with representatives of the Minister of Conservation and the Royal NZ Forest and Bird Protection Society Inc – identified 19 Outstanding Natural Landscapes (ONLs) within the Buller District and 22 rivers / lakes / wetlands coastal environments displaying high levels of Natural Character. The Mokihinui River was identified as being part of one of those ONLs extending into Kahurangi National Park. It was also determined that the Mokihinui River displays a high level of natural character.
5. Of note in relation to the current appeals, I have also provided evidence for Mighty River Power Ltd (MRP) for its Turitea Wind Farm application and have, more recently, assessed the effects of its proposed Puketoi Wind Farm. Having also undertaken an assessment of landscape values within the Rangitikei, Tararua, Manawatu and Horowhenua Districts in the course of preparing evidence for the Turitea Board of Inquiry, I consider myself reasonably familiar with the eastern half of the Manawatu Whanganui Region and its diverse array of landscapes.
6. Appendix A to my statement provides a more detailed outline of my experience and major projects that I have been associated with.
7. I have read the Code of Conduct for Expert Witnesses in the Environment Court Practice Note. This evidence has been prepared in accordance with it and I agree to comply with it. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

SCOPE OF EVIDENCE

8. I was commissioned by Meridian Energy Ltd (Meridian) to undertake a review of Chapter 7 addressing *Indigenous Biological Diversity, Landscape and*

Historic Heritage, together with Schedule F and Table F1 (within it) – which identify *Regionally Outstanding Natural Features and Landscapes (ONFL)*, including their ‘characteristics and values’.

9. I subsequently attended mediation at the offices of the Manawatu Whanganui / Horizons regional Council in May 2011, at which a range of landscape issues were discussed. Unfortunately, due to other commitments, I was unable to attend the most recent round of expert caucusing on landscape matters held in January 2012.
10. However, I contacted Clive Anstey and Brad Coombes to relay concerns about the proposed extent of a revised ‘Ruahine and Tararua Ranges skyline’ ONFL. I have also been asked by Meridian to review the issue of cumulative effects in respect of proposed Policy 7-7(aa) and to comment on it. Consequently, my statement solely addresses these two issues.

THE RUAHINE & TARARUA RANGES ONFL

11. That same Table F1 of the Proposed One Plan lists regionally outstanding natural features and landscapes within the Manawatu-Wanganui Region. The Table provides commentary on the characteristics and values of each landscape that have given rise to its classification as outstanding, and also lists ‘other values’ which may be associated with the landscape. In the notified One Plan, ONFL (ia) is described as follows:

<i>Outstanding Natural Features or Landscapes</i>	<i>Characteristics / Values</i>
<p>(ia) <i>The skyline of the Ruahine and Tararua Ranges - defined as the boundary between the land and sky as viewed at a sufficient distance from the foothills so as to see the contrast between the sky and the solid nature of the land at the crest of the highest points along ridges.</i></p> <p><i>The skyline is a feature that extends along the Ruahine and Tararua Ranges beyond the areas in (h) and (i) above</i></p>	<p>(i) <i>Visual and scenic characteristics, including aesthetic cohesion and continuity, its prominence throughout much of the Region and its backdrop vista in contrast to the Region’s plains</i></p> <p>(ii) <i>Importance to tangata whenua and cultural values</i></p> <p>(iii) <i>Ecological values including values associated with remnant and regenerating indigenous vegetation</i></p> <p>(iv) <i>Historical values</i></p> <p>(v) <i>Recreational values</i></p>

12. Thus, the skyline of both the Tararua and Ruahine Ranges was originally identified in the notified plan as being ‘regionally outstanding’ on the basis of

its ecological, recreational, historical and cultural values, but also – of most relevance to my evidence – due to the fact that it affords a significant visual backdrop to much of the Region. Particularly so in relation to the Manawatu Plains and the population centres of Palmerston North, Feilding, Linton, Levin, Ashurst, Woodville, Dannevirke, Pahiatua and Eketahuna.

13. Subsequent to caucusing in the middle of this month, that description was amended to read as follows:

Outstanding Natural Features or Landscapes	Characteristics / Values
(ia) <i>The main and highest ridges and highest hilltops along the full extent of the Ruahine and Tararua Ranges, including within the Forest Parks described in (h) and (i).</i>	(i) <i>Visual natural and scenic characteristics of the Ruahine and Tararua Ranges, as defined by the series of highest hilltops along the full extent of the Ruahine and Tararua Ranges, including the skyline’s aesthetic cohesion and continuity, its prominence throughout much of the Region and its backdrop vista in contrast to the Region’s plains</i> (ii) <i>Importance to tangata whenua and cultural values</i> (iii) <i>Ecological values including values associated with remnant and regenerating indigenous vegetation</i> (iv) <i>Historical values</i> (v) <i>Recreational values</i>

14. The important changes associated with this amendment relate to the changes from “*skyline*” to “*highest ridges and highest hilltops*”, and the insertion of the “*full extent of ...*”. Bearing in mind the practical application of related provisions, I cannot discern a great deal of difference between the concept of the Ranges’ ‘skyline’ and their ‘highest ridges and hilltops’. Of more concern, however, is the issue of a description that refers to the ‘full extent of the Ruahine and Tararua Ranges’.

15. In order to appreciate my concerns in this respect, I need to traverse both the foundation for One Plan’s proposed ONLs and the current situation ‘on the ground’, with regard to the ‘highest hilltops and ridges’ of both Ranges – especially so at the nexus between these Ranges, between Pahiatua Aokautere Road and Wharite Road. This area embraces part of both Ranges between the southern-most extent of the Te Rere Hau Wind Farm and the northern edge of the Te Apiti facility, above the Manawatu Gorge and Ashurst.

The Region's ONLs In General

16. Section 22.3.1, Policy 8.3 of the Operative Manawatu-Wanganui Regional Policy Statement states that the following landscapes and features are outstanding from a regional perspective in terms of section 6(b) of the Resource Management Act:
- Tongariro National Park, particularly the volcanoes
 - Kaimanawa Ranges, in particular the skyline and the south-eastern side of the ranges
 - Rangipo Desert
 - Mount Aorangi on the northern Ruahine Range, especially its skyline
 - Kutaroa and Otahupitara Swamps (Irirangi Swamp)
 - Hautapu River and adjacent river valley
 - Rangitikei River and river valley
17. They are identified as such primarily because of their perceived landscape / amenity character. Other ONFLs are also included in this list; however, they appear to have been included in Policy 8.3 because of their ecological – as opposed to landscape – value – including, for example, the Makirokiri Tarns and Reporoa Bogs.
18. Schedule F of the One Plan appears to have used this list as a template, but excluded those features / landscapes that have more of an ecological foundation. Yet, no new or region-wide assessment has been carried out to underpin Schedule F's revised list of regionally outstanding features / landscapes, despite the fact that Chapter 7 includes the following policy:

Policy 7-7A: Assessing outstanding natural features and landscapes

The Regional Council and Territorial Authorities must take into account the criteria in Table 7.2 when:

- (a) identifying outstanding natural features and landscapes, and*
- (b) considering adding to the list of outstanding natural features or landscapes listed in Table F1 of Schedule F, or (c) considering the inclusion of outstanding natural features or landscapes into any district plan, or*
- (c) considering the inclusion of outstanding natural features or landscapes into any district plan*

Table 7.2 Natural Feature and Landscape Assessment Factors

Assessment Factor	Scope
(a) Natural science factors	<p>These factors relate to the geological, ecological, topographical and natural process components of the natural feature or landscape:</p> <ul style="list-style-type: none"> (i) <i>Representative: the combination of natural components that form the feature or landscape strongly typifies the character of an area.</i> (ii) <i>Research and education: all or parts of the feature or landscape are important for natural science research and education.</i> (iii) <i>Rarity: the feature or landscape is unique or rare within the district or Region, and few comparable examples exist.</i> (iv) <i>Ecosystem functioning: the presence of healthy ecosystems is clearly evident in the feature or landscape.</i>
(b) Aesthetic values	<p>The aesthetic values of a feature or landscape may be associated with:</p> <ul style="list-style-type: none"> (i) <i>Coherence: the patterns of land cover and land use are largely in harmony with the underlying natural pattern of landform and there are no, or few, discordant elements of land cover or land use.</i> (ii) <i>Vividness: the feature or landscape is visually striking, widely recognised within the local and wider community, and may be regarded as iconic.</i> (iii) <i>Naturalness: the feature or landscape appears largely unmodified by human activity and the patterns of landform and land cover are an expression of natural processes and intact healthy ecosystems.</i> (iv) <i>Memorability: the natural feature or landscape makes such an impact on the senses that it becomes unforgettable.</i>
(c) Expressiveness (legibility)	<p>The feature or landscape clearly shows the formative natural processes or historic influences that led to its existing character.</p>
(d) Transient values	<p>The consistent and noticeable occurrence of transient natural events, such as daily or seasonal changes in weather, vegetation or wildlife movement, contributes to the character of the feature or landscape.</p>
(e) Shared and recognized values	<p>The feature or landscape is widely known and is highly valued for its contribution to local identity within its immediate and wider community.</p>
(f) Cultural and spiritual values for tangata whenua	<p>Māori values inherent in the feature or landscape add to the feature or landscape being recognised as a special place.</p>
(g) Historical associations	<p>Knowledge of historic events that occurred in and around the feature or landscape is widely held and substantially influences and adds to the value the community attaches to the natural feature or landscape.</p>

19. Moreover, in listing the so-called ‘modified Pigeon Bay factors’, Policy 7-7A still fails to address another aspect of the same decision, which is referred to in Paragraph 135 of the Environment Court’s decision in *Waiareka Valley Preservation Society Inc versus Holcim NZ Ltd & Ors* (C058/2009) is also instructive: it includes the following statement:

*“In considering whether or not landscapes or features are outstanding, it has been customary over the past decade for landscape architects and the Court to consider various elements of the landscape under a series of heads identified in **Wakatipu Environmental Society Incorporated versus Queenstown Lakes***

*District Council, and sometimes referred to as the modified Pigeon Bay criteria or factors. We indicate that we consider the term factors much more appropriate. They are a series of elements which help to ensure a full understanding of the landscape the Court is dealing with, not a series of criteria according to which some rating in one or more results in a landscape becoming outstanding. It is still necessary to stand back and ask the question “does this landscape or feature stand out among the other landscapes and features of the district?”. We refer to the salutary comments of the Court In **Unison versus Hastings District Council**, warning against a mathematical or mechanical approach to applying the modified Pigeon Bay factors.”*

20. Consequently, any assessment of landscape values necessarily involves an appreciation of the greater whole, the landscape as both the product of its components and, in some cases, much more than that – especially where landscapes are considered to be truly outstanding. While the modified Pigeon Bay factors are useful in identifying the different strands of landscape that may be helpful in the analysis of landscapes, they do not establish clear thresholds of value that need to be crossed in order for a landscape to be regarded as outstanding. Whereas the Modified Pigeon Bay and WESI (Wakatipu Environmental Society v QLDC case) criteria or landscape factors have received a great deal of attention over recent years, it seems to me that another key facet of the latter case has been rather overlooked. This is where (Environment Court Decision C180/99, para.82) the Court refers to the word "outstanding" as meaning:

".. conspicuous, eminent, especially because of excellence ... remarkable in ..."

21. In my opinion, it seems strange that the Horizons Regional Council should require the application of standards and criteria in the implementing of landscape assessments by TLAs (to meet statutory obligations under section 6 of the Act) that it has yet to meet itself. Moreover, I regard the modified Pigeon Bay criteria as being incomplete without the additional ‘thresholds’ that I have just mentioned, which also pertain to the physical context (regional / district) within which a landscape / feature is identified as being outstanding or otherwise.
22. Clearly, the likes of Ruapehu and the Rangipo Desert are included in Schedule F because they resonate strongly with our national identity, let alone regional values and perspectives. These are nationally important and iconic

landscapes / features (even more so as NZ's tussock lands are progressively lost).

23. At the next level down, the Ruahine and Tararua Ranges – focusing on both off their state forest parks – afford an alpine backbone or spine to the eastern North Island that fundamentally structures and 'orders' the landscapes between the Rangitikei District, Hawkes Bay and the Wairarapa / Manawatu. They strike a very strong symbolic chord with the Region and its populace, even if relatively few put on tramping boots and venture into the Ranges' dramatic 'back blocks' (Annexures 1 to 6).
24. Much closer to the arterial corridor of State Highway 1, even though most of the countryside around the Rangitikei River is substantially shorn of most native vegetation, indeed any vegetation at all in places, its stark scarp faces and eroded banks remain central to the Rangitikei District's identity. Further to the south-east, the coastlines around Akitio and Castle Hill are similarly modified, even depauperate, but their dramatic landforms and dynamic interaction with the Pacific Ocean ensures that they leave an indelible impression. As such, they comprise part of a broad canvas of memorable landscapes that contribute to the Region's identity and appeal.
25. By design or accident, therefore, most of the proposed ONFLs identified in Schedule F display the characteristics listed in Policy 7-7A:
 - They all comprise 'natural remnants' that are revealing of formative processes and evolution to varying degrees;
 - They are expressive and highly legible;
 - This also renders most of them very memorable – with a clear place in the regional consciousness and important in terms of the sense of place associated with different parts of the Region;
 - They are aesthetically appealing, in some cases dramatically so;
 - A number are of importance to tangata whenua; and
 - Some have historical connections / associations.
26. Importantly, some of these ONFLs display other qualities as well. Perhaps most critical is a certain visual (and physical) coherence or intactness: highly

valued landscapes present a unified 'picture' that avoids being fragmented or overly disrupted by discordant elements. In my opinion, this characteristic is fundamental to any ONFL. Without this 'glue', landscapes lose any sense of continuity and their legibility soon breaks down. It is precisely where this starts to occur that the boundaries at the edge of ONFLs are located.

27. Many of the Manawatu Whanganui Region's ONFLs also display a quite marked sense of scale and 'grandeur'. This big, dramatic statement is important in its own right, but it can also contribute to elevating regionally important features / landscapes above the local or district levels. They are clear landmarks at the regional (even national) level. For instance, the southern slopes of Mt Ruapehu and the peaks of the Ruahine and Tararua Ranges – focused on their state forest parks – are not just another sequence of backdrop hills. As I have stated above, these features structure and define the regional landscape in a most emphatic and dramatic fashion.
28. From these comments it should be clear that I have no great concern about the intent of Chapter 7 or the majority of Schedule F's 'draft list' of ONFLs. On the other hand, I am concerned about the Regional Council's failure to address / assess the merits of other landscapes that might also be ONFL candidates and to accurately delineate the boundaries of those regionally important landscapes – both as currently identified and into the future. This delineation becomes much more important, and is often the subject of considerable debate, in the course of resource consenting – as both Clive Anstey and myself can attest from very recent experience.

The Ruahine & Tararua Ranges 'Skyline' ONFL

29. Turning, therefore, from the general situation to that specifically pertaining to the ridges, hilltops and 'skyline' of the Ruahine and Tararua Ranges, it is clear that this is the case, with reference to the Turitea Board of Inquiry. In that instance, much debate ensued about the relative merits and characteristics of different parts of the Turitea and wider northern Tararua Ranges' skyline. In particular, a considerable amount of verbiage was expended trying to determine if that part of the Ranges' skyline was outstanding given two contrasting situations:

- The mature and highly appealing native forest to sub-alpine canopy and valley system of the Turitea water catchment, extending dramatically into an adjoining Hardings Park; and
 - A range crest and upper slopes flanking (and visually framing) the water catchment, that comprises a more Spartan mix of almost bare pasture, pine woodlots, rural-residential development and isolated pockets of residual bush / shrubland.
30. This interplay, and the ‘weighing up’ of values that it required on the part of the Board of Inquiry, was ultimately judged as follows (page 12-20 Draft Decision):
- [80] After considering the evidence of all the landscape experts on the ONL/ONF matters, we have a clear preference for the direction taken by Ms Lucas, Messrs Brown, Anstey and Bray over that of Mr Wyatt. We find that the northern end of the Tararua Forest Park plus the vast majority of Hardings Park and Turitea Reserve are an ONL. Mr Anstey notes the frayed western edge of Hardings Park and Messrs Brown, Bray and Ms Lucas note the modified character at the northern end of Turitea Reserve as areas that would not qualify as outstanding. We accept these minor qualifications. This ONL area is distinct from the modified external slopes on which the proposed wind farm is also located, which remain a significant amenity landscape as distinct from an ONL.*
31. This ‘significant amenity landscape as distinct from an ONL’, encloses the slopes around the northern end of the Turitea watershed and then extends northwards through to approximately to Wharite Road – above Ashurst, Saddle Road and the Manawatu Gorge. The landscape across this ridgetop / hilltop landscape is very markedly different to that found within the Turitea and Hardings Park Reserves: the internal valley systems of both watersheds disappear, so that the upper mantle of the Ranges becomes a sequence of interlocking ridges substantially devoid of large scale valleys and tracts of native forest (Annexure 7).
32. Consequently, just as the series of ridges between Wharite Peak and Turitea lose some of their dramatic elevation and vertical scale – becoming more like a broad saddle that connects the main massifs of the Ruahine and Tararua Ranges – the landscape components of the “*highest ridges and highest hilltops*” also change. Open pasture, pine woodlots and forestry, and wind farms become the main physical ‘building blocks’ of the Ranges’ upper slopes and skyline. Whereas the margins of both Turitea and the margins of Wharite Peak are, at least in part, defined by the presence of native forest and

shrubland, the landscapes north of Pahiatua Aokautere Road increasingly becomes a checkerboard that is hall-marked by an array of shorn landforms and the linear / geometric interplay between pine forest and pasture, overlain by wind turbines in various configurations. The varied architecture, scale and layouts of the latter simply compound this manifest imposition of human structures and patterns on the underlying landform of the northern Tararua and lower Ruahine Ranges. Indeed, the varied nature of the turbines on display – extending (physically) from the latest extension to Te Rere Hau in the south to the Te Apiti Wind Farm above Ashford – captures much of the historical evolution of wind farm technology in a confusing and, in places, chaotic way.

33. Annexures 8 to 12 (Photopoint locations are shown on Annexure 13) reveal this ‘modification’ of the ranges landscape between Turitea and the margins of Wharite Peak very clearly. The result is a present-day sequence of ridges and hilltops that is not only visually dishevelled and devoid of any real sense of cohesion or unity; it is also blatantly ‘cultural’, as opposed to ‘natural’. Thus, while the ranges’ landform may well remain apparent – indeed, it is emphasised by the historic clearance of native forest across both Ranges – it is visually subjugated by the matrix of pastoral, forestry and energy generation activities / structures that sit atop almost every visible ridge and hilltop. In my opinion, this landscape is certainly expressive; but rather than affirming the integrity of a natural or outstanding landscape – let alone both together – it clearly articulates the idea of a highly modified, and rather utilitarian, ‘energy production’ landscape.
34. If one were to assess this section of the joint ranges landscape in isolation, I therefore doubt that any landscape architect would identify the sequence of upper mantle of ridges and hilltops between Pahiatua Aokautere Road and Wharite Road as an ONFL. Instead, it is the association of this sequence to the extended axis of ranges / state forest parks both south and north of these roads (respectively) that gives rise to the proposed ONFL (ia) and its revised description referring to the ‘full extent’ of the Ruahine – Tararuas ‘chain’.
35. As a result, I think a reality check is needed in respect of ONFL (ia)’s description and the management principles implied in terms of its ‘scope’ (Table F1). In saying this, I acknowledge that there is a certain symbolic

value associated with the idea of protecting the physical continuity and linkage of both Ranges. Yet, the fact remains that the environs between Wharite and Aokautere Roads are already about as disturbed and modified as most rural landscapes get.

36. This means that I do not agree with the term “full extent” being stated in the ONFL’s description and I further consider that the ONFL’s scope should be further modified to read as follows:

(i) *Visual natural and scenic characteristics of the Ruahine and Tararua Ranges, as defined by the series of highest hilltops along the Ruahine and Tararua Ranges, including the skyline’s aesthetic cohesion and continuity, its prominence throughout much of the Region and its backdrop vista in contrast to the Region’s plains*

37. Alternatively, I believe it would be appropriate for the Court to more explicitly acknowledge the situation on the ground by requiring insertion of an amendment to Table F1’s Description and Scope of ONFL (ia) which specifically excludes those parts of the ranges landscape directly influenced by a combination of farming, forestry and energy generation activities – generally between Pahiatua Aokautere Road and Wharite Road. The Manawatu Gorge should, as at present, remain a discreet ONFL in its own right.

CUMULATIVE EFFECTS & POLICY 7-7(aa)

38. As currently proposed Policy 7-7(aa) reads as follows:

The natural features and landscapes listed in Schedule F Table F1 must be recognised as regionally outstanding. All subdivision, use and development directly affecting these areas must be managed in a manner which:

- (aa) *avoids any significant adverse cumulative effects on the characteristics and values of those outstanding natural features and landscapes, and*
- (a) *except as required under (aa), avoids adverse effects as far as reasonably practicable and, where avoidance is not reasonably practicable, remedies or mitigates adverse effects on the characteristics and values of those outstanding natural features and landscapes.*

39. Under this regime, precedence appears to be given to the assessment of cumulative effects over direct effects, a ‘discovery’ that somewhat surprises me. In making this statement, I fully recognise the concerns raised by Clive

Anstey in his statement at paragraphs 21 to 34. However, he makes a number of points that need to be addressed in a slightly different light.

40. On the subject of the Turitea and Motorimu decisions, turbines were removed from lower ridges – as conditions of consent – solely on the basis of direct effects and proximity to key viewing catchments. Cumulative effects were not the core issue in that selective ‘removal’ of turbines.
41. Turning to the issue of wind farm architecture and layout, Mr Anstey is quite correct that NZ and the area close to Palmerston North appears to have witnessed the rapid evolution of turbine design and configuration. However, this situation appears to be stabilising at present: turbines have pushed the bounds of acceptability (on land at least), as well as generation efficiency, and there is an emerging preference for turbines that are generally 150-160m high, that are mounted on monopole structures and that are tri-bladed. This increasing homogeneity, or similarity, of designs is reflected, for example, in recent wind farm applications around the Puketoi Range and Castle Hill. Coincidentally, there also appears to be a broad consensus, in terms of aesthetics, that turbines within the 130-150m range are preferable to smaller turbines. This is because larger turbines, incorporating increased spacing between them, appear less ‘cluttered’ and intensive; they leave more breathing space around each structure and impact less directly on underlying landforms and vegetation cover. They also appear less ‘busy’ and frenetic, with their blades appearing to turn more slowly (especially when compared with the ‘flicking’ motion of dual blade turbines). Consequently, future wind farm applications are likely to involve structures that have more similarities than differences.
42. It is also clear that cumulative effects can be very significant in some locations: In particular, successive wind farm developments on the northern Tararua and southern Ruahine Ranges have taken a ‘toll’, as I have already acknowledged. Yet, such effects are not always the most important, indeed far from it. It is often the first development of a particular kind – effectively ‘breaking new ground’ – that most modifies a landscape and, for instance, has an impact on its fundamental naturalness, rural character and aesthetic coherence / cohesion. Moreover, my recent assessment of the Puketoi Wind Farm proposal revealed that the cumulative impact associated with a linear

chain of wind farms down and beyond the Puketoi Range (including the Waitahora, Puketoi and Castle Hill proposals) would be secondary to the direct landscape and amenity effects generated by the Puketoi proposal. This reflects the fact that such effects – both direct and cumulative – will “*vary with their context*” (Anstey Paragraph 32).

43. Finally, I agree with Mr Anstey’s comment at paragraph 34 that “*at some point ‘enough is enough’*”, although this always has to be balanced against the more desirable aspects of co-location, which might well include consolidation of such developments (together with their effects) within landscapes that are already modified and therefore inherently less sensitive to such development. More strategically, there is also a strong argument for co-location of such utilities within those landscapes that are both more productive (in energy generation terms), but also less sensitive in terms of their intrinsic landscape values, and less exposed to population centres and major transport corridors or areas that provide strong focus for visitor / tourism activities. This, potentially takes us well away from the much traversed Ruahine / Tararua Ranges near Palmerston North.

44. Moreover, section 3(d) of the Act requires cumulative effects to be addressed in any assessment of a wind farm’s effects by stating that the word ‘effect’ includes:

any cumulative effect which arises over time or in combination with other effects — regardless of the scale, intensity, duration, or frequency of the effect, and also includes—

(e) any potential effect of high probability; and

(f) any potential effect of low probability which has a high potential impact.

45. Taking all of the above into account, it is my opinion that a number of factors inform the assessment of wind farms’ effects – both cumulative and direct:

- The impact of a new wind farm on a landscape that is as yet untouched by such development can be highly significant, often more so than the second or third such development in an area;
- The nature of any proposal and its landscape setting, including the distribution of visual catchments and audiences around it, is highly important in terms of both direct and cumulative effects;

- This can also lead to situations in which the direct effects of a proposal are more significant than its cumulative effects, even if it is one of several projects in one area;
- At a strategic level, it may be appropriate to concentrate development in areas of lesser landscape value and sensitivity – rather than end up in a situation where every corner of the Region is impacted, regardless of its landscape significance and receiving environments;
- In a related vein, consolidation of such development via the up-grading of existing facilities may well be preferable to pushing them into new ‘frontiers’ and parts of the Region that are relatively untouched by such development at present; and
- The issue of when wind farm development has reached the point of being ‘enough’, or too much, remains important.

46. This leads me to the view that Policy 7-7 has been written with a clear focus on just one part of the Manawatu Whanganui Region, and that a more balanced approach should be taken to the full spectrum of landscape effects that are generated by wind farms. This means that cumulative effects should be addressed in the same manner as direct effects [in terms of Policy 7-7’s clause (a)], and this would also mean that the positive, as well adverse, effects of such development could be appropriately considered in such an exercise.

Stephen Brown

BTP, Dip LA, Fellow NZILA, Affiliate NZPI
Registered NZILA Landscape Architect

15 February 2012

APPENDIX A. RESUME OF STEPHEN BROWN

RESUME: Stephen Brown

Academic Qualifications:	Bachelor of Town Planning 1978 (Auckland University) Diploma of Landscape Architecture 1981 (Lincoln University)
Professional Architects Qualifications:	Current President, former Vice President & Fellow of the NZ Institute of Landscape Architects Affiliate Of The NZ Planning Institute
Professional Experience:	Auckland Regional Authority 1982 - 84 Travers Morgan Planning (London) 1984 - 86 Brown Woodhouse Landscape Architects (owner) 1987 - 88 LA4 (part owner & director) 1988 - 98 Stephen Brown Environments Ltd & Brown NZ Ltd 1999 onwards

Awards:

Landscape Value Mapping of Hong Kong (2001 – 5): development of the methodology and assessment criteria for the 'landscape values and sensitivity mapping' of Hong Kong undertaken by Urbis Ltd for the Hong Kong Government – awarded the Strategic Planning Award by the (UK) Landscape Institute in 2006.

Project Impact Assessments:

Project Mill Creek (2010): assessment of the landscape, natural character and amenity effects of a proposed 31 turbine wind farm proposed in close proximity to Makara and Ohariu Valley, near Wellington – for Wellington City Council

Project Central Wind (2009): evaluation of the landscape, natural character and amenity effects of a proposed 51 turbine wind farm proposed for the southern margins of the North Island's Volcanic Plateau near Taihape and SH1, including a sub-regional assessment of alternative locations – for Meridian Energy Ltd

Project West Wind (2006): assessment of the strategic, regional implications, of the Project West Wind project relative to the Wellington region and the southern halves of the Wairarapa and Manawatu coastlines – for the NZ Wind Energy Association

Turitea Wind Farm (2006 - 10): preliminary assessment of the landscape and amenity effects of a proposed 80 turbine wind farm on the Tararua Ranges near Palmerston North – for Might River Power

Moorabool Wind Farm (2009/10): assessment of the landscape and amenity implications of a proposed 110 turbine wind farm east of Ballarat in the Moorabool Shire of Victoria – for WestWind Pty Ltd.

Allandale Wind Farm (2008): evaluation of the landscape and amenity effects of a proposed 50 turbine wind farm near Mt Gambier and Port MacDonnell in South Australia – for Acciona Ltd

Sidonia Hills Wind Farm (2008): assessment of the landscape and amenity implications of a proposed 52 turbine wind farm in the Macedon Hills Shire of Victoria – for Hydro Tasmania Consulting & Roaring 40s.

Awhitu Wind Farm (2005): evaluation of the strategic landscape and natural character effects of a 21 turbine wind farm proposed by Genesis Energy for the coastal margins of the Tasman Sea and Awhitu Peninsula near Waiuku, south of Auckland – for the Auckland Regional Council

Waterview Connection Project / SH16 (2009 - 11): assessment of landscape, amenity and natural character effects associated with redevelopment of the Te Atatu – Waterview section of Auckland's North-western Motorway and the Te Atatu interchange – for the NZ Transport Agency

Waterview Connection Project / SH20 (2009 - 11): evaluation of the landscape and amenity effects associated with development of SH20 from Stoddard Road to Waterview in Auckland – for the NZ Transport Agency

- Eden Park 2011 (2006 - 9):** detailed evaluation of the amenity and landscape effects of the proposed redevelopment of the Eden Park stadium and grounds for the Rugby World Cup 2011, addressing both 'legacy' and temporary stand alternatives – for the Eden Park Redevelopment Board
- Matiatia Village (2003-4):** evaluation of the landscape, natural character and amenity effects associated with a comprehensive commercial village development (18,000m²), together with car parking and transport interchange at the 'gateway' to Waiheke Island - for Waitemata Infrastructure Ltd.
- Waitemata Harbour Crossing Options Assessment (2002/3):** Evaluation of the visual and amenity effects of 9 harbour crossing options, including bridges, tunnels, submerged tubes, reclamations, ventilation and service structures, trenches and motorway interchanges - for Opus International and Transit NZ
- Coca Cola Amatil Plant Expansion (2005):** assessment of the amenity effects associated with an \$80 million expansion of Coca Cola Amatil's plant at Mt Wellington, abutting two arterial roads and a large residential community - for Coca Cola Amatil.
- Weiti River Crossing Review (2000):** review of the effects of a proposed bridge over the Weiti Estuary and the coastal environment - for the Auckland Regional Council.
- ALPURT B2 Waiwera River Crossing Review (1999):** review of the effects of a proposed bridge and related roading developments on the Waiwera and Puhoi Estuary coastal environs - for the Auckland Regional Council.
- Sylvia Park Commercial Centre Assessment (1999):** detailed assessment of the implications of a plan change to accommodate 150,000 sq metres of retail, office, and residential development at Mt Wellington, including community facilities, a railway station and new access road - for Kiwi Property Management Ltd.
- Marsden Point Port Impact Assessment (1997 & 2002):** responsible for assessment of the visual and amenity implications of a major new port facility covering some 37 ha.s and associated infrastructure development - including preparation of proposals for amelioration & enhancement around Blacksmith's Creek, followed by assessment of the effects of additional berths in 2002 - for the Northland Port Corporation / Northport.
- Southdown Power Station Assessment (1995):** detailed assessment of the likely visual and amenity implications of a co-generation power station within the industrial/coastal environment of Southdown – for Mercury Energy / Transalta.
- Dominion Road Transport Designation Assessment (2000):** detailed analysis of the amenity and visual implications of proposed transport corridor designations, including road widening and LRT corridor deviations off Dominion Road - for Auckland City.
- Glenfield Road Designations Review (2004):** review of the effects of implementation of three Outline Plans Of Work and resource consent applications related to the widening of Glenfield Road, an arterial route within North Shore City, including evaluation of impacts in respect of amenity, streetscape and open space values - for North Shore City .
- Lake Road Designations Assessment (2002):** detailed analysis of the effects associated with widening of Lake Road, including impacts upon residential amenity, streetscape and open space values; and appraisal of mitigation measures - for North Shore City .
- Omokoroa Roading Options Study (2001):** evaluation of route options and effects as part of an Assessment of Environmental Effects (in association with Beca Carter Tauranga) - for Western Bay of Plenty D. C.
- Tauranga Northern Arterial Review & Arbitration (2000):** evaluation of the proposed northern arterial's implications utilising assessments prepared by LA4 and Priest Mansergh, followed by site visits, and provision of recommendations to Transit NZ, the Bay of Plenty Regional Council and Western Bay of Plenty District Council about the landscape mitigation measures that should be employed in conjunction with development of the arterial corridor - for Transit NZ, the BOP Regional Council and WBOP District Council.
- Eastcliffe On Orakei (Bastion Point) Housing Project Assessment (current):** analysis of the visual and amenity implication of an 86 unit housing development next to Takaparawha reserve at Bastion Point & development of landscape concepts / detailing as part of the overall development proposal – for Protac Investments & Ngati Whatua.
- Eden Park Floodlighting & North Stand Assessment (1996/7):** evaluation of a proposal for floodlighting of the No.1 ground and a new north stand; and design of landscape treatment in front of the north stand - for the Eden Park Trust Board.
- Spencer On Byron Hotel (1998):** assessment of the visual effects of a 22 storey hotel proposal for Byron Ave in Takapuna – for Manawanui Trust.
- St Josephs Convent Redevelopment Assessment (1995/6; 2001):** analysis of the visual implications of replacing an existing convent with a combined retirement home / convent / chapel in St Marys Bay, including development of landscape concept for the main grounds and courtyards - for Little Sisters of the Poor.
- Brightside Hospital Assessment (1995/6):** analysis of the visual and amenity implications of replacing an existing hospital with a new hospital facility in central Epsom, including development of landscape proposals for the historic grounds - for Southern Cross.
- South-western Interceptor Assessments (1992; 1996-7):** detailed assessment of the proposed route for the South-western Interceptor AEE - covering a route from Homai Stream to Puhinui Road (the eastern airport Access road) via the

Matukutururu Stonefields, Puhinui Inlet and Puhinui Reserve - for the AEE. Followed up in late 1996 with development of an amelioration strategy - for WaterCare Services Ltd

North Harbour Gas Pipeline (1995-6): *three stages of involvement in the planning process covering: evaluation of broad 'corridor' options for routing of the pipeline and identification of three preferred routes; detailed assessment of the landscape and amenity implications of the preferred route option; and preparation and presentation of evidence about the proposal and its effects for the North Shore City Council hearing - for Enerco.*

Auckland International Airport Eastern Accessway Impact Assessment (1989 / 1991): *appraisal of a new entry route and bridge options across Pukaki Inlet for Mangere International Airport and development of broad guidelines for the design of the entry road and its immediate surrounds - for the Auckland International Airport Company Ltd.*

A.R.C. Reservoir / Bulk Water Supply Options Study (1988): *responsible for detailed evaluation of eight different dam and/or river extraction options for supplying Auckland with water into the 21st century - for the Water Dept of the Auckland Regional Authority.*

Sky Tower Assessment (1991): *assessment of the Sky Tower proposal for upper Symonds St, Grafton, and presentation of evidence at the Planning Tribunal in relation to its effects - for Auckland City Council & the Auckland Regional Council.*

Mt Ruahine Mast assessment (1999): *evaluation of the effects of a proposed 24 metre mast and shed on top of Mt Ruahine at the southern end of Great Barrier Island - for the Maritime Safety Authority.*

Light Rail transport Evaluation (1990): *evaluation of the visual and aesthetic implications of a light rail system running into and through central Auckland and providing recommendations for its integration into Queen St - for NZ Railways.*

Bayswater Marina, Okahu Bay Marina & Goldsworthy Bay Marina and Tourism Development Studies (1987-90): *evaluation of all 3 marina proposals and presentation of design recommendations for each - for Wilkins & Davies Ltd, Beca Carter Hollings & Ferner Ltd and L. Sutherland.*

Pine Harbour Marina Extension Assessment (1990): *visual impact appraisal of a 250 berth extension at Pine Harbour - for the Department of Conservation.*

Site Selection Studies for P.W.R. Stations at Trawsfynydd and Wylfa - North Wales (1984-6): *evaluation of a wide range of different siting options for two power stations proposed for North Wales based on landscape/visual impact criteria - for the (U.K.) Central Electricity Generating*

Channel Tunnel Railway Connections Study (1986): *evaluation of route options and landscape impacts associated with provision of railway connections to the Channel Tunnel immediately north-west of Folkestone - for the United Kingdom Department of Transport.*

Strategic Assessments:

Waikato Regional Policy Statement Chapter 12 – Landscape Review (2011): *review of proposed ONLs and areas of high natural character across the Waikato Region, taking into account public submissions and the 2010 NZ Coastal Policy Statement – for the Waikato regional Council*

Auckland Geomorphic / Geological Features Assessment (2011): *analysis of past case law, the RMA and current policy, together with field evaluation of 207 features to determine if they qualify as ONFs – for Auckland Council*

Buller District Landscape & Natural Character Assessment (2011): *assessment of the Buller Districts Outstanding Natural Features and Landscapes, together with identification of its coastal environment, lake / river / wetland margins and identification of those areas displaying high Natural Character – for Meridian Energy Ltd & the Environment Court (in relation to the Mokihinui hydro-electric project appeals)*

Auckland Region: Natural Character Assessment (2009/2010): *delineation of the coastal environment for the entire Auckland Region and identification of areas of high natural character employing key environmental indicators / parameters – for the Auckland Regional Council.*

Manawatu / Tararua / Lower Rangitikei District Landscape Assessment (2009): *identification of the Outstanding Natural Landscapes and Amenity Landscapes distributed within all three districts within 150km of the Turitea Wind Farm site in the northern Tararua Range – for Mighty River Power.*

Auckland Regional: Natural Character Assessment (2009 / 10): *delineation of the coastal environment for the Auckland Region in conjunction with identification of all coastal areas that display high natural character, employing environmental indicators – for the Auckland Regional Council.*

Otorohanga District Landscape Assessment (2008): *identification of Outstanding Natural Features and Landscapes, Amenity Landscapes and parts of the District's coastline – together with lake and river / stream margins – that display high Natural Character values – for Otorohanga District Council.*

- Thames Coromandel Landscape Review (2007 / 2008):** peer review of the Thames Coromandel landscape assessment leading to a complete re-assessment of the Peninsula, identification of its Outstanding and Amenity Landscapes, as well as coastal environments displaying high to outstanding natural character values – for Thames Coromandel District Council.
- Kawhia Aotea West Coast Assessment (2006):** assessment of the landscape and natural character values of the catchments around Kawhia and Aotea Harbours, including the identification of the area's outstanding landscapes, visual amenity landscapes and parts of the coastline displaying high natural character – for Environment Waikato and the Waikato, Waipa and Otorohanga District Councils.
- Whangarei District Landscape review / Assessment (2005):** assessment of landscape values across Whangarei District to identify its Outstanding Landscape and Visual Amenity Landscapes, involving use of past public preference research, public consultation, identification of natural character values, landscape heritage values - in conjunction with Beca Carter Hollings & Ferner Ltd for Whangarei District Council.
- Assessment of the Auckland Region's Landscape (2001-4):** responsible for a review of landscape assessment methodologies appropriate for re-assessment of the Auckland Region's landscape, including literature search and organisation of workshops to review theoretical options - designed to address identification of Auckland's outstanding / iconic landscapes; followed by Q-Sort testing of public attitudes to landscape, and mapping of the Auckland Region's Outstanding Landscapes - for the Auckland Regional Council.
- Hauraki Gulf Islands District Plan - Plan Change Reviews (2003):** detailed reviews of Plan Changes 23 (Subdivision), 24 (Earthworks), 25 (Indigenous Vegetation Clearance) & 26 (Lot Coverage) involving detailed assessment of the Waiheke and Great Barrier Island landscapes in respect of their capacity to accommodate changes to the relevant thresholds for permitted and discretionary activities and assessment criteria leading to recommendations in relation to each Plan Change - for Auckland City.
- Auckland Urban Coastline Assessment:**
Waiheke Island Coastal Landscape Assessment:
Great Barrier Island Coastal Landscape Assessment:
 (1993-5): Assessment of the VALUE, VULNERABILITY and overall SENSITIVITY of each of these coastal areas - involving their breakdown into landscape units, description and discussion of landscape character types and preparation of preliminary policies for landscape management - for the Auckland Regional Council.
- Hawkes Bay Region Landscape Assessment:**
East Manukau Assessment:
 (1994-6): responsible for managing / overseeing assessment of the landscape values in each of these strategic landscape studies - involving their breakdown into landscape units, description and discussion of landscape character types and preparation of preliminary policies for landscape management - for the Hawkes Bay Regional Council & Manukau City Council.
- Mahia Peninsula / Wairoa Coastal Strategy (2003):** assessment of the landscape and natural character values of the Mahia Peninsula and nearby coastal areas, including Mahanga and Opoutama, to provide input on both conservation and strategic development strategies for the Wairoa District Coastal Strategy Study - for Beca Carter Hollings & Ferner and Wairoa District Council.
- North Shore City Significant Landscape Features Assessment (1998-2001):** identification, analysis and description of all significant landscape features within the Albany, Greenhithe, Paremoremo and Long Bay / Okura parts of North Shore City - for North Shore City Council.
- East Tamaki Catchment Management Study (2001):** analysis of landscape and open space values in the East Tamaki catchment leading to recommendations in relation to future open space provision and park acquisition - for Beca Carter & Manukau City Council.
- Whangarei District Coastal Management Study (2003):** assessment of the landscape values and 'carrying capacity' of settlement areas down the eastern Whangarei coastline leading to recommendations about future development and conservation strategies - in relation to: Oakura, Moureeses Bay, Woolleys Bay, Matapouri, Pataua South & North, Ocean Beach, Urquharts Bay, Taurikura, Reotahi and McLeods Bay - for Beca Carter & Whangarei District Council.
- Waitakere City Northern Strategic Growth Area Study (2000 - 2001 & 2003):** Analysis of existing landscape features, character areas and resources within the Whenuapai / Hobsonville / Brighams Creek catchment as the basis for evaluation of future growth options. This work includes the identification of key landscape sensitivities within the catchment, the identification of development constraints and opportunities in relation to the local landscape and the preliminary assessment of effects associated with shifting Auckland's MUL in the subject area - for URS New Zealand Ltd and Waitakere City Council (Eco Water). In 2003 this work was extended to cover Herald Island and the Red Hills area - for Landcare Research.
- Franklin District Rural Plan Change Study (current):** responsible for re-evaluating most of Franklin District - in relation to landscape values, sensitivities and residential development potential / appeal - to determine areas that present opportunities for residential growth, rural areas that should be specifically excluded from rural-residential development and generic features that should be conserved throughout the District - for Franklin District Council.

Assessment of the Auckland Region's Landscape (1983-4): region-wide appraisal of both the aesthetic quality and the visual absorption capability of different parts of Auckland's extra-urban landscape (covering 425,000 has). This study involved breaking the Region down into 633 landscape units and incorporated a public preference study with over 1100 public participants. It has enabled planners to come to terms with both public perceptions of landscape value and the relative vulnerability of different parts of the Region to development - for the ARC.

Whangarei District North-eastern Coastal Settlements Assessment (1996): assessment of key landscape features and elements that should be conserved to help define the margins of urban growth around Whangarei District's north-eastern coastline - from Ocean Beach in the south to Oakura and Whangaruru - for Whangarei District Council.

Volcanic Cone Sightlines Review (1997 - 2003): appraisal of current sightlines to Auckland's volcanic cones leading to suggestions about the addition, deletion and location of sightlines, and the specification of controls in relation to each - for the ARC and Auckland City Council.



ANNEXURE 1.

PROPOSED ONE PLAN OUTSTANDING
NATURAL LANDSCAPES & FEATURES

Ruapheu & The Rangipo Desert



ANNEXURE 2.

PROPOSED ONE PLAN OUTSTANDING
NATURAL LANDSCAPES & FEATURES

The Rangipo Desert & The Kaimanawa Ranges

Evidence of Stephen Brown: Chapter 7 One Plan Appeals



3884 Panhatua Pungawa Road



ANNEXURE 3.

PROPOSED ONE PLAN OUTSTANDING
NATURAL LANDSCAPES & FEATURES

The Tararua & Ruahine Ranges

Evidence of Stephen Brown: Chapter 7 One Plan Appeals



ANNEXURE 4.
PROPOSED ONE PLAN OUTSTANDING
NATURAL LANDSCAPES & FEATURES
The Rangitiki River
Evidence of Stephen Brown: Chapter 7 One Plan Appeals



ANNEXURE 5.

PROPOSED ONE PLAN OUTSTANDING
NATURAL LANDSCAPES & FEATURES

The Manawatu Coastline

Evidence of Stephen Brown: Chapter 7 One Plan Appeals



ANNEXURE 6.

PROPOSED ONE PLAN OUTSTANDING
NATURAL LANDSCAPES & FEATURES

Akitio Coastline & Cape Turnagain

Evidence of Stephen Brown: Chapter 7 One Plan Appeals



ANNEXURE 7.

AERIAL VIEWS OF THE AREA BETWEEN WHARITE PEAK & PAHIATUA AOKAUTERE ROAD

Evidence of Stephen Brown: Chapter 7 One Plan Appeals



Viewpoint 1: Looking towards the northern Tararua Ranges around Pahiatua Aokautere Road & the northern end of Turitea Reserve



Viewpoint 2: The northern Tararua Ranges viewed from Pahiatua Aokautere Road looking towards Te Rere Hau

ANNEXURE 8.

THE LANDSCAPE BETWEEN WHARITE PEAK & PAHIATUA AOKAUTERE ROAD

Evidence of Stephen Brown: Chapter 7 One Plan Appeals



Viewpoint 3: The landscape near Pahiatua Aokautere Road viewed from North Range Rd looking southwards Turitea



Viewpoint 4: The landscape of the northern Tararua Ranges viewed from Ballance Valley Road

ANNEXURE 9.

THE LANDSCAPE BETWEEN WHARITE PEAK & PAHIATUA AOKAUTERE ROAD

Evidence of Stephen Brown: Chapter 7 One Plan Appeals



Viewpoint 5: The southern end of the Ruahine Ranges near the Manawatu Gorge Looking towards Wharite Peak from Saddle Road



Viewpoint 6: The more immediate landscape around the access road up to the Te Apiti Wind Farm south of Wharite Peak

ANNEXURE 10.

THE LANDSCAPE BETWEEN WHARITE PEAK & PAHIATUA AOKAUTERE ROAD

Evidence of Stephen Brown: Chapter 7 One Plan Appeals



Viewpoint 7: The landscape near Saddle Road on the Ashurst side of the Ruahine Ranges



Viewpoint 8: Looking up to the northern Tararua Ranges from Fitzherbert Road East

ANNEXURE 11.

THE LANDSCAPE BETWEEN WHARITE
PEAK & PAHIATUA AOKAUTERE ROAD

Evidence of Stephen Brown: Chapter 7 One Plan Appeals



Viewpoint 9: The landscape on the northern Trarua Ranges south of the Manawatu Gorge viewed from Hall Block Road

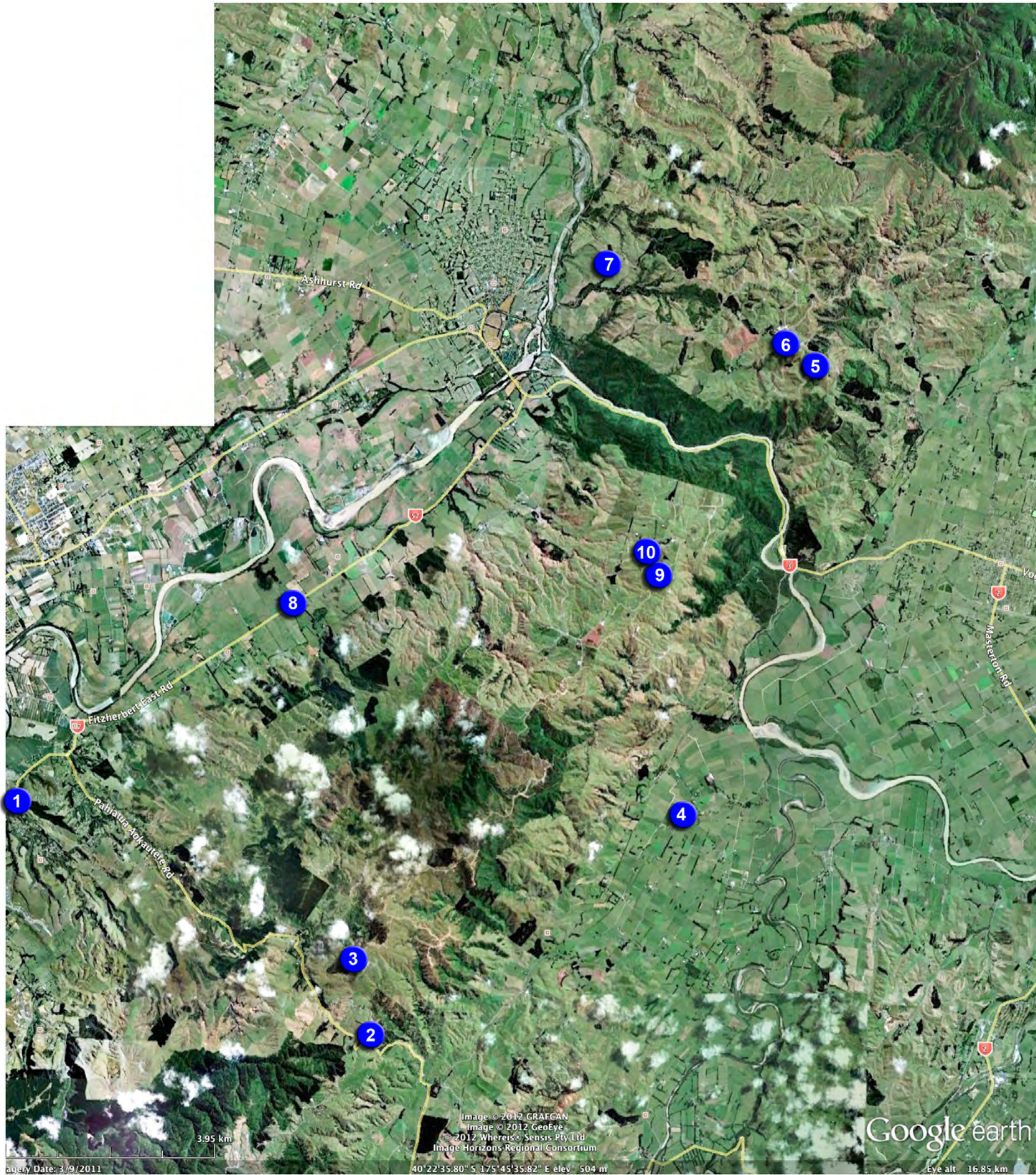


Viewpoint 10: The crest of the Ranges looking southwards from Hall Block Road

ANNEXURE 12.

THE LANDSCAPE BETWEEN WHARITE PEAK & PAHIATUA AOKAUTERE ROAD

Evidence of Stephen Brown: Chapter 7 One Plan Appeals



7 Viewpoints (1 - 12)

ANNEXURE 13.

PHOTOPOINT LOCATIONS

Evidence of Stephen Brown: Chapter 7 One Plan Appeals