

**BEFORE THE COMMISSIONER ON BEHALF OF DUNEDIN
CITY COUNCIL**

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of an application for resource consent
for a wind farm on Porteous Hill (LUC-
2015-469)

BY Blueskin Energy Limited

STATEMENT OF EVIDENCE OF STEPHEN KENNETH BROWN

10 May 2016

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 past 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 33 years.

2. During that period, the great majority of my professional practice has focussed on landscape assessment and planning. This has included evaluating the landscape, natural character and amenity effects associated with numerous wind farm projects, including:
 - **Puketoi Wind Farm Project** (2011/12): assessment of the landscape, amenity and natural character effects of a 54 turbine wind farm to be located on the Puketoi Range in the Tararua District together with a 220 kV transmission corridor to the Turitea substation on the northern Tararua Range – for Mighty River Power Ltd.
 - **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.
 - **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 Mighty River Power Ltd.
 - **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.
 - **The Hauāuru mā raki Wind Farm** (2008/9): evaluation of the amenity and landscape effects associated with a 245 turbine, 34km long, proposal on the west Raglan coastline – on behalf of local landowners, David and Pamela Walter.
 - **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.

- **Te Uku Wind Park** (2007): peer review and assessment of the landscape, amenity and natural character effects of a 28 turbine wind farm proposed for the Te Uku Ridge / Wharaurua Plateau by WEL Networks – for Waikato District Council.
 - **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.
 - **Project West Wind** (2006): assessment of the strategic regional implications of the Project West Wind wind farm relative to the Wellington region and the southern halves of the Wairarapa and Manawatu coastlines – for the NZ Wind Energy Association.
3. In addition, I have addressed the effects of projects ranging from Auckland’s Waterview Connection project and various harbour crossing options for the Waitemata Harbour to the Escarpment Mine on the Buller District’s Denniston Plateau. More strategically, I have also undertaken a large number of assessments addressing landscape and natural character values. As outlined in the attached CV (**Appendix A**), these have covered territorial areas stretching from Whangarei District to the West Coast Region (Buller, Grey and Westland Districts), and in 2006 I was also part of a team managed by Urbis Ltd that was awarded the (UK) Landscape Institute’s Strategic Planning Award for the “Landscape Value Mapping Study of Hong Kong”. My contribution included development of an assessment method and evaluation criteria that were employed in that study.

CODE OF CONDUCT

4. The current application is not yet before the Environment Court. Notwithstanding this, I confirm that I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2014 and that I agree to comply with it. I further confirm that I have considered all the material facts that I am aware of that might alter or detract from the opinions that I express, and that this evidence is within my area of expertise, except where I state that I am relying on the evidence of another person.

SCOPE OF EVIDENCE

5. In relation to the 'Blueskin' application, I have been engaged by Simon Ryan and Jennifer Ashby, who reside at 90 Pryde Rd, and Lyndon and Kirsty Clayton who live at 22 Pryde Rd. All four submitters live directly adjacent to the proposed wind farm site atop Porteous Hill. My brief addresses the direct effects of the proposal on those residents; in addition, I address a range of other, related, issues:
 - Values attributed to, and associated with, the various landscapes that would be affected by the proposal.
 - Wider amenity effects, with particular regard to the residential communities of Warrington, Waitati and Michies Crossing, and even the small settlement of Seacliff.
 - Impacts on coastal landscape character and values, focusing in particular on Blueskin Bay, the Warrington beach area and spit, Doctors Point through to Mapoutahi, and the coastline from Warrington up to Brinns Point and Green Point.
 - Impacts on SH1.
 - The strategic implications of the proposal, with particular regard to Policy 13 of the NZ Coastal Policy Statement (2010), the North Coast Coastal Landscape Protection Area (NCCLPA), and the implications of more dispersed wind farm development over time on wider landscape characteristics and attributes.

6. I fully appreciate that my landscape colleagues – Ms Lucas and Michael Moore especially – have traversed the landscape around Porteous Hill, Blueskin Bay and further north at some length. I don't intend to repeat their descriptions of this landscape, but will address its values through a lens that is somewhat different from that of Ms Lucas; less so Mr Moore who it appears sits somewhere between myself and the applicant as regards the qualities of the existing environment and the application's likely effects on it.

7. I also have to 'be upfront' and acknowledge that I have more often than not supported wind farms in the past – albeit, not exclusively so. However, this also means that I fully apprehend the various shades of human reaction and emotion that wind farm proposals give rise to, both for and against. Turbines are frequently

praised for being elegant, sculptural elements that help to focus attention on particular topographic features – whether individual hilltops or the sweeping wave form of a cuesta ridge; alternatively, they are decried for being large utilitarian, even industrial, artefacts that pollute landscapes and destroy their innate naturalness. My professional view is that turbines can be both – within different surroundings – and that individuals’ responses to them will largely be dictated by factors that include:

- Personal aesthetic taste and responses to the form and scale of turbines;
- The actual design of the individual turbines;
- Their layout and proximity to key receiving environments;
- The nature of the existing landscape setting: the incursion of turbines into a landscape that is valued, even cherished, by the communities around it - and more fundamentally natural - will inevitably evoke more or an adverse reaction than the imposition of turbines on a landscape that is already degraded and modified; and
- Community influences, with the idea of supporting a ‘green economy’ somehow seeming much more noble and worthwhile than simple power generation, while the concept of ‘community ownership’ – much touted in the application but largely refuted in the council officer’s report – also has considerable appeal.

8. These overlapping influences ultimately mean that reactions to wind turbines and farms vary considerably; there is no singular or uniform way of viewing them. In this instance, reactions will be honed as much by the character and ‘community ownership’ of Porteous Hill and its wider landscape setting, as by the nature of the proposal itself. I am not therefore prepared to succumb to the idea of the Blueskin turbines being elegant and aesthetically beneficial, regardless of which vantage point they are viewed from. Having said this, it is clear that the Blueskin proposal avoids the massing of turbines that is certainly more typical of most local wind farm proposals.

THE PROPOSAL

9. I am pleased that Ms Lucas’s statement clarifies the situation in relation to the nature of the turbines proposed for Porteous Hill, that they comprise 90m high Enercon E53

turbines with a hub height of 60m. The lack of clarity over this matter was a critical deficiency of the application that needed to be resolved.

10. However, using the map provided in the application by acoustic engineer, Stephen Chiles indicates an array of turbines that would result in Turbine 2 being separated from Turbine 3 (Lucas numbering) by approximately 190-200m, while Turbine 1 would be some 260-270m from Turbine 3. Yet, it is commonly accepted that wind farms need separation distances at least 2.5 times the height of each turbine – with multiples of 5-6 times more typical – to avoid the turbulence from individual rotors downgrading the flow across other down-wind turbines. In the case of the Blueskin site, this means that turbines might be expected to be at least 225m from one another and more typically 500-540m apart.
11. I am not aware of any changes to the proposed wind farm layout that reflect this more typical wind farm arrangement, and any such alterations would likely result in one or more turbines moving appreciably closer to neighbouring properties, thus increasing their proximity to local residents. However, this unusual configuration still leaves an element of doubt about the ultimate layout of the proposal that should be addressed in conjunction with the modification to the type and size of proposed turbine that is acknowledged in Ms Lucas's statement. Just as important, the currently proposed layout would result in a turbine grouping that is unusually intensive, with blades and masts visually 'overlapping' one another when viewed from most quarters. In this context, I also remain unclear as to any limits on the final location of the proposed turbines.
12. I should also add that I am still unclear as to the proposed path of an 11kV or 33kV transmission line to the Palmerston-Waitati sub-transmission corridor, and note that Ms Lucas's evidence doesn't appear to address this component of the proposal at all. I have no idea how significant it might be, either in its own right or in conjunction with the proposed turbines.
13. On the other hand, Ms Lucas does make it clear that each of the turbine hubs would carry a shielded hazard warning light – in all likelihood, not sufficient to completely screen its red refracted light as is suggested by Ms Lucas at her paragraph 37, but providing enough buffering to reduce the lighting to a softer 'ambient' glow when viewing the turbines from below. Furthermore, she explains that shadow flicker – derived from the blades creating a flickering shadow – would not affect local

dwellings and their occupants, but says nothing about blade glint, presumably on the basis that a matt coating on the blades and rotating nacelles would limit such effects to a barely discernible, or at least, acceptable level. I have not had sufficient time to explore such effects in any detail.

EXISTING LANDSCAPE VALUES

14. Both Ms Lucas and, to a lesser degree, Michael Moore are rather dismissive of the values associated with Porteous Hill and the combination of rural and coastal environs that frame it. Clearly, much of the modification that Ms Lucas focuses on is derived from historic farming activity on and around the hill, while shelterbelts, pine woodlots, together with the production forestry across SH1, are identified as factors that detract from the overall structure and composition, aesthetic appeal, aesthetic coherence, and ultimate naturalness of the landscape stretching up from Blueskin Bay to wrap around the application site. Clearly, the quarry at the end of Pryde Rd and the pockets of residential development stretching from the eastern end of Michies Crossing to Warrington then Seacliff, compound this infiltration of man-made activities and patterns in this landscape.
15. But this doesn't render the landscape wholly unnatural or unappealing: Doctors Point; the Warrington distal spit and beach area, together with coastal dunes and grassland; the enclosed water area of Blueskin Bay, and the serrated coastline leading up to Brinns Point all display significant appeal (**Annexures 1 & 2-10**). Indeed, that is precisely why people live at Waitati, Michies Crossing, Warrington and the other settled pockets up the coastline near, and north of, Porteous Hill. In a similar vein, the rolling profiles of Porteous Hill, Hammond Hill, and Guilds Hill – with a complex mosaic of pasture, shelterbelts, bush remnants, pine woodlots and rural-residential properties across and between them – provide an attractive backdrop to the coastal domain 'below'; less than truly spectacular or outstanding in the parlance of section 6(b) of the Act, but nevertheless appealing and highly complementary to the embayed waters, open sea and varied coastal margins that I have just described.
16. Sandwiched between the coastal marine area and these rural climes, the local settlements of Warrington and Michies Crossing / Waitati, together with local reserves, stare across Blueskin Bay at one another. A palette of (sometimes) flat

sea provides the foundation for this visual interaction, while the rising backdrop of rolling farmland on undulating slopes and small volcanic peaks encloses, and visually defines most of the local coastal landscape and environment. The resulting interplay of water and land, and of suburbia with a wider rural domain is fundamental to this part of the north Dunedin coastline. Blueskin Bay's enclosed body of sea dominates many of the views from surrounding vantage points, while the spit – together with the beaches both sides of Doctors Point and the island at the harbour inlet – provide ready focal-points at the centre of such views. Yet, the array of peaks stretched across the northern skyline, including the patchwork quilt of open farmland, shelterbelts and pine woodlots that Ms Lucas decries, remain critical to the appeal of this entire landscape. Porteous Hill is the fulcrum of this sequence, with a mixture of rolling farmland, pockets of remnant bush, and even the production forestry across SH1, spreading left and right of its open slopes and crest.

17. Looking from out to sea from the beach on Warrington's spit or from the car park and tracks that provide public access to it, Porteous Hill climbs high above the adjoining settlement, anchoring the base of the spit. Its array of open, pastoral slopes, shelterbelts and pockets of bush comprise most of the visible backdrop to, and frame for, Warrington. Although housing near the elevated Coast Rd is also visible, as Ms Lucas explains at p.8 of her application report (in relation to views from the Coast Rd):

...there are inland views across lower slope farmland to the open pastoral summit of Porteous Hill. The hill has a gentle rolling silhouette and the regenerating forest of Slaughterhouse Bush is visible on the mid-to upper slopes exhibiting high naturalness.

18. In fact, both the rolling terrain and bush within, or connected with, Slaughterhouse Bush becomes more prominent in views from further up the coast – towards Church Rd, Seacliff and Brinns Point as my series of photos (**Annexures 7 to 10**) demonstrate. The increasingly convoluted coastline north of Warrington, with its pockets of remnant bush intertwined with shelterbelts and pockets of other planting (both pines and amenity species), retains a strong rural ambience, but it also has the sense of being more varied, intimate and natural as well.
19. Although the serrated sequence of coves, small headlands and rock shelves below much of the Coast Rd is not visible from public vantage points, the volcanic underpinnings of this landscape are apparent in its convoluted profile, and the steep

fall from local ridgelines to the sea. Pockets of remnant bush around Omimi Creek and other stream courses, as well as across the seeming karst landscape (actually volcanic / metamorphic) stretching from Truby King Reserve to high above Brinns Point, reinforce this patterning, while Porteous Hill and, further north, Guilds Hill, provide punctuation points on its crest. Porteous Hill, in particular, is a pivotal point within this stretch of coastline – both a ready point of reference and visual ‘centrepiece’ – that (again) anchors the wider coastal landscape around it.

20. Although pockets of bush also affirm some of the natural qualities of Porteous Hill and its margins on its inland side – above SH1, either side of Stead Rd – it is the coastal side of Porteous Hill that is of more significance from my point of view, because it is so fundamental to the character and qualities of the coastal landscapes that I have just described.
21. Much closer to the proposed Blueskin wind farm site, the farm properties up Pryde Rd owned by my clients, Simon Ryan and Jennifer Ashby, and Lyndon and Kirsty Clayton, clearly benefit from other qualities associated with the more elevated slopes of both Porteous Hill and nearby Hammond Hill. Sitting between these two cones, both properties enjoy a sense of relative isolation, of peace and quiet and of being ensconced in a highly appealing rural landscape. Their surrounds are dominated by the open crests of both volcanoes, together with a complex layering of shelterbelts, amenity planting, pine woodlots and pasture. Mr Ryan and Ms Ashby also enjoy spectacular views to the Pacific Ocean and its margins, including Mapoutahi and Potato Point across the outer reaches of Blueskin Bay and up the coastline towards Seacliff.
22. As my **Annexures 11 & 12** show in relation to the property at 90 Pryde Road, much as the foreground landscape retains its essentially rural nature, grounded by the sort of open pasture and shelterbelts decried by Ms Lucas. Its volcanic terrain – including rock outcrops – is clearly apparent, while bush remnants, the serrated coastal edge around Omimi and expansive ocean panorama that are visible from my client’s house and surrounds are little short of spectacular. As a result, many of the elements identified by Ms Lucas as eroding both the innate naturalness and aesthetic appeal of Porteous Hill when viewed over any distance, have much less meaning and relevance when this landscape is viewed from ‘within’. Even the nearby quarry on the side of Hammond Hill is completely screened from view and is devoid of any real ‘presence’ in relation to the Ryan and Ashby property. The

grassed terrace in front of the Ryan / Ashby residence at no.90 Pryde Rd makes the most of this outlook, with Porteous Hill affording both a physical and visual 'backstop' to the house and its lawn.

23. Although Mr and Mrs Clayton's farm property is both closer to SH1 and devoid of the sort of sea views that I have just described, it still retains the very strong sense of sitting within a fundamentally rural environment. Views to both Hammond Hill and Porteous Hill dominate much of the outlook from both the main house and subsidiary buildings that are (in part) occupied by Mr and Mrs Clayton's son, while surrounding slopes remain dominated by a mixture of pasture, shelterbelts and roadside planting. The Clayton residence retains a strong sense of being physically and visually isolated, of being a quiet haven from the activities, noise and other accoutrements of human-kind, while decks on the northern and eastern sides of the main house reinforce the sense of connection with both nearby hills: their slopes and crests are very immediate points of reference for both the Claytons and anyone visiting them.

AMENITY EFFECTS - LOCAL RESIDENTS

24. Addressing the issue of the Blueskin proposal on those living on Pryde Rd and nearby Porteous Rd, Ms Lucas states as follows at her paragraphs 38-40:

38. The amenity values of the adjoining lands includes the aesthetic coherence of the acoustic environment, the soundscape. The expected sound generation from the 3 turbines has been assessed by Dr Chiles and Enercon and one of the houses has been found to be potentially adversely affected. The modelling indicates a slight exceedance for the house location at 90 Pryde Road. With the house oriented away and the turbines visually screened, the effects of this sound on amenity values is assessed to be less than for that acoustic effect to accompany a direct view to turbines. I assess the effect of the turbines on the soundscape of the houses on the adjoining lands to be minor...

40. For the rural land of the 8 properties, when visible in reasonably close proximity the turbines will affect the amenity values. The character will be changed. Whether the structures are perceived to contribute to or to detract from their amenity will depend on a viewer's attitude to their presence.

41. As "amenity values" address people's appreciation of the pleasantness and aesthetic coherence, viewers' opinions will undoubtedly vary. As has been found with wind turbines elsewhere, changing from what has long existed to introduce

something entirely new can initially be perceived as unpleasant, but can later be enjoyed, accepted, ignored or merely tolerated.

25. Frankly, Ms Lucas's assessment means little: at worst, it appears that those living close to the wind farm could expect to be affected by a 'change in landscape character' and even though this might be "*initially tolerated*", this may later be "*enjoyed, accepted, ignored or tolerated*". This essentially returns us to the personal attitude argument discussed at paragraph 7 of my statement, but doesn't progress us towards a meaningful understanding of impacts derived from the change described by Ms Lucas.

26. Indeed, Michael Moore offers a rather more balanced view of the likely effects of the wind farm on both families residing within Pryde Rd – at pages 32 to 34 of his original review (Appendix A to his statement), focusing first on 22 Pryde Rd:

22 Pryde Rd

...From the house and its environs, turbines 1 and 3 will be entirely or largely screened by landform but turbine 2 will be prominent on the hill summit. Its vertical form, significant scale and dynamism will ensure that it is a focal point.

...In my assessment, the visible turbines will be a major new element to the rural landscape at this proximity. Whilst they will not modify the landform or vegetation character they will modify the current level of naturalness and introduce a significant change to the landscape. Overall, it is my opinion that the magnitude of visual effects will be moderate-significant from this viewpoint. A higher rating is avoided because the windfarm is located 'behind' the dwelling and not within the main / north facing outlook and because there is substantial screening by landform.

27. Very similarly in relation to 90 Pryde Rd at pages 33 and 34:

90 Pryde Rd

...In my assessment, the visible turbines will be a major new element to the rural landscape at this proximity. Whilst they will not modify the landform or vegetation character they will modify the current level of naturalness and introduce a significant change to the landscape. It is my opinion that the magnitude of visual effects from this viewpoint (including the wider setting) will be moderate-significant from this viewpoint overall. A higher rating is avoided because the windfarm is located 'behind' the dwelling and not within the main / north facing outlook and because there is substantial screening by vegetation and landform.

28. Returning to Ms Lucas's evidence, I also note that in replacing the simulations which first accompanied her application report with those now attached to her evidence, the original Viewpoint 2 images (with and without the proposed turbines) have been lost. Whereas those images previously helped to locate the turbines relative to the top of Pryde Rd and the Ryan / Ashby residence, and provide an indication of their scale when viewed from reasonably close up, that comparator is no longer available. Indeed, none of the viewpoints employed by Ms Lucas provide any sort of basis for the assessment of effects in relation to those living closest to the proposed wind farm. I regard this as a major omission in Ms Lucas's evaluation of amenity effects and of the proposal as a whole.
29. Furthermore, while Ms Lucas reiterates that the Ryan / Ashby dwelling 'turns its back on' Porteous Hill in facing away from its summit, with trees and screen planting accentuating this orientation, she doesn't appear to have visited the subject properties or analysed effects on them in any detail. Conversely, my clients have outlined their personal views on, indeed antipathy to, the Blueskin proposal. I have also visited both farms, their dwellings and areas of residential curtelage. **Annexures 13 to 21** contain photos that show the following:

22 Pryde Rd:

- Annexure 13** (Photo 12): approaching the entrance to the Clayton residence (Pryde Rd);
- Annexure 14** (Photo 13): travelling up the driveway towards the Pryde residence;
- Annexure 15** (Photo 14): looking from outside the Clayton residence towards the crest of Porteous Hill; and
- Annexure 16** (Photo 15): looking from the deck outside the Clayton residence towards the crest of Porteous Hill.

90 Pryde Rd:

- Annexure 17** (Photo 16): travelling up the driveway towards the Ryan / Ashby residence;
- Annexure 18** (Photo 17): looking from the lawn outside the Ryan / Ashby residence over the house towards the crest of Porteous Hill;
- Annexure 19** (Photo 18): looking from the paddock next to the Ryan / Ashby residence towards Turbine site 2;
- Annexure 20** (Photo 19): looking from a volcanic outcrop / knoll on part of the Ryan / Ashby property towards the crest of Porteous Hill; and

Annexure 21 (Photo 20): looking from a paddock near Pryde Rd on the Ryan / Ashby residence towards the crest of Porteous Hill.

30. Having reviewed the situation 'on the ground', as well via the photos listed above, I have reached quite different conclusions about the level of effect that the proposed turbines would generate in relation to 22 and 90 Pryde Rd, notwithstanding the mitigatory factors identified by Ms Lucas and Mr Moore.
31. The first point I need to make is that I am not aware of any other wind farms that locate turbines as close to neighbouring houses as the current proposal would. At Makara, I had to assess the effects of a Project Mill Creek turbine some 580m from a house site (not developed at that time). The turbines were larger than those proposed by Blueskin Energy (125m, as opposed to 90m) and the house site looked directly away from the Mill Creek site, towards the Tasman Sea. More importantly, however, the primary coastal ridge behind Makara substantially separated the wind farm catchment from that of the adjoining coastline – which the house site sat in. As a result, little of the proposed turbine (since consented and constructed) was exposed to that site. Moreover, the prevailing winds helped to carry noise from the nearest turbine away from that residential property.
32. At Pryde Rd, some 410m would separate the Ryan / Ashby residence from Turbine 2, and the same turbine would be 679m from the Clayton home. Although Ms Lucas and Mr Moore are quite correct that both houses are oriented away from the application site, my photos clearly demonstrate that:
 - The road approaches and driveways up to both houses clearly reveal the summit of Porteous Hill. Turbine 2 atop it would be highly visible, potentially accompanied by the sweeping blades, nacelles and upper towers of Turbines 1 and 3. Although Mr Moore is unclear about how much of the latter turbines would be visible from the Clayton property, in particular, one only has to consider a tower some 14m lower than the mast on Mt Cargill to appreciate that it is highly likely that more than one turbine would be visible from both residences.
 - The outdoor areas adjoining both houses – lawn and deck areas, together with parking and turning bays – would offer views to Turbine 2, at the very least. For example, anyone looking back towards the Clayton residence

from their front deck (**Annexure 16**) would almost inevitably have their eye drawn to the rotating blades and nacelle of that turbine just to the left of the main living area. In a similar vein, anyone using the front lawn at 90 Pryde Rd could hardly help but notice the rotating, even still, turbine(s) atop the broad summit of Porteous Hill.

- Nearby paddocks on both properties would offer a similar degree of visual ‘engagement’ with the turbines: the paddocks and volcanic promontory near the Ryan / Ashby residence offer natural vantage points for views of the sea and immediate Omimi – Seacliff coastline (**Annexure 22**), but in looking back towards that dwelling, they also help to locate the property within the broad apron of slopes across the northern side of Porteous Hill. The turbines would completely change the nature of such views.

33. Even allowing, therefore, for the orientation of both dwellings and the screening provided by present-day vegetation near them, it is apparent that the presence of the turbines would unequivocally affect the nature of each property’s visual relationship with Porteous Hill, the character of the surrounding landscape and the amenity value derived from that environment. The turbine(s) visible from both properties would have a pervasive and wholly negative impact on:

- Introductory views and perception of each property;
- Their sense of isolation and ‘getting away from it all’;
- The frame and wider context for views to the coast, as well as of the wider hill country landscape extending through to Hammonds Hill;
- The essentially rural character of that landscape as whole; and the
- Residential appeal and enjoyment of both properties – appreciating that this necessarily pertains to utilising more than just the indoors environment of each dwelling; it pertains to use of the immediate curtilage and – less frequently – those other parts of each property that have appeal for their occupants.

34. These aren’t complex issues; they pertain to the simple enjoyment of both properties by my clients and their appreciation of residential environs that actually extend beyond the confines imposed by windows and doors.

35. In addition, both dwellings lie within the path of the prevailing winds from the wind farm site over the hill. Although Mr Chiles is satisfied with the levels of noise that would emanate from the turbines (a conclusion that is not shared by the Council's acoustic peer reviewers, Malcolm Hunt Associates), Ms Lucas (paragraph 38) has acknowledged that the acoustic environment or 'soundscape' is an important component of amenity. She goes on:

...The expected sound generation from the 3 turbines has been assessed by Dr Chiles and Enercon and one of the houses has been found to be potentially adversely affected. The modelling indicates a slight exceedance for the house location at 90 Pryde Road. With the house oriented away and the turbines visually screened, the effects of this sound on amenity values is assessed to be less than for that acoustic effect to accompany a direct view to turbines. I assess the effect of the turbines on the soundscape of the houses on the adjoining lands to be minor.

36. The problem with this statement from my point of view is that it assumes little real visual interaction between the turbines and the landowners, at 90 Pryde Rd especially. Yet, as I have indicated, awareness of the proposed turbines would change the essential nature of each property, visually. The turbines would become pervasive, and highly intrusive, components of the immediate environment. 'Soundscape' effects could only exacerbate this situation, increasing the sense of imposition and degradation otherwise generated by the wind farm. The noise effects and those that I have identified in relation to the visual character of the Pryde Rd landscape would be cumulative and aggregate one another. Consequently, I cannot agree that the 'small noise standard exceedance' in relation to the Ryan / Ashby residence should be somehow excused or mitigated by screening around that abode.

37. Turning finally to the issue of night-time effects, Ms Lucas seems to largely dismiss them as follows:

From much of the adjoining lands, including from any houses from which turbines would be visible, all are located well below hub height. Thus if the lights are shielded, they will not be evident at night, and the adverse effects of lights on their night-time amenity will be avoided.

38. In reality, most shields comprise a slightly downward-angled baffle under each hazard light – sloping downwards at some 2-5 degrees. Civil Aviation requires that the lights be of 'medium intensity red with an effective intensity of not less than 1600 candela of red light, flashing between 20 and 60 times per minute'. Even with the

use of modern LED lights, a haze of red lights is generally visible above and around each shield. Such lighting would not so much affect landscape values *per se*, simply because most of the application site and its surrounds are shrouded in darkness. Nevertheless, it would have an impact upon:

- the relative solitude and essentially rural character of the night-time landscape; and
- perceptions of the night sky, with the canvas of stars presently revealed around Porteous Hill and Pryde Rd; even more so because the area around both subject properties is so relatively devoid of 'external' lighting (beyond the immediate property boundaries) at present.

39. These effects would almost certainly be compounded by the 20-60 cycles per minute flashing of the proposed lights, adding to the day-time intrusion that I have already described.
40. Overall, therefore, it is my opinion that Ms Lucas and Mr Moore have failed to appreciate the full nature and extent of interaction between the Pryde Rd properties and Blueskin wind farm proposal. Accordingly, I am of the view that they have not accurately assessed the amenity effects of the proposal in relation to 22 and 90 Pryde Rd. In my assessment, the effects of the proposal on the aesthetic character and coherence of the environment containing both properties, and therefore on related amenity values, would be both high to very high and adverse.
41. I cannot, however, take this matter further with respect to the other local properties on Pryde and Porteous Roads, Stead Rd, Camerons Rd, Reservoir Rd or the margins of Coast Rd – quite simply because I have not been on properties at those locations. However, given the manner in which these roads encircle Porteous Hill, it is my opinion that they should have been more directly and specifically addressed as part of the amenity assessment in the application. I should also add that even if such an analysis were to find that the properties on these roads are unlikely to be appreciably affected by the Blueskin proposal, this hardly derogates from the significance of the amenity effects that I have already described. Effects assessment involves judgment, but should not descend into being a sort of averaging exercise.

WIDER LANDSCAPE AND AMENITY EFFECTS

42. I have already outlined many of the landscape attributes and qualities that I associate with Blueskin Bay and the coastal landscape extending through to Brinns Point then Waikouaiti. Ms Lucas suggests that the effects generated by the proposal would be limited, primarily by three factors:

- The modified, even compromised, nature of the landscape and coastal environment around the application site;
- The elegant, seemingly sculptural, aesthetic of the turbines; and
- In a related vein, the manner in which they would supposedly enhance the legibility and visual 'magnetism' of an otherwise rather ordinary, and flat-topped, Porteous Hill.

43. Mr Moore is rather more considered in his appraisal of the context for the proposal. Thus, at page 16 he states:

Without addressing the matters listed in Section 14.5.2 (a) (ii) in any detail, the report [of Ms Lucas] states that the wind cluster activity 'will not adversely impact on any important landscape features that are to be protected, preserved or conserved'.

I am somewhat more reserved in my assessment. Porteous Hill defines the skyline and extent of the wider coastal landscape as viewed from many places in the area surrounding. The wind farm will introduce a significant new built element to the hilltop, thereby modifying natural character to an extent...

44. He then goes on to say, however, that:

It is my assessment that natural character effects will be minor because the turbines will contrast with, rather than intrinsically alter, natural elements in the landscape, and because the landscape character of Porteous Hill is already significantly modified by rural land use...

45. In my view, a number of related and additional factors need to be considered when addressing the overall effects of the wind farm on the wider rural landscape and coastal environment. Without wishing to labour this matter, they include the following.

- **The large catchment of audiences** who currently enjoy glimpses, views, even panoramic views across Blueskin Bay, as well as up and down the

Waitati – Waikouaiti coastline (**Annexures 23 – 26**). The broad crescent of residential development stretching from Waitati next to SH1 through to Doctors Point and White Rd is firmly focused on Blueskin Bay and the rising mantle of volcanic terrain that encloses its northern side. As I have previously indicated, Porteous Hill is a strategically important focal-point at the heart of that backdrop. It even remains such in relation to views from across the bay – within Warrington and down its spit – as well as from parts of Seacliff and down the Coast Rd.

- **The current structure of that coastal landscape** and, in particular, the demarcation between developed and less developed areas within it. Although the slopes of Porteous Hill have clearly been shaped over decades by farming activity, it remains emblematic of the rural environment that is an integral part of the Blueskin Bay to Waikouaiti coastline. It contrasts with the areas of more consolidated development that I have just mentioned and contributes to a clear demarcation between ‘town and country’ within the confines of the Blueskin Bay and its margins. However, this interplay is always delicate and sensitive to change. As a result, ‘urban creep’ has entered the lexicon of resource management to describe where such ‘edges’ become frittered and dissipate, and this can either happen as development pushes out from established settlements (like Warrington) or it can be triggered by the more insidious erosion of rural character and values from within. The Blueskin proposal is clearly aligned with this type of transition.
- **The focal nature – or otherwise – of Porteous Hill** and the landscape imagery / values that it evokes. I accept that in some views, Porteous Hill is rather flat-topped, certainly rather less cone-like than many of the volcanic features that I am more familiar with. Nevertheless, it retains a strong presence, even a feeling of visual primacy in relation to the many catchments and parts of the local coastline that I have just described. Certainly, when looking across Blueskin Bay or over the Warrington spit from Doctors Point, the arched profile of Porteous Hill is much more apparent than when following the Coastal Rd across its lower slopes or down from Seacliff: in such views its clearly articulated form provides a counterpoint to the flat surface of the Bay’s water area. The two contrasting features complement one another. In other views Porteous Hill has a more subdued role, but still remains important as an ‘anchoring’ feature of the

landscape, especially so when entering Blueskin Bay from the south on SH1, looking back above Warrington or when travelling down from Seacliff.

- **The sense of place and identity** imparted by the hill country and coastline around Porteous Hill and Blueskin Bay as a whole. It would be fair to say that much of the landscape around the margins of Blueskin Bay is clearly subject to human activities, structures and influences; yet it is also – as I have just stated – dominated by three key features: the actual bay area, the spit that defines its interface with the open waters of the Pacific Ocean and the rather rounded profile of Porteous Hill merging with, and blending into, the mantle of hill country that extends up towards Seacliff and Waikouaiti. However, at a more fine-grained level, this is also a landscape that contains bush remnants, rock shoals and promontories, sand beaches linked to areas of coastal lupins and marram grass, and volcanic promontories. In other words, it is a coastline that is both cultural and natural, that is full of diversity but also homogeneity (the production forestry), and that reveals both the mundane and the spectacular.

46. Given this contextual situation, it is my opinion that Porteous Hill hardly needs three wind turbines to attract attention. Its volcanic dome is perhaps not overly endowed with visual presence, but certainly it remains sufficiently legible and expressive without the need for a 'pointer' or 'pointers in the sky'. Moreover, the turbines would not complement the modification that has already occurred on and around its flanks; instead, the wind farm would exacerbate the erosion of natural patterns and values north of Blueskin Bay, taking such change and modification to a new level. In so doing, it has the potential to dramatically alter the balance between developed and rural/natural areas across the coastline, and to erode the sense of demarcation between 'town and country' in the vicinity of Warrington especially.
47. Finally, in relation to the Blueskin-Waikouaiti landscape as whole, it is clear that it is not an Outstanding Natural Landscape [as per section 6(b) of the Act], nor could it hope to qualify as an area of Outstanding Natural Character [section 6(a)]. Yet, it still retains very strong sense of identity and place because of all the elements and patterns that I have described, many of which are embodied in the more generic description of the NCCLPA, which extends up to near the intended turbine locations (including part of the wider application site). Consequently, far from being in tune with the landscape characteristics, patterns and qualities that I have identified, it is my contention that the Blueskin proposal would disrupt, or at the very least erode,

many of the characteristics and qualities that I strongly associate with the Blueskin Bay to Brinns Point landscape, including the residual naturalness and distinctive sense of place that I consider to be important for locals and visitors alike.

48. In summary, therefore, it is also my opinion that the Blueskin proposal would generate a range of landscape and amenity effects that are significant, with reference to section 104D of the Act and its 'gateway tests'.

STATE HIGHWAY 1

49. I have also travelled up and down SH1, looking at the proposed development. With the exception of one area, I find myself largely agreeing with the assessments of both Ms Lucas and Mr Moore in relation to effects on this key highway (**Annexure 27**).
50. That one exception is within the western reaches of Blueskin Bay, north of Waitati approaching Evansdale. Much of my preceding discussion pertains to views across Blueskin Bay and is applicable to the experience of first entering the Bay, then travelling past it towards Porteous Hill (**Annexure 5**). As a result, my concerns about effects on this part of SH1 are substantially encapsulated by my discussion of wider effects above. However, the strategically important nature of the highway adds impetus to my concerns about effects in relation to the wider coastal landscape's character and identity, its interplay of 'developed' and 'less developed' areas and the profile of Porteous Hill.

THE NCCLPA

51. With reference to Policy 13 of the NZCPS, it is my view that the proposed wind farm site lies on the cusp of the coastal environment: perhaps not physically within it, but certainly close enough to affect its character and qualities. In this context, I agree with Ms Lucas and Mr Moore that the proposed wind farm would not generate effects that might be regarded as 'significant' in terms of natural character values of the coastal environment. The variable nature of the existing landscape / environment around, and exposed to, Porteous Hill is too 'mixed' and diverse – including areas of substantial settlement and transport infrastructure for that to be the case.

52. However, the North Coast Coastal Landscape Protection Yard is rather more nuanced in its management of the coastline around Blueskin Bay. It extends across the coastal margins and hinterland of Blueskin Bay and the Waitati-Waikouaiti coastline to the main ridges that define this coastal catchment, falling just short of the proposed turbine locations.
53. In my opinion, this physical separation of the wind farm site does not preclude it – and, in particular, its effects – from evaluation in respect of the NCCLPA. The *King Salmon* decision teaches us to be wary about such demarcations: in that case, the King Salmon enclosures proposed for Port Gore lay well offshore of Pig Bay and its ONL, yet the Supreme Court determined that the effects of the proposal on that ONL had to be thoroughly addressed, notwithstanding this physical separation. Ultimately, those effects were determinative in the Court’s final ruling on the Port Gore proposal. In this case, it appears that the NCCLPA was defined so as to address development applications that would adversely affect key characteristics and values of Blueskin Bay’s coastal domain. However, delineation and mapping of the NCCLPA did not appear to anticipate the potential effects of unusually large or tall development proposals ‘overlooking’ the preservation area’s boundary – which is precisely what the Blueskin wind farm would do.
54. Given this situation, it is important to consider the characteristics of the NCCLPA that are set in the Operative District Plan:
- *The general visual dominance of the natural landscape elements, eg natural landform over human landscape elements, eg buildings or shelter plantings.*
 - *The integrity, extent, coherence and natural character of the landform, streams and remaining areas of indigenous vegetation.*
 - *The generally limited visual influence of any large scale structures or exotic plantings to diminish the impact of the natural landscape forms and features.*
 - *The extent and quality of the dramatic coastal landforms and views. Visual interest is focused on the coastal edge.*
 - *The remote wilderness character of the beach landscapes and the visual separation of these areas from adjacent developed areas by dunes or other landforms.*
 - *The human-made features which are relics of the past, eg remnant shelter plantings.*
 - *The highlights of transient wildlife interest, eg seals.*
 - *Areas of significant habitat value, eg Aramoana Salt Marsh and Purakanui Estuary.*

- *The landscape values of the historically and culturally significant Quarantine Island/ Kamau-taurua and Goat Island/ Rakiriri, pa sites at Huriawa (Karitane) and Mopoutahi (Purakanui Bay) and site of early European settlement at Matanaka.*
- *The following significant landform features listed in the NZ Geological Society Geopreservation Inventory for the Otago Region:*
 - *Aramoana coastal features*
 - *Blueskin Bay coastal features*
 - *Karitane tombolo*
 - *Aramoana - Heyward Point*
 - *Harwood sea cliffs.*

55. Key components of the landscape around Blueskin, extending through to Seacliff, that clearly resonate with these characteristics include:

- The rural-natural areas of pasture, remnant bush, shelterbelts and amenity planting above Warrington and both sides of the Coast Rd north of that settlement;
- The volcanic profile of Porteous and Hammond Hills, relatively unadulterated by buildings and structures at present – especially when viewed from Doctors Point, Michies Crossing, Waitati, SH1 running next to Blueskin Bay, and the Coast Rd heading southwards from Seacliff;
- The way in which Porteous Hill affords a backdrop to the Warrington beach and spit, the adjoining coastal margins of Warrington and the increasingly rugged coastline extending up to Seacliff and Brinns Point; and
- The more natural, in places even remote, qualities associated with the coastal landscape north of Warrington.

56. In my assessment, the proposed wind farm would inevitably change the composition and balance with the coastal environment around, and north of, Blueskin Bay – as I have already explained. In so doing, it would have an adverse effect on the residual naturalness and aesthetic appeal of the NCCLPA, and it would erode the integrity of the volcanic landforms that afford both a backdrop to the key coastal margins described in the district plan above and that have value as features in their own right.

57. As such, I do not regard the Blueskin proposal as being aligned with key tenets of the NCCLPA.

Seacliff Significant Natural Landscape

58. The Proposed Dunedin District Plan's "Seacliff Significant Natural Landscape" (Appendix A3.3.7.1) also generally overlaps with the NCCLPA near the proposed wind farm site – applying to most of the proposed wind farm site, including the proposed turbine locations. The Seacliff Significant Natural Landscape includes proposed policies on Aesthetic and Amenity Values that build on the rather bare-bones structure provided by the preservation area's 'characteristics':

The following features and characteristics have been identified as important to protect:

a. *Natural science values:*

- i. Natural landforms: the general visual dominance of natural landform and other natural elements over cultural or human-made landscape elements. A notable feature is the coastal erosion of Seacliff. Geological instability is highly legible in the landforms.*
- ii. Natural character: the area's rural amenity values contribute to the natural character of the wider coastal environment. Indigenous vegetation cover is low on developed farmland but substantial patches of indigenous scrub can be found in steep gullies and coastal cliffs.*
- iii. Ecological significance: a defining element is the prevalence of significant natural coastal-estuarine habitats within bays and inlets. The presence of native bush is expressive of the natural vegetation character of the area. There are a number of covenants protecting areas of indigenous vegetation. Coastal cliffs are likely to provide roosting and nesting habitat for seabirds.*

b. *Cultural/historic values:*

- i. This larger landscape includes several wāhi tūpuna of significance to manawhenua. See Appendices A4.13, A4.14, and A4.12.*
- ii. The Coast Road and railway are recognised as valuable scenic routes in this area. The Waikouaiti coast and hills represent a strategic transport gateway into Dunedin City from the north.*
- iii. Historical significance: The ruins of Seacliff Hospital (once New Zealand's largest building) is located in this area and has associations with both Sir Truby King (founder of the Plunket Society) and writer Janet Frame.*

c. *Aesthetic and amenity values:*

- i. Backdrop and coastal views: this area is usually viewed either as distant coastal hill country from viewpoints south of Blueskin Bay, or as the immediate landscape context of Coast Road and the Main South Railway.*

Its visual prominence is therefore moderate in terms of profile from major population centres and roads. Coast Road is recognised as a scenic route for its magnificent coastal views.

ii. Aesthetic coherence: this is a modified rural landscape but naturalness and aesthetic coherence values are high due to the generally coherent natural landform and the presence of areas of native bush and scattered native and exotic trees. It forms an attractive rural foreground to highly memorable coastal viewpoints such as Coast Road.

59. Key issues that Appendix A3.3.7.1 raises include:

- The way in which “*the area’s rural amenity values contribute to the natural character of the wider coastal environment*”;
- “*The Coast Road and railway are recognised as valuable scenic routes in this area. The Waikouaiti coast and hills*” combine to create a ‘northern gateway’ into Dunedin.
- In a related vein, the Coast Rd is also appreciated for its magnificent coastal views. Those views are framed and contextualised by the sequence of coastal hills that are anchored by Porteous Hill.
- Even though the coastline south of Waikouaiti through to Blueskin Bay is modified and settled, “*naturalness and aesthetic coherence values are high due to the generally coherent natural landform and the presence of areas of native bush and scattered native and exotic trees. It forms an attractive rural foreground to highly memorable coastal viewpoints such as Coast Road.*”

60. In my opinion, these features and characteristics reinforce my own interpretation of the coastal landscape north on Blueskin Bay and affirm many of the concerns that I have expressed in relation to the effects of the proposed wind farm. Moreover, the Seacliff Significant Natural Landscape covers the vast majority of the application site, and is much more explicit in its identification of key natural character, ecological, landscape and amenity attributes that are central to the appeal of the Warrington – Puketeraki coastal landscape.

61. I note that Appendix A3.3.7.1 has not been addressed to any real extent by either Mr Knox (the landscape architect / reviewer acting for Dunedin City Council) or the council planner.

OTHER STRATEGIC MATTERS

62. Without wishing to labour many of the issues that I have already highlighted, it is therefore my opinion that the current application fails to address, and is inconsistent with, a number of operative district plan provisions, including:

Operative District Plan:

Objective 6.2.2 – Maintain and enhance the amenity values associated with the character of the rural area.

Policy 6.3.5 – Require activities to be of a nature, scale, intensity and location consistent with maintaining the character of the rural area and to be undertaken in a manner that avoids, remedies or mitigates adverse effects on rural character of the district.

Policy 6.3.6 – Avoid, remedy or mitigate the adverse effects of buildings, structures and vegetation on the amenity of adjoining properties.

Policy 6.3.11 – Provide for the establishment of activities that are appropriate in the Rural Zone if their adverse effects can be avoided, remedied or mitigated.

Objective 6.2.5 – Avoid or minimise conflict between different land use activities in rural areas.

Policy 6.3.12 – Avoid or minimise conflict between differing land uses which may adversely affect rural amenity, the ability of rural land to be used for productive purposes, or the viability of productive rural activities.

Policy 21.3.3 – Protect people and communities from noise and glare which could impact upon health, safety and amenity.

Proposed District Plan (2GP):

Objective 16.2.1 and Policy 16.2.1.10 – Seek to ensure that rural zones are reserved for productive rural activities and the protection and enhancement of the natural environment, along with certain activities that support the well-being of rural communities where these activities are most appropriately located in a rural rather than an urban environment.

Objective 16.2.3 and Policy 16.2.3.8 – Seek to ensure that the rural character values and amenity of the rural zones are maintained or enhanced .

Objective 5.2.1 and Policy 5.2.1.5 and 5.2.1.11 – Seek to ensure that network utilities activities, including renewable energy generation activities, are able to operate efficiently and effectively, while minimising, as far as practicable, any adverse effects on the amenity and character of the zone; and, where located in an overlay zone, meeting the relevant objectives and policies for those areas.

63. In my assessment, the proposal's specific amenity effects on neighbouring residents would be too substantial to accord with these provisions, while the effects on more general amenity and landscape values – including on a wide variety of perspectives of the coastal landscape stretching up the coast from Blueskin Bay and Dunedin's 'northern gateway' – would also exceed the threshold of acceptability. Furthermore, I do not believe that such effects could be sufficiently reduced, ameliorated or mitigated to appreciably alter this finding.
64. As a result, it is also my view that the proposal fails to meet the second of the section 104D gateway tests pertaining to relevant policy instruments.
65. Turning to the related issues of the proposal being 'small' and 'community owned', I have already addressed the issue of 'green power' in brief, while the planners report raises very real concerns about the concept of community ownership in relation to the current application. I can't really comment on the latter, but have acknowledged that both concepts have considerable appeal. The Parliamentary Commissioner for the Environment has also commented favourably in the past on the concept of 'spreading the energy generation load' – of placing more reliance on a larger number of small wind farms rather than focusing energy production on a smaller number of large scale facilities.
66. I have to say that I feel some discomfort with this philosophy: it has always seemed to me that one of the by-products of a coherent energy strategy could well be the concentration of fewer, larger scale, wind farms in locations that have fewer effects on the overall character and landscape values of New Zealand, or indeed any other country. By contrast, countries like Wales, Scotland and Norway now suffer from a surfeit of smaller scale, wind farms – containing anywhere from 3 to 40 turbines – scattered across their landscapes. Consequently, the Renewable UK website reveals that there are currently 143 onshore wind farms within the principality of Wales (1,090 turbines), covering an area about the size of the Canterbury Region, with another 729 spread across Scotland (4,694 turbines). Few fjords in southern and central Norway have yet to escape the effects of wind farm development, and in 2012 a petition to the national Assembly of Wales seeking a moratorium on new wind farm projects, suggested that:

...The moratorium will be used as a period of reflection, during which time a cross party committee will be convened to examine the effects of operation of wind turbines upon the health, social well-being, property value, effects on tourism, and the local economy within 15Km of installations.

67. I am not suggesting that New Zealand or Otago has reached the same level of saturation by wind farm projects that has emerged in the UK and other parts of Europe, but small scale projects still come at a cost. They 'spread the load' in more ways than one and a key casualty of the cumulative change associated with successive smaller scale developments is cumulative landscape change.
68. In saying this, I appreciate that I am treading on soft ground; no other community wind farm projects are currently proposed around Dunedin that I am aware of (although other sites have been assessed by the Blueskin Energy Trust) and the current proposal does not raise the prospect of cumulative effects in isolation. Nevertheless, it treads a path that could take us away from the more selective approach to wind farm location that has generally (though, not always) prevailed in this country to date. Instead, we could well move towards a future where green energy production is increasingly fragmented, and the accompanying landscape change could also become more sporadic and piecemeal, but also potentially more pervasive, than at present.

CONCLUSION

69. At paragraph 38 of the planning report it is stated that: "*The turbines will undoubtedly be large, but in terms of a wind-farm the proposal is small scale with three turbines set in relatively tight cluster. From many vantage points, the turbines may even appear as one structure.*" In reality, I'm not sure that 'small scale' is the sort of epithet or description that most inhabitants of Dunedin would accord with the current application: Blueskin's three turbines would each reach to within 15m of the top of the mast on Mt Cargill, while their much more substantial tower girth and attention-drawing blades would clearly add to the structures' perceived mass. Furthermore, their triangular arrangement and dynamic nature would almost totally preclude the possibility of seeing three turbines as one.
70. In my opinion, the number of turbines atop Porteous Hill might well be 'small', but their effects would be more significant than this term implies. They would have a particularly significant impact on the neighbouring residents on Pryde Rd, as I have explained, while the wider effects associated with the Blueskin proposal in respects of a coastline that is subject to two landscape overlays – within the operative and proposed district plans – would also be significant.

71. Consequently, it is my assessment that the current proposal would generate effects that are both specifically, and generally, significant (“more than minor” in RMA parlance), and that it is contrary to a policy regime that clearly sets out to protect the landscape, natural character values and amenity of the coastline around Blueskin Bay, stretching up to Waikouaiti. I therefore consider the proposal to be inappropriate in terms of its effects and implications for the integrity of relevant policy instruments.

Stephen Brown

BTP, Dip LA, Fellow NZILA
10 May 2016

APPENDIX A.

RESUME OF STEPHEN BROWN

Stephen Brown

Academic

Qualifications: Bachelor of Town Planning 1978 (Auckland University)
Diploma of Landscape Architecture 1981 (Lincoln University)

Professional

Qualifications: Fellow & Past Vice President 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
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.

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: NZILA Distinction (Landscape Planning & Environmental Studies Category) 2014

Project Impact Assessments:

Klondyke Water Storage Facility (2015/16): assessment of the effects of the development and operation of a 53Mm³ water storage dam near the Rangitata River in South Canterbury, together with related modifications to the existing Rangitata Diversion Race canal system – for RDR Management Ltd.

Highland Park Apartments (2015): assessment of the visual and amenity effects associated with the development of a 6 storey apartment complex within the Highland Park Commercial Centre in Pakuranga, Auckland – for Canvas Investments Ltd.

Rena Shipwreck Assessment (2015): evaluation of the natural character and landscape implications of various options pertaining to wreck removal and remediation – for Beca Limited.

Hagley Park Cricket Oval Application (2013): review of the landscape and amenity effects of a proposed cricket oval – including embankments, spectator pavilions and seating, light towers, security fencing and parking – within Hagley Park South for events up to the international level – for Christchurch City Council.

Seafarers Site Redevelopment – Quay St (2012): review of the visual and urban design implications of a proposed plan change by Cooper & Co to accommodate 55m high hotel / commercial development on Auckland's waterfront, at the edge of the Britomart Jreitage Precinct – for Auckland Council.

Puketoi Wind Farm Project (2011 / 12): assessment of the landscape, amenity and natural character effects of a 54 turbine wind farm to be located on the Puketoi Range in the Taranua District together with a 220 kV transmission corridor to the Turitea substation on the northern Taranua Range – for Mighty River Power Ltd.

Waterview Connection Project / SH16 (2009): 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): evaluation of the landscape and amenity effects associated with development of SH20 from Stoddard Rd to Waterview in Auckland – for the NZ Transport Agency.

Eden Park Rugby World Cup 2011 (2006 - 10): 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.

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 wind farm 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 Ltd.

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.

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 Rd 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 Rd - for Auckland City.

Glenfield Rd 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 Rd, 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 Rd Designations Assessment (2002): detailed analysis of the effects associated with widening of Lake Rd, 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 Rd (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:

- Volcanic Cone Sightlines & Blanket Height Control Review (2015/16):** re-appraisal of 87 sightlines within Auckland City to Mt Victoria, Mt Albert, Mt Roskill, Mt Eden, Mt Hobson, Mt Wellington, One Tree Hill, Mangere Mountain, Browns Island and Rangitoto, together with a complete review of the Blanket Height Control Areas that flank all of the major cones across and near the Auckland Isthmus: analysis of the sensitivity of each cone and the key threats to their visual integrity followed by the mapping of areas that should be subject to a new regime of building height controls under the Proposed Auckland Unitary Plan - for Auckland Council.
- Auckland Unitary Plan (2014 / 15):** review of Natural Heritage chapters and provisions, together with mapping of proposed ONLs, Volcanic Viewshafts and areas of High and Outstanding Natural Character; preparation of evidence for Auckland Council in relation to ONLs, ONC / HNC Areas, Volcanic Viewshafts, Rural Subdivision, Earthworks and the Rural Urban Boundaries for the Puhinui Peninsula, Helensville, Kumeu, Hatfields Beach, Okura, Snells Beach & Warkworth.
- Puhinui Structure Plan & Cultural Heritage Plan Input (2014 / 15):** assessment of landscape values and sensitivities across the Puhinui Peninsula, together with around Pukaki Crater and Crater Hill; followed by preparation of maps highlighting the cultural values and sensitivities of that area on behalf of Te Akitai – for Auckland Council.
- Coromandel Peninsula Natural Character Assessment (2014):** identification of the Coastal Environment and relevant wetland / river margins, followed by identification of those areas displaying High and Outstanding levels of Natural Character – for Thames Coromandel District Council.
- Auckland Region Natural Character Assessment (2013/14):** identification of the Coastal Environment and relevant wetland / river margins, followed by identification of those areas displaying High and Outstanding levels of Natural Character – for Auckland Council.

- Volcanic Cone Sightlines & Blanket Height Control Review (2012 / 13):** re-appraisal of 6 sightlines to Mt Albert, Mt Eden, Mt Wellington and Rangitoto, together with a complete review of the Blanket Height Control Areas that flank all of the major cones across and near the Auckland Isthmus: analysis of the sensitivity of each cone and the key threats to their visual integrity followed by the mapping of areas that should be subject to a new regime of building height controls - for Auckland Council.
- West Coast Region & Buller / Grey / Westland Districts Landscape Study & Natural Character Assessment (2011-14):** assessment of the Buller, Grey and Westland Districts to identify the combined Districts' / Region's Outstanding Natural Landscapes and those part of the Region's coasts and lake / river / wetland margins that display High and Outstanding levels of Natural Character – for the West Coast Regional Council & District Councils
- Thames Coromandel Landscape Review & Assessment (2007 - 14):** 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.
- West Coast Rural Policy Area (2011):** evaluation of the coastal environment, areas of coastal influence and assessment of amenity values to determine the extent of the proposed West Coast Rural Policy Area overlay – 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)
- Waikato Regional Policy Statement Chapter 12 – Landscape Review (2011/12):** 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
- Auckland Region: Outstanding Natural Features Study (2011):** assessment of over 220 geomorphic and ecological features (mainly volcanic remnants such as the Wiri Lava Cave, Orakei Basin / crater) to determine which of those should be classified as an Outstanding Natural Feature under section 6(b) of the RMA – for Auckland Council
- Auckland Region: Amenity Areas Study (2011):** description and mapping of those areas within the Region that qualify as Amenity Landscapes within the Auckland – in terms of their aesthetic and natural characteristics, recreational appeal, etc – with reference to section 7(c) of the RMA – for Auckland Council
- Auckland Region: Natural Character Assessment (2012/13):** delineation of the coastal environment for the 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.
- Otorohanga District Landscape Assessment (2009 - 11):** 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.
- 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.
- 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 (2002/3):** responsible for re-evaluation of 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.

Peer Reviews of Impact Assessments:

- Matiatia Marina Application (2013/14):** peer review of the landscape, natural character and amenity effects of a proposed marina at Matiatia on Waiheke Island – for Auckland Council.
- Sandspit Marina Application (2012):** peer review of the landscape, natural character and amenity effects of a proposed marina within the Matakana River estuary – for Auckland Council
- Escarpment Mine Application (2012):** peer review of the landscape, amenity and natural character effects of the proposed Escarpment Mine (open Cast) on the Denniston Plateau, including detailed review of whether or not the Plateau lies within an Outstanding Natural Landscape; followed by the preparation and presentation of evidence at an environment court hearing – for Buller District Council
- Onehunga Foreshore Retoration Project 2011):** peer review of the evaluation of landscape, natural character, amenity and urban design effects associated with rehabilitation of the Onehunga foreshore – for Auckland Council.
- Matiatia Marina Project (2011-14):** review of the landscape, natural character and amenity effects of a proposed marina within Matiatia May at the western gateway to Waiheke Island – for Auckland Council.
- Orakei Point (2008):** peer review of a mixed use residential / commercial / transport hub development on the edge of the Orakei Basin and Hobson Bay in Auckland, involving up to 8 storey development and footprint of up to 88,000m² of residential floor space, together with another 20,000m² of commercial floor area, in conjunction with creation of a pedestrian plaza and recreation areas on the edge of both water areas – for the Auckland Regional Council.
- Waikato Wind Farm Project (2008):** review of the landscape, natural character and amenity implications of a 235 turbine wind farm proposed for the Tasman Sea's coastal hinterland between Port Waikato and Raglan, covering a site some 34kms long and up to 8kms wide – for the Waikato and Franklin District Councils.
- Te Uku Wind Park (2007):** peer review and assessment of the landscape, amenity and natural character effects of a 28 turbine wind farm proposed for the Te Uku Ridge / Wharaurua Plateau by WEL Networks – for Waikato District Council.
- Te Arai Coastal Community Review (2005 - 2006):** evaluation of the landscape and natural character effects of a proposed 1400 lot development at northern Pakiri Beach (north-eastern Rodney District), incorporating a commercial / community centre, golf course, wetlands / lakes and coastal reserve - for the Auckland Regional Council.
- St Emilion Comprehensive Housing Development (2005 - 2006):** evaluation of the landscape and amenity implications of a 'gated community' housing project, containing 144 residential units and a recreation centre - for Rodney District Council.

Swanson Structure Plan (2005): analysis and review of Waitakere City's proposed Swanson Structure Plan for an area on the margins of both metropolitan Auckland and the Waitakere Ranges, as the basis for an Environment Court Appeal - for the Auckland Regional Council.

Project West Wind (2005): detailed peer review of the West Wind proposal and Peter Rough Associates' assessment of the proposal's landscape and visual effects - for Meridian Energy Ltd.

Awhitu Wind Farm (2004 - 2005): evaluation of the strategic landscape and natural character effects of Genesis Energy's proposed wind farm at the southern end of the Awhitu Peninsula - for the Auckland Regional Council.

Millbrook Quarry Review (2005): assessment of the landscape effects of a proposed 30 year expansion to the current Wharehine Quarry near Mt Tamahunga and southern Pakiri (north-eastern Rodney District) - for Rodney District Council.

Mountain Landing Coastal Residential development (2004-5): assessment of the landscape effects of a proposed 40 lot subdivision, involving extensive ecological restoration, next to Marsden Cross in the northern Bay Of Islands - for Blue Water Holdings and The Environmental Defence Society.

Tairua Marina (2002 - 5): review of the natural character, landscape and amenity effects of a proposed marina (150 berths) at Tairua on the Coromandel Peninsula, as the basis for hearing recommendations , then appeal evidence - for Environment Waikato,

The Warehouse Gisborne (2003): one of four commissioners responsible for hearing the resource consent application into a proposed 10,500 sq m / 372 car park development proposal for Gisborne city's Amenity Commercial zone - for Gisborne District Council.

Tairua Marina (2002 / 3): detailed review / analysis of the natural character implications of three marina proposals for Tairua Harbour and recommendations - for Environment Waikato.

Telstra Clear Telecommunications Network Review (2002): evaluation of the assessments undertaken as part of 4 applications for the staged 'roll out' of an overhead cable network within Auckland City - for Auckland City Council.

277 Broadway Review (2002-3): responsible for reviewing the visual and urban design components of proposal for the redevelopment of the "277" sites in Newmarket - for City Planning.

88 The Strand (1999): independent review of the visual effects of the proposed twin tower residential development at 88 The Strand, Parnell - for Auckland City.

Weiti River Crossing Review (2000): review of the effects of a proposed motorway 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.

O'Shea Subdivision Review - Great Barrier Island (1999 - 2000): evaluation of a proposal for a 17 lot subdivision at Awana on the basis of protection of a Special Environmental Feature leading to participation in the Council hearing and current Environment Court proceedings - for Auckland City Gulf Islands.

McGintys Visitor Accommodation Review - Waiheke Island (1998-9): appraisal of proposals for redevelopment of the McGintys' hotel site on Onetangi Beach - including the development of a restaurant / bar and 46 residential units resulting in participation in the Council hearing and in Environment Court proceedings - for Auckland City Gulf Islands.

Environmental Impact Audits: Sandspit, Whitianga, Paihia and Okahu Landing Marina Proposals (1988-91): auditing of visual impact assessments to ensure the technical adequacy of each assessment and to independently evaluate their findings - for the Dept. of Conservation, Northland Regional Council and Americas Cup Planning Authority.