

**Wellington City Council and Porirua City Council
Report to the Resource Consents Hearing Committee**

30 July 2008

Service Request No: 176538
File Reference: 1043316

Notified Application

<u>Project Title:</u>	Project Mill Creek
<u>Applicant:</u>	Meridian Energy Limited
<u>Location:</u>	<p>The general location of the site is between Ohariu Valley and Wellington’s west coast. The site is located 12km south of Porirua and 8km north of Wellington City, and covers approximately 18km² of pastoral land.</p> <p>The application also relates to Spicer Forest (owned by Wellington City Council) and Spicer Landfill (owned by Porirua City Council) where an access track will be constructed. The access track would link Broken Hill Road (Porirua City Council) with Ohariu Valley Road (Wellington City Council) for use by wind farm construction traffic. It is noted that the northern portion of the track is within the Porirua City Council jurisdiction.</p>
<u>Legal Description:</u>	<p>Lots 2 - 4 DP 347825, Lot 2 DP 385946, Lots 2 - 3 DP 78259 Secs 73 - 75 Ohariu District, Sec 77 Ohariu District, Lots X, XI and XII Ohariu District, Pt Sec 111 Ohariu District, Pt Sec 7 Ohariu District, Pt Sec 4 Ohariu District, Sec 3 Ohariu District Lots 2 – 6 DP 303803 Lot 1 DP 302866, Lot 14 DP 302866, Lots 17-20 DP 302866 Lot 1 DP 334043 139480 Pt Lot 2 DP 54371, Lots 2 - 3 DP 77503, Lot 1 DP 52949 Legal Road (area of the K series)</p>
<u>Proposal:</u>	Consent is requested for the construction, operation and maintenance of a wind farm and ancillary activities.
<u>Owners:</u>	GF & EJ Bruce; GK & JD Best and KJ Sampson; RB Kellahan & JM Green; LJ Bryant & RD Peterson, WD Bryant & SR Tong; JWR Eastwick Ltd; Wellington City Council; Porirua City Council

<u>Appendices:</u>	Appendix 1 – Summary of Submissions
	Appendix 2 – Objectives and Policies (Wellington City Council)
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	Appendix 4 – Landscape Assessment, John Hudson, Hudson Associates
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	Appendix 10 – Conditions – Porirua City Council

Introduction:

1. The purpose of this report is to provide an assessment and recommendation to the joint Resource Consents Hearings Committee of the Wellington City Council, Porirua City Council and Greater Wellington Regional Council in respect of Wellington City Council and Porirua City Council District Plan provisions and the Resource Management Act 1991 (RMA, the Act) in regard to the resource consent application to develop, establish and operate a wind farm on the site described below.
2. It is noted that four land use consents, four discharge permits and one water permit are concurrently being sought from the Greater Wellington Regional Council and are reported on separately.

Site Description:

The Mill Creek Site

3. The Mill Creek site (referred to as ‘the site’) is located approximately 12km south of Porirua city centre and 8km northwest of Wellington city centre, and covers approximately 18km² in area of privately owned pastoral land. The site is generally bounded by Ohariu Valley Road and Takarau Gorge Road to the east, Boom Rock Road to the north, the coast to the west, and abuts privately owned land to the south and southeast along Makara Road and Takarau Gorge Road.
4. The topography of the site is characterised by a series of ridgelines which run through in a northeast-southwest direction and are generally parallel to the coast. The ridgelines are flanked by steep sided slopes, typically greater than 30 degrees. At the coast the land ends in a steep escarpment that drops to a rocky shoreline.
5. The existing land use is predominantly pastoral farming, supporting cattle and sheep grazing, as well as stables and horse trekking. There are a number of dwellings located on the site. The site at 184 Takarau Gorge Road also provides a number of non-rural activities including a high-wire confidence course and a function centre. Resource Consent (SR No. 176715) has been recently granted for the construction of a chapel and

butchers shop at this property to compliment the existing non-rural activities. These non-rural activities are located within one area close to the dwelling at No. 184 Takarau Gorge Road.

6. The remainder of the site is predominantly covered in grassland, with very little gorse or native bush. Smiths Gully, which is the first gully back from the coast, is predominantly covered in coastal scrub and does not appear to be accessible for farming purposes. There are a number of streams which run through the site. The most notable are Ohariu Stream, Mill Creek, Hawkins Gully Stream, and Smiths Gully Stream. These streams all feed into the Makara Stream, with the exception of Smiths Gully Stream which enters the sea directly at Smiths Bay.
7. The Wilton-Bunnythorpe transmission line runs northeast-southwest through the site on a set of double circuit steel lattice towers. These towers are visible from various points along Takarau Gorge Road and Ohariu Valley Road. The HVDC earth electrode transmission line also runs through the southern portion of the site, in an east-west direction. This connects to the electrode station at the south-western end of the site. The HVDC line is visible from various points along Takarau Gorge Road and Makara Road.
8. There are numerous farm tracks and Transpower tracks that run through the application site, which provide access for rural activities and maintenance of the transmission lines.
9. It is noted that a 60m high wind anemometer mast, has been erected in the western portion of the site. This is clearly visible from various locations outside of the application site.
10. There is a section of unformed legal road which runs in a northeast-southwest direction through the middle of the site. This section of unformed legal road runs from near the junction of Makara Road and Takarau Gorge Road north/northeast towards Boom Rock Road. It has no connection to other formed legal roads within the area and there appears to be no logical reason for the road. Furthermore, it traverses relatively difficult terrain.

Spicer Forest and Porirua Landfill - Access

11. It is proposed that vehicular access to the site will be via Spicer Forest and the Spicer Landfill which is located at the northern end of Ohariu Valley Road.
12. The land of Spicer Forest is owned by Wellington City Council and is partially within the jurisdiction of both Wellington City Council and Porirua City Council. The trees located within Spicer Forest are owned and maintained by the Greater Wellington City Council. The Spicer Landfill is owned by Porirua City Council. Each of the Councils as land or asset owner has entered into separate access agreements with the applicant.
13. Spicer Forest has some established tracks which link to Colonial Knob and provide for recreation activities such as mountain biking, horse riding and walking.
14. The Spicer Landfill operates as a commercial landfill with the majority of the area restricted access to the general public. The landfill is accessed from Broken Hill Road.

Surroundings and Adjacent Uses

15. The Makara Beach community is located to the south of the site and the Ohariu Valley/Takarau Gorge community is located to the east of the site.
16. The Makara Beach area is characterised by a number of residential and rural residential allotments clustered around the valley floors, particularly at Makara village, along Makara Road and at Makara Beach. These residential and rural residential properties are interspersed with larger pastoral and forestry blocks.
17. The Ohariu Valley/Takarau Gorge area is also characterised by mixture of rural pastoral farms and rural-residential allotments along the length of the roads. As detailed in the application, approximately 120 houses are located in Ohariu Valley.
18. Activities in the wider area include farming and forestry, as well as recreational activities such as horse-riding, cycling, running and golf.
19. A full site description is included by applicant in the application documents that have been distributed and can be read in conjunction with this report.

The Relevant Background and History:

Access Agreements

20. As a land or asset owner, each of the Councils have entered into access agreements with Meridian Energy Limited which focus on the use of their respective parts of Spicer Forest and Spicer Landfill. These are not considered to be relevant to the consideration of this application; however, a summary of these documents is presented below for information purposes.
21. The Wellington City Council - Access Agreement, dated 27 August 2007, allows Meridian *'to construct the Access Road and when completed use the Access Road during the Construction Period and the Further Access Period strictly for the purpose of transporting loads associated with the Mill Creek Wind Farm which cannot be practicably transported by way of the public road due to the size or weight of the loads, public safety requirements, or the requirements of any consent obtained from any Authority for the Mill Creek Wind Farm.'* The agreement states that the ongoing access shall not extend beyond a 30 year period from the date of the agreement.
22. The Porirua City Council - Access Agreement, dated 22 June 2007, provides Meridian with the same allowances.
23. It is also noted that Greater Wellington Regional Council has entered into a similar agreement as it owns the trees planted on the land.
24. A number of submitters have raised concerns regarding the link that this road would create between Porirua and Ohariu Valley. It is noted that there is no public access to Spicer Landfill outside of the landfill's operational hours. In terms of Spicer Forest this already has links to Colonial Knob for recreational purposes. The Spicer Forest is covered under the Wellington City Council's Outer Green Belt Management Plan, which proposes that once the pine trees are harvested in approximately 10 years this area would be left to revert to native vegetation. It is also proposed to possibly vest this

area as scenic reserve. At this stage, the Wellington City Council has not yet moved to designate the area as reserve partly because it still needs to confirm the appropriate reserve status that best fits the future use of the land.

25. It is also noted that the alignment of the new road does not follow any existing legal road alignment. For this road to become a public road which links Porirua and Ohariu Valley it would have to be upgraded to an appropriate standard and then be vested as legal road. The Wellington City Council has no intention of undertaking this process.
26. In summary, the land will ultimately be vested as reserve, will remain in the ownership of the Wellington City Council, and will be managed like any other reserve where appropriate measures are undertaken to restrict the access of public vehicles.

Pre-application Discussions

27. The Local Area Planning Team of the Wellington City Council entered into pre-application discussions with Meridian Energy Limited (Meridian) in September 2007 regarding the possible development of a wind farm at the Mill Creek site.

Project West Wind

28. On 21 December 2005, Joint Hearings Commissioners acting on behalf of the Wellington City Council and the Greater Wellington Regional Council (GWRC) approved an application by Meridian Energy Limited to construct, use, and maintain a wind farm on a 55.8 square kilometre site to the west of Wellington City. This decision was subsequently appealed to the Environment Court (SR No. 131428).
29. On 14 May 2007, the Environment Court issued its first decision which basically upheld the decision of the two Councils, albeit with a number of changes to the original proposal which included an overall reduction in the number of turbines from 70 to 66. On 20 July 2007 the Environment Court issued its final decision which included all the revised conditions of consent for the proposal. Meridian has subsequently reduced the number of turbines to 62.
30. The Project West Wind approval is potentially relevant in the assessment of this application as there are a number of commonalities between the two proposals. The applicant (Meridian Energy Limited) is the same. The same make and model of wind turbine are proposed for both locations. The site locations are in close proximity to each other, one is to the south of Makara Beach (West Wind) the other is to the north (Mill Creek). The Project West Wind proposal and conditions have undergone consideration by the Environment Court and therefore provide some guidance in the assessment of this application.

The Proposal:

Wellington City Council

31. Resource consent is sought for the construction, operation and maintenance of a wind farm and ancillary activities. The proposal is commonly known as Project Mill Creek. The applicant has requested consent for a wind farm with 31 wind turbines and a total capacity of up to 71.3 megawatts (MW). The proposed wind farm would include the following:

- The erection of 31 Siemens 2.3MW wind turbines of up to 111 metres in height with a rotor diameter of 82.4m. The turbines would be coated with a light grey low reflectivity coating. The majority of the turbines are located in the western portion of the site. The applicant is seeking to consent to locate the turbines within a 100m radius of their identified positions.
- The erection of 31 transformer buildings, with each transformer housed in a cubicle steel building adjacent to the turbines. Each transformer building would be 2.5m high, 4.5m long and 3m wide.
- Earthworks are proposed, including cut volumes of up to 814,700 cubic metres, to create turbine platforms and access tracks and roads. The main access road would enter the site from Boom Rock Road and would run through the site in a south-westerly direction and then branch off to provide access to each turbine platform.
- Fill areas are proposed to accommodate excess excavated material. The location of these fills areas will be determined by a fill site selection strategy.
- The erection of two 70 metre high wind monitoring masts is proposed to provide wind data for operation purposes. The location of the wind masts would be within a 150m radius of that shown on the plans.
- The erection and operation of an electricity substation and an operations and maintenance building which is located east of turbine G01. The substation would be located adjacent to the existing transmission line (Tower 333). Therefore no new transmission line tower construction is required. However, Tower 333 will have to be strengthened to support the new connecting wires. The substation would occupy an area of 72m by 105m. Within the substation area there would be located a permanent switchgear building (32m by 12m and 5m high), switch yard, transformer, lightning masts and communication equipment.
- The erection of a permanent operations building, proposed to be located on the western side of the transmission line opposite the substation. This building would be approximately 15m by 12m with a maximum height of approximately 5.5m.
- The realignment of a section of the overhead HVDC earth electrode transmission line located on the site.
- On-site dry concrete batching is proposed, however, no location has been identified. The applicant has stated that this will depend on where the construction team believe it is best placed to maximise efficiency of delivery of raw materials and the concrete itself to the turbine platforms on site. The applicant has stated that the plant would only be on site for a short time, around 4 months and would be set back at least 100m from any waterway.
- A range of temporary construction activities including but not limited to, geotechnical investigations, extraction and processing of basecourse aggregate, site offices and ancillary activities. The location of the main site offices would be near the beginning of Road A. Signage is proposed at the entrance of the site. A 30,000 litre diesel tank is also proposed to be located near the main site offices.

- If required, construction lighting will be supplied via portable lighting rigs. All lighting will be sited to avoid any light spill being directed to any adjoining land.
 - Aviation lighting is proposed to be installed on up to 11 turbines as the site is near the flight path approaches for Wellington International Airport. The lights required are expected to be medium intensity flashing lights, shielded so that they are not directly visible below the horizontal plane of the light.
 - The installation of an internal transmission network.
 - Site reinstatement works are also proposed which include regrading of areas disturbed by heavy vehicles, backfilling with local topsoil over tower foundations, re-vegetating exposed areas of cut and fill, and removal of all the temporary stockpiles of materials and equipment.
 - Access is proposed via SH1 Ngauranga Gorge, Mungavin Bridge Porirua, Kenepuru Drive, Rahia Street, Broken Hill road, Spicer Forest, Ohariu valley Road and Boom Rock Road. It is proposed to widen and upgrade a 2.3km long section of the northern end of Ohariu Valley Road.
 - It is proposed to construct a purpose-built access road through Spicer Forest.
32. The potential generation capacity for the project is up to 71.3MW, based on the use of Siemens 2.3MW turbines. The annual energy output of the wind farm is therefore expected to be sufficient to provide electricity equivalent to the needs of 35,000 households.
33. Depending on the outcome of the final detailed design process and taking into consideration the potential for weather related delays, the construction period is expected to take approximately 18 months.

Porirua City Council

34. The new access road through Spicer Forest incorporates approximately 450 metres of land within Spicer Landfill, which is in the Porirua City Council jurisdiction, before connecting to Broken Hill Road, Porirua City. To create the access road through Spicer Landfill earthworks are required. The earthworks would have an approximate cut to waste volume of 2700m³, maximum height of cut and fill areas would be 5.5m and the area of land disturbed would be 5200m².

Greater Wellington Regional Council

35. It is noted that approval is sought from the Greater Wellington Regional Council for the following aspects:
- Roothing, Tracking and Earthworks (2 x Land Use Consent)
 - Discharges to land and surface water (3 x Discharge Permits)
 - Stream piping, structures, disturbance and reclamation (Land Use Consent)
 - Reclamation of streams at fill disposal sites (Land Use Consent)
 - Diversion of surface water (Water Permit)
 - Concrete Batching Plant (Discharge Permit)
36. Full details of the above activities and the proposed construction methodology are provided in the application.

Wellington City District Plan

Operative District Plan

Planning Maps

37. Under the Operative Wellington City District Plan the majority of the subject site is located in the Rural Area. A narrow strip of land adjacent to the coast is zoned Open Space B, however, no works are proposed in this area. A portion of the access road through Spicer Forest is also zoned Open Space B.
38. There is also an area of land subject to a designation. It is identified as *F5 – Transpower New Zealand, Shore electrode station, Te Hikowhenua, Makara Coast*. No works are proposed within this area.
39. The site is also located within the Ohariu – Te Ika a Maru Precinct and the following notations in the District Plan relate to sites of potential significance to Māori:

<i>Reference</i>	<i>Map</i>	<i>Title</i>	<i>Category</i>	<i>Significance</i>
<i>M3</i>	<i>25</i>	<i>Midden</i>	<i>For information/ further investigation</i>	<i>Low</i>
<i>M4</i>	<i>25</i>	<i>Terraces</i>	<i>Landscape Feature</i>	<i>Medium</i>
<i>M5</i>	<i>25</i>	<i>Midden, oven, karaka trees</i>	<i>Landscape Feature</i>	<i>Medium</i>
<i>M6</i>	<i>25</i>	<i>Terraces and pits</i>	<i>Landscape Feature</i>	<i>Low</i>
<i>M7</i>	<i>25</i>	<i>Kumuhore cultivations</i>	<i>For information/ further investigation</i>	<i>Medium</i>
<i>M8</i>	<i>25</i>	<i>Terraces and pits</i>	<i>Landscape Feature</i>	<i>Medium</i>

40. With the exception of M7, all of the above notations are located within the Ohariu – Te Ika a Maru Precinct boundaries. No works are proposed within the Ohariu – Te Ika a Maru Precinct boundaries. Therefore, the only cultural site of significance within the footprint of the proposed wind farm itself will be M7, which is listed in the District Plan for information purposes only.
41. The District Plan also indicates that there is a Hazard (Fault Line) Area running along Ohariu Valley Road which crosses portions of the site. The Wilton-Bunthythorpe transmission line and HVDC earth electrode transmission line are identified on the planning maps as well.

Activity Status - Operative District Plan

42. The proposed wind farm requires resource consent under a number of different sections of the Operative District Plan as outlined below:

The construction and use of wind turbines and ancillary structures

43. A wind farm is not provided for as a rural activity and requires resource consent as a Discretionary (Unrestricted) Activity under Rule 15.4.1. Consent is also required under Rule 15.4.2 for the construction or siting of any structure, or the undertaking of any earthworks, on identified ridgelines and hilltops. This relates to the construction of the turbines and the associated operations building.

Earthworks

44. Earthworks are required for a number of different aspects of the proposed development, including the development of access tracks, laydown areas, and turbine platforms. The details of the proposed earthworks involve cut-to-fill volumes of up to 814,700 cubic metres and cuts of up to a maximum of 20 metres. It is noted though that these figures represent the worst case scenario. Consequently, the proposed earthworks require consent as a Discretionary (Restricted) Activity under Rule 15.3.7 in general areas and Discretionary (Unrestricted) Activity under 15.4.2 within the ridgelines and hilltops.

Upgrade of Ohariu Valley Road

45. The upgrade and widening of Ohariu Valley Road with new carriageway located entirely within existing legal road is considered to be a Permitted Activity under Rule 15.1.7 as it would not result in the creation of new legal road.

Spicer Access Track

46. The majority of the proposed access track is within the Wellington City Council jurisdiction, and consent is required for earthworks to facilitate the construction of the track as a Discretionary (Restricted) Activity under Rule 15.3.7 in general areas and Discretionary (Unrestricted) Activity under 15.4.2 within the ridgelines and hilltops. The use of this track for access to the wind farm site also requires consent under Rule 15.4.1 with respect to the non-rural use.
47. The construction and use of the section of the access track within the Open Space B zone requires land use consent as a Discretionary (Restricted) Activity under Rule 17.3.2 as the track is for a non-recreational purpose, and under Rule 17.3.3 for earthworks.

Concrete Batching Plant

48. The proposed concrete batching plant is not provided for as a rural activity and requires resource consent as a Discretionary (Unrestricted) Activity under Rule 15.4.1.

Substation

49. The proposed electricity substation constitutes a utility structure under the Operative District Plan, and requires consent as a Discretionary (Unrestricted) Activity under Rule 23.4.1.

Operations Building

50. The operations building requires consent as a Discretionary (Unrestricted) Activity under Rule 15.4.1 as it is for the purpose of carrying out non-rural activities.

Transmission Lines

51. The proposal requires two single-span overhead connections to connect the substation to the existing transmission towers. The tower's cross-arms will need to be modified to accommodate the two sets of down leads. The proposed 220kV overhead connection and the proposed realignment of the HVDC earth electrode transmission line and consequent requirement to erect new support structures require consent as a Discretionary (Unrestricted) Activity under Rule 23.4.2.

Communications Masts

52. The installation of up to two 5m high communications masts within the substation area are considered to comply with the relevant conditions under Rule 23.1.8 and therefore constitute a Permitted Activity under the District Plan.

Hazardous Substances

53. The proposal includes the temporary installation of a bulk fuel storage tank to supply fuel to construction vehicles during the construction phase. Consent for the fuel storage facility is required as a Discretionary (Unrestricted) Activity under Rule 15.4.3.

Signs

54. The application states that any temporary signage during the construction period will be designed to meet the Permitted Activity requirements of the District Plan (i.e. will have an area of less than 3m²).

Temporary Buildings

55. Temporary buildings, including workshops, stores, lay down areas and security offices will be located on the site during the construction period. Consent for these buildings is required as a Discretionary (Unrestricted) Activity under Rule 15.4.1 as they are non-rural activities.

Quarrying for Road Aggregate and Processing Material

56. The applicant proposes to use locally sourced materials for the road construction. This requires the establishment of borrow areas and the use of a mobile crushing plant. The applicant has therefore requested consent to extract and process materials from within the site. The quarrying and processing of materials requires consent as a Discretionary (Unrestricted) Activity under Rule 15.4.1 as it is a non-rural activity.

Site Access

57. The application states that the new access road meets the Permitted Activity requirements of the District Plan with respect to sight line distances and minimum distances to an intersection.

Use of a Contaminated Site

58. Rule 15.4.4 of the District Plan states that any use of a contaminated site requires consent as a Discretionary (Unrestricted) Activity. Lots 17-19 DP 302866 within the Bryant property on the corner of Boom Rock Road and Ohariu Valley Road is listed on the Greater Wellington Regional Council's Selected Land Use Register (SLUR) as potentially contaminated. Accordingly, land use consent is also required under Rule 15.4.4.

Plan Change 32 (Renewable Energy) and Plan Change 33 (Hilltops and ridgelines and Rural Area)

59. On 26 May 2004 proposed Plan Changes No. 32 and 33 were notified and took effect from the date of notification.
60. Proposed Plan Change 32 can be summarised as follows:
- recognition that energy efficiency and the use of energy from renewable sources are specific resource management issues as required under the Resource Management Act (Energy and Climate Change) 2004 Amendment
 - the addition of a new definition of 'Wind Energy Facility';
 - the inclusion of policies in Volume 1 which encourage energy efficiency and the use of renewable energy
 - the introduction of new objectives, policies and rules to establish an additional planning framework for assessing applications involving renewable energy on a Citywide basis and specific rules for anemometer and wind energy facilities.
61. Proposed Plan Change 33 can be summarised as providing the following;
- a review of development and subdivision standards and criteria for the rural area;
 - inclusion of a rural area design guide;
 - introduction of a ridgelines and hilltops overlay and inventory maps to the planning maps; and,
 - a review of policy and assessment criteria for identified ridgelines and hilltops.

Weighting of Plan Changes 32 and 33

62. The proposed Plan Changes have been through the submissions and further submissions processes, and the hearings relating to the Plan Change have been held. The Council's decision has been issued and a number of appeals have been filed with the Environment Court. Three appeals have been filed in respect to Plan Change 32 and eleven appeals in respect to Plan Change 33.
63. A number of these appeals are relevant to this application. In particular, an appeal has been filed seeking to have the entire energy provisions of PC 32 set aside, and there are appeals which focus on the ridgelines and hilltops overlay. Over the last few years the Council has made continuous efforts to resolve the appeals associated with these Plan Changes but no agreement has been reached. Therefore, the Operative District Plan is the dominant planning document against which the application is to be assessed, but significant weight should also be given to the plan changes as well.

Activity Status – Proposed Plan Changes 32 & 33

64. Plan Change 32 introduced a series of rules related to renewable energy. Rule 26.1.1 provides that where the rules in this chapter apply to any proposal the relevant area based rules do not apply. Consequently, under Plan Change 32 consent is required as a Discretionary (Restricted) Activity under Rule 26.2.1 for the proposed anemometers and as a Discretionary (Unrestricted) Activity under Rule 26.3.1 for the proposed construction, operation and maintenance of a wind energy facilities and ancillary structures listed earlier in this report.
65. Note that a wind energy facility (a ‘wind farm’) is defined within Plan Change 32 and includes the land, buildings, substations, turbines, structures, underground cabling, earthworks, access tracks and roads associated with the generation of electricity by wind force and the operation of wind energy facility. However, any cabling required to link the wind energy facility to the point of entry into the electricity network, whether transmission or distribution in nature is not included in the definition of a wind energy facility.
66. Four of the proposed turbines are to be located within the Ridgeline and Hilltops overlay area defined in Plan Change 33. However, wind energy facilities (including structures) are considered under Rule 26.3.1 of Plan Change 32, and the proposed turbines within the overlay area do not require a separate assessment under Rule 15.4.2 of Plan Change 33 because of the requirement of Rule 26.1.1, as discussed above.

Proposed Plan Changes 65 - Earthworks

67. Plan Change 65 was notified on 1 July 2008 and takes effect from the date of notification.
68. Plan Change 65 replaces the Earthworks Bylaw Approval process, and introduces objectives, policies and rules to achieve the sustainable management of earthworks in Wellington City. The Plan Change concentrates on ensuring that the type of earthworks are environmentally acceptable, and requires details of how the adverse effects of earthworks and associated structures can be acceptably avoided, remedied or mitigated.
69. At the time that this application was lodged with the Council (12 March 2008) the proposed plan change had not been publicly notified, and therefore had no bearing on the activity status of this proposal. The plan change is however relevant to the substantive assessment under section 104.

Activity Status – Proposed Plan Change 65

70. As noted above, Plan Change 65 has no bearing on the activity status of this consent.

Overall Activity Status - Wellington City District Plan

71. Overall, the following Wellington City District Plan provisions are required to be considered in the assessment of this proposal:
- The Operative District Plan
 - Plan Change 32 – Renewable energy
 - Plan Change 33 – Hilltops and ridgelines and Rural Area
 - Plan Change 65 – Earthworks
72. The proposed wind farm requires consent for a **Discretionary (Unrestricted) Activity** under the Operative District Plan, Plan Change 32, and Plan Change 33. There is no limit to the scope of matters that can be considered when forming an opinion as to whether the adverse effects will be minor and who will be affected.
73. The assessment criteria relevant to this proposal are set out within Rules 15.3.7 (Earthworks), 15.4.1 (Non-Rural Activities), 15.4.2 (Earthworks on Ridgelines and Hilltops), 15.4.3 (Hazardous Substances), 15.4.4 (Contaminated Sites), 17.3.2 (Non-Recreational Use of Open Space), 17.3.3 (Earthworks within Open Space), Rule 23.4.1 (Substation), Rule 23.4.2 (Transmission Lines) of the Operative District Plan and Rule 26.2.1 (Anemometer Masts) and Rule 26.3.1 (Wind Energy Facilities).

Porirua City District Plan

Planning Maps

74. Under the Operative Porirua City District Plan the Spicer Landfill area to be used is located in the Rural Zone. The site is also listed as being within a Seismic Hazard Area and as being a Potentially Contaminated Site.
75. The following designations are within the subject site:

K1052 – Refuse Disposal Landfill, Spicer Landfill, Broken Hill
K1031 – Reservoir, Broken Hill

Activity Status

76. The earthworks associated with the construction of the access route, which will extend through Spicer Landfill from the end of Broken Hill Road, requires consent under Rule D4.1.4 of the Porirua City District Plan. The use of this land for construction access purposes (and any ongoing maintenance access) is not a permitted activity or a controlled activity as the definition of a road provided for in the District Plan excludes private roads and farm tracks. Therefore the construction of the track and the associated earthworks requires consent as a **Discretionary (Unrestricted) Activity** under Rule D4.1.4 of the Plan.

Proposed Plan Change 7 – Wind Farms

77. Plan Change 7 was notified on 22 September 2007 and takes effect from the date of notification.
78. Plan Change 7 has been developed to recognise the introduction of section 7(j) into the RMA, whereby the Act requires councils to have particular regard to the benefits to be derived from the use and development of renewable energy. The plan change is based on the fact that wind energy has been recognised as being the form of renewable energy that is most likely to be developed in the near future in Porirua City, and there are no existing provisions in the Plan to address the potential effects of wind farms. Thus the Plan Change aims to put in place an appropriate regulatory framework to manage the effects of future wind farm developments within Porirua City.
79. At the time that this application was lodged with the Council (12 March 2008) the proposed plan change had been publicly notified, and therefore it has a potential bearing on the activity status of this proposal. However, the works that fall within the Porirua City Council area are limited to the construction of an access track for wind farm construction and maintenance traffic that links Broken Hill Road in Porirua City with Ohariu Valley Road in Wellington City. This access track is not part of the wind farm site and the wind farm itself is entirely within the jurisdiction of the Wellington City Council. Therefore the provisions of Plan Change 7 are not relevant to the consideration of this application.
80. Consequently, only the provisions of the Operative Porirua City District Plan are required to be considered in the assessment of this proposal.

Statutory Criteria:

81. Under section 9(1) of the RMA:

“No person may use any land in a manner that contravenes a rule in a district plan or proposed district plan unless the activity is-

(a) Expressly allowed by a resource consent granted by the territorial authority responsible for the plan; or

(b) An existing use allowed by section 10 or section 10A.”

82. The application is for a Discretionary (Unrestricted) Activity under the District Plan. The Council may grant or refuse consent under section 104B of the RMA and, if granted, may impose conditions under section 108.

83. Section 104(1) of the RMA sets out matters a consent authority shall have regard to in considering an application for resource consent and any submissions received. Subject to Part 2 of the RMA (Purposes and Principles), the matters relevant to this proposal are:

Section 104 (1) (a) “any actual and potential effects on the environment of allowing the activity;”

Section 104 (1)(b) “any relevant provisions of-

- (i) a national policy statement;*
- (ii) a New Zealand Coastal Policy Statement*
- (iii) a regional policy statement or proposed regional policy statement;*
- (iv) a plan or proposed plan;”*

Section 104 (1)(c) “any other matter the consent authority considers relevant and reasonably necessary to determine the application.”

84. Part 2 (Sections 5, 6, 7 and 8) of the RMA sets out the purpose and principles of the legislation, which as stated in section 5, is “*to promote the sustainable management of natural and physical resources*”. Section 5 goes on to state that sustainable management should enable “*people and communities to provide for their social, economic and cultural wellbeing and for their health and safety whilst (amongst other things) avoiding, remedying or mitigating any adverse effects of activities on the environment*”.

Notification and Submissions:

85. The application was publicly notified on 17 April 2008 in accordance with section 93(2) of the Resource Management Act. Public notices appeared in the Dominion Post and the Wellingtonian on 17 April 2008, and in the Kapi-Mana News on 22 April 2008. Signs were erected in the vicinity of the site. All owners and occupiers of land in the immediate area were served a copy of the application, as were a number of property owners along Makara Road and in Porirua City.
86. The closing date for submissions was extended to 40 working days under section 37 of the RMA. A total of 776 submissions to the proposal were received by the close of submissions at 4.00 pm on Monday 16 June 2008. 364 submissions were in support of the application and 408 submissions were in opposition and 4 submissions were neutral.
87. An additional 27 late submissions were received, of which 17 were in support and 9 were opposed and 1 was neutral. Pursuant to section 37 of the Act, the Council may extend a time period specified in the Act within which it or any other person must do something in connection with any of the authority’s functions under the Act. The timeframe for submissions was extended to 50 working days with the agreement of Meridian. In extending the time period under section 37, the consent authority shall take into account (s37A(1)):
- (a) The interests of any person who, in its opinion, may be directly affected by the waiver; and*
 - (b) The interests of the community in achieving adequate assessment of the effects of any proposal, policy statement or plan; and*
 - (c) Its duty under section 21 to avoid unreasonable delay.*
88. In this regard it is considered that no parties will be affected by granting a further extension; that the submissions raise relevant issues; and that the extended time limit would not result in any unreasonable delay. The decision to accept the late submissions to the Wellington City Council has been ratified by Ernst Zöllner, the Director of the Urban Development and Transport Directorate, Wellington City Council, in consultation with the Chair of the Wellington City Council Hearings Committee, and has been approved under the relevant delegated authority.

89. A full summary of the submissions, including the details of the submitters, is included as Appendix 1 of this report.
90. Issues raised within submissions are generally categorised as follows:

Support

- The benefits of a continuous, sustainable and renewable energy and New Zealand's international commitments
- Making use of Wellington's wind, a great natural asset
- Positive visual impact of the turbines
- The close proximity of the electricity resource to the main area of consumption
- The suitability of the site for such a project
- The need for a secure future power supply for Wellington and New Zealand
- General support for the decision of the farmers to use their land in a manner they select.

Opposition or raised as issue of concern

- Noise generated by the construction and operation of the wind farm
- The conversion of a unique, rural landscape to an industrial one
- The impacts of significant earthworks on the landscape, waterways and water supplies
- Damage to sites of significance to Māori, or to the ability for Māori to care for the land in their role as kaitiakitanga
- Damage to terrestrial and stream ecosystems during the construction period in particular Makara Stream and its tributaries
- The visual impact of the turbines – in particular scale and light effects
- The impacts of construction traffic on road structure and safety
- Vibrations generated by turbines
- Health-related effects associated with the operation of the turbines
- The proximity of the turbines to residences
- Potential negative impacts on property values
- Potential disruption to recreational use of the area, in particular to the use of Spicer Forest for recreation
- The size of individual turbines, and the project as a whole
- Concerns about the consultation process and accuracy of the information provided
- There should be more emphasis on energy efficiency and the development of nationally sustainable energy policies rather than simply increasing energy generation
- Concern that wind turbines are not generating the amount of electricity that they were claimed to produce. Therefore, the environment is being destroyed for no benefit
- There is still uncertainty about the potential effects of wind farms and West Wind has not yet been built. This proposal should not be decided until West Wind has been constructed and the effects are known.
- This is only the second stage of the Meridian development, and further turbines are anticipated by the residents.

Principles of Assessment of Effects & District Plan Assessment:

91. The purpose of this assessment is to analyse the anticipated effects that the proposal would have on the surrounding environment, particularly the extent or degree to which the proposal would adversely affect the character and functions of the rural area, the ecological, cultural and recreational values, and amenities of surrounding land owners/occupiers and visitors to the area.

Permitted Baseline

92. In forming the opinion for the purposes of section 104(1)(a), a consent authority may disregard an adverse effect of the activity on the environment, if the Plan permits an activity with that effect (in accordance with section 104(2) of the Act). This is not considered to be particularly relevant as any wind energy facility (or similar scale non-rural activity) would require resource consent. However, consideration of permitted baseline could be used when assessing some of the smaller aspects of the proposal such as signage and accessory buildings.

Definition of Receiving Environment

93. The definition of receiving environment is particularly important in terms of the assessment of this application as there are a number of consents for proposed house sites and dwellings within the immediate vicinity of the application site. At this stage the Council is aware of the following proposed house sites and dwellings which have all been granted resource consent:
- 1000 Makara Road: Land use consent was granted for the construction of a dwelling on the 28 March 2008 (SR No. 176073);
 - 182 Takarau Gorge Road: Subdivision consent was granted by the Environment Court on the 26 October 2004 through a consent order for a two lot fee simple subdivision which includes a restriction for the location of a house (SR No. 9833);
 - 731 Takarau Gorge Road: Subdivision consent was granted on 21 July 2008 for a twelve lot fee simple subdivision which includes a restriction for the location of the houses (SR No. 175183);
 - No. 1029 Ohariu Valley Road: Subdivision consent was granted on 19 March 2008 for a two lot fee simple subdivision and land use consent for the construction of a utility building and restrictions on house locations (SR No. 173801); and
 - No. 272 Ohariu Valley Road: Subdivision consent was granted 31st March 2006 for a two lot fee simple subdivision which includes a restriction for the location of the house (SR No. 142089).
94. In terms of whether the above consents can be considered as part of the receiving environment for the section 104(1)(a) assessment below, we have sought legal advice and conclude that the future receiving environment must be considered as part of the 104(1)(a) assessment. For the purposes of this assessment the future receiving environment must include Permitted Activities and any unimplemented activities for which resource consent has been granted that could be reasonably expected to be affected.

95. It is acknowledged that some of the consents referred to above have only subdivision consent and no resource consent for the dwelling. The specific areas for these houses were considered in conjunction with the subdivision consents as being appropriate for new houses and houses cannot be built elsewhere on the sites without an amendment to the original subdivision approvals. Therefore, the Council (the Environment Court in respect of No. 182 Takarau Gorge Road) has consented to the overall principle of dwellings in these restricted locations and there is a high level of expectation that houses will be granted land use consent in these locations subject to design criteria in the future. Furthermore, these restricted house sites are fairly restrictive in size providing the future owners limited capacity to reposition the dwelling away from the wind farm. It is noted that for many of these new lots it may prove difficult to obtain consent to relocate houses from the approved sites. It is also considered reasonable to expect all of these consents will be given effect to as there is no reason to think otherwise.
96. Due to the extensive level of consideration shown to these restricted sites at the time of granting subdivision consent to ensure that any reasonable house built in this location will create a good outcome in respect of the wider environment and the relationship to any other sites approved by the subdivision or other existing houses, and that accordingly land use consent approval would be a straightforward process with a very high level of certainty of success, it would seem reasonable to consider these sites as part of the 'receiving environment'. However, this position is not supported by current case law.

Section 104(1)(a) – Actual and Potential Effects on the Environment:

Visual Effects

97. This assessment of effects on the visual landscape is intended to be read in conjunction with the assessment of environmental effects provided in support of the application and the landscape review provided by John Hudson (Appendix 4), which is supported in terms of the assessment it provides. This section is intended to be read in close reference to these documents and serves to identify the salient issues.
98. When considering the visual effects of the proposed wind farm Mr Hudson has made a distinction between landscape effects and visual amenity effects. These are discussed in turn.

Landscape Effects (Including the Coastal Environment)

99. The applicant and Mr Hudson are generally in agreement as to the definition of the coastal environment as it relates to this application. The coastal environment and outstanding natural landscape are both considered to extend inland as far as the top of the first inland ridge. Therefore, the F series turbines are located on this ridgeline while all other turbines are inland and therefore outside the coastal environment.

100. The F series turbines can be seen from the entrance to Smiths Bay, along the beach from Makara south to Fishermans Point and on the Makara Walkway. Mr Hudson has considered the effects on the natural character of the coastal environment and considers that the turbines “*prominence, scale, contrast of their built form, and proximity to the coastal environment all contribute to this effect. When seen in the context of the coastal environment, which includes views from the beach south of Makara, the Makara Walkway and the gun emplacements, the Mill Creek turbines will have a significant effect on the natural character of the coastal environment, which cannot said to be preserved*”.
101. Mr Hudson has commented that “*the character and scale of the receiving landscape has a critical effect in determining the landscape appropriateness of the Mill Creek site for the proposed wind farm*”. The landscape of the site and its surroundings is characterised by largely pastoral farmland, rolling hills and generally open ridgelines. This is significantly different to the landscape to the south, where West Wind is located, which is much more wild, rugged and dramatic. Mr Hudson comments that in the case of the subject site “*the land cover is also far less diverse, giving a more uniform carpet of pastoral grass with its accompanying domesticity, simplicity and scenic aesthetic appeal*”. In this particular situation, the landscape does not seem to be as well suited to the density and scale of the industrial structures. Furthermore, the scenic aesthetic appeal of the landscape within and surrounding the site must be considered as part of the visual amenity effects assessment below.
102. Four of the turbines are located within the ridgeline and hilltops overlay introduced by Plan Change 33. Mr Hudson has commented that the “*additional effect of the turbines on this identified ridgeline and hilltop area, over and above their effect on the underlying rural landscape is not significant*”.
103. In summary, the proposal is considered to have significant adverse effects on the natural character of the coastal environment and in terms of its impact on the inland landscape this has flow on effects in terms of visual amenity which is discussed below.

Visual Amenity Effects

104. There is a clear distinction between public and private views when considering visual amenity effects. Mr Hudson has commented in this case “*there are a number of houses that are at an elevated position in relation to the road. This causes the houses to gain quite different views to those that the public can obtain, and results in a quite different set of visual effects for the residents than for the public. Residents have a far greater appreciation of the ridges that enclose the valleys and wider angle of view than can be obtained from the road*”.

Public Views

105. In terms of the public views of the proposed wind farm, Mr Hudson has commented that “*there are a very limited number of public viewing points that will be exposed to significant effects in terms of visual amenity from the proposed turbines*”. This seems to be due to the topography of the area limiting long distance views and the location of the roads within the bottom of valleys. There are some long distance views from high points within the area, such as the skyline walkway, Mount Kaukau, Makara Hill, Makara Walkway, Makara gun emplacements and Colonial Knob, which would take in the proposed wind farm. There are of course areas at short and long distances where the

wind farm would have a significant effect on visual amenity, however, as Mr Hudson comments “*when considered in relation to the extent of roading and opportunities for public appreciation of the rural landscape, the effect that the turbines will have on visual amenity values is not significant*”.

106. We concur with Mr Hudson’s conclusions and consider that the visual amenity effect on the wider public to be acceptable as it is impossible to screen such a proposal entirely from view.

Private Views

107. Meridian has provided residents who requested visual simulations of the proposed wind farm a vantage point on their property. The Council’s Officers have visited properties as a result of these simulations. It is noted that not all dwellings within the surrounding area have been provided with visual simulations. However, 67 visual simulations have been completed by Meridian. These cover a large area and are considered to provide a good representation of the effects on private dwellings. There may be other dwellings affected by the proposal which have not received visual simulations and have not been considered below, however, we believe that the visual simulations provided give a good appreciation of the impact on private dwellings within the area. However, this does not rule out the potential for additional dwellings to become an issue through the presentation of evidence by submitters.
108. Mr Hudson has commented that from a number of private dwellings “*the views are for prolonged periods, the turbines are often the focus of view due to the orientation and layout of the house, the pastoral land use can accentuate their presence and the proximity can elevate their prominence to dominance*”.
109. Mr Hudson has developed a table which is incorporated within Section 7 of his report which summarises the visibility and visual amenity effects from the houses that were considered to be most affected by the proposed wind farm. It is worth noting that Mr Hudson has analysed the reasoning behind the West Wind decision to help in determining what might be acceptable.
110. In summary, the table indicates that 9 turbines keep recurring as affecting the visual amenities of surrounding dwellings and warrant consideration for removal. These turbines are F13, F14, G01, G02, G03, G04, K01, K02 and K03. It is noted that the houses within the below assessment have been identified due to the visual simulations provided and that there may be other houses which are in similar locations and have similar effects.
111. The G series (G01, G02, G03, and G4) are located on a ridgeline which is close to Takarau Gorge Road. These turbines are of greatest concern as they highly visible and dominate the view from a number of properties along Takarau Gorge Road. Mr Hudson has commented that in his opinion “*the effect on visual amenity of the G series is of such magnitude for a sufficient number of houses to warrant their removal*”. We agree with Mr Hudson’s comments and consider the visual amenity impact of the G series to be unacceptable.
112. F13 and F14 are the two southern most turbines and are clearly visible from properties along Makara Road. Mr Hudson describes two different situations which occur on Makara Road, one where a small number of turbines are visible but turbines F13 and

F14 are clearly dominant and the other where a large number of turbines are visible and turbines F13 and F14 are the closest.

113. The existing dwelling at No. 1000 Makara Road is in close proximity to turbines F13 and F14. Mr Hudson has commented that *“while portions of a number of other turbines can be seen, they diminish in significance in comparison to F13 and F14, which are virtually seen for their entire height. These turbines are central to this northern view, with their presence emphasised by the focus of the landform shape and their closeness. They are a dominant feature in this aspect of the property’s view. The contrast with existing rural character is sufficient to result in a substantial effect on the scenic aesthetic values of this rural view”*.
114. From the dwellings of Nos. 879 and 952 Makara Road there is a full view of the southern end of the wind farm. Mr Hudson has commented that for No. 952 Makara Road *“turbines F13 and F14 are the closest (F13 is 1803m away), while F10, F11, F9, and L1 are prominent with the view. Being concentrated into a mass, located in the saddle of landform, and lying in the centre of the view, the turbines’ presence is accentuated to the point where they form a feature that is prominent in the local view and has a substantial effect on the scenic aesthetic values or rural amenity”*. It is noted that No. 879 Makara Road has a very similar view.
115. The K series (K01, K02 and K03) appear in the view of fewer properties along Makara Road but still have a substantial effect and tend to appear as the dominant turbines within a larger group. However, due to the slightly more distant views experienced by a smaller number of affected dwellings the visual effects associated with these turbines are considered acceptable.
116. Mr Hudson has noted where a property has a view of a number of turbines the removal of the most dominant ones will not necessarily take the visual effect away but would simply reduce the visual dominance of the wind farm. It is considered an unreasonable expectation to completely obscure the view of the wind farm from private residences. However, the level of effect must be considered carefully.
117. In summary, the all F series have significant effects on the natural character of the coastal environment, the G series turbines and turbines F13 and F14 have the most dominant effect when viewed from various properties and would result in an unacceptable loss of the scenic aesthetic values and rural amenity experienced by these properties. For these reasons the visual amenity effects of the proposed wind farm as currently applied for are considered to be unacceptable. However, it is considered that the removal of these turbines would either remove the dominating visual effect of the wind farm, or significantly reduce this effect to an acceptable level that can be supported.

Noise Effects

118. Noise associated with the proposal can be split into two main categories, namely construction/traffic noise and operational noise. It is recognised that there is a great deal of public concern surrounding the potential noise effects associated with wind farms.
119. The applicant has provided a Noise Impact Assessment (NIA) from Acoustical Consultant Malcolm Hayes (Hayes McKenzie Partnership). A summary of Mr Hayes's conclusions is as follows:
- The predictions of operational noise from the proposed wind farm are based on the wind turbines approved for installation at the Project West Wind site.
 - A preliminary noise survey was undertaken at two locations in Ohariu Valley. These measurements indicate that background noise levels may remain low during the night-time period such that at wind speeds of 6m/s at 10 metres above ground level at the wind farm (although this is wrongly stated as at the hub height of the wind turbines in the conclusions of the NIA), the prevailing night-time noise levels may be below 25dB L_{A95} at some locations.
 - Using this preliminary noise data, reference has been made to the noise criteria within the NZS6808:1998: *Acoustics – The Assessment and Measurement of Sound From Wind Turbine Generators* and the conditions dealing with noise for the consented West Wind proposal, including the “sub-6808” condition adopted for that consent.
 - Predicted operational noise levels from the proposed wind farm will meet the requirements of NZS6808:1998 and the conditions dealing with noise for the approved Project West Wind conditions at all locations within the Mill Creek site.
 - Construction noise effects have been assessed in accordance with NZS6803:1999: *Acoustics – Construction Noise*, with the assessment indicating that the site operation will meet the long-term duration noise limits proposed within the standard.
 - Traffic noise associated with construction will have an impact upon the properties at the northern end of Ohariu Valley Road, with an increase of up to 26.9dB. To reduce the effects there should be limits on access to the site during the night, early in the morning, and during weekends and public holidays. Normal daytime noise levels for construction activities will be satisfied without any particular restrictions.
 - Cumulative noise has been considered with respect to all of the locations that neighbour both the Mill Creek and West Wind sites. Based on the operational noise predictions, NZS6808:1998 will not be breached at these locations.
 - The proposed conditions included with the assessment are based on the West Wind conditions.
120. Mr Hayes's NIA has been peer reviewed by Nigel Lloyd (Acousafe Consulting and Engineering Limited) on instruction from the Councils, who has requested further information from the applicant with regard to the NIA. Mr Lloyd's report forms Appendix 5 to this report.

121. His review of the NIA identifies potential noise issues and discusses the appropriateness of the draft conditions. Mr Lloyd comments that the “*NZS6808:1998 provides the best methodology for assessing and controlling wind farm noise*”, and explains that the standard sets an “*upper limit of wind turbine generator sound levels from being heard at neighbouring dwellings and at times the wind farm may be significantly audible and still meet the noise limits in NZS6808*”. Accordingly, there may be an impact on neighbouring properties who value the quiet nature of the rural area. These impacts would generally occur when the background sound levels are low at dwellings but when wind speeds are high enough at the wind farm to allow the wind turbines to enter production.
122. The District Plan has a two tier system in terms of noise limits for Permitted Activities within the Rural Area and refers to the site boundary and the conceptual boundary of a residential dwelling which has a stricter noise limit. The conceptual boundary is defined within the District Plan as being the site boundary or a line 20m from the wall of any building or from any land directly occupied by the activity, whichever is closer. Mr Lloyd, considers that the use of the conceptual boundary is “*reasonable with respect to providing for residential amenity at dwellings*” but does recognise that there is some “*uncertainty with respect to future noise sensitive developments that may occur*”. However, as has been discussed above, proposed dwellings that have been approved through resource consent are considered to be part of the receiving environment.
123. Mr Lloyd has considered the operational noise of the wind farm on the receiving environment. He has considered the existing dwellings within the area, the Smiths Bay baches and unimplemented but consented houses and approved house sites. He has identified the most exposed dwellings as being the Smiths Bay baches, the dwellings on Estuary Street, the proposed dwelling at No. 1000 Makara Road and the three consented restricted house sites along Takarau Gorge Road. These points could receive noise levels of between L_{Aeq} 35dBA and L_{Aeq} 40dBA but would be protected by the conditions. However, due to the current caselaw on this matter it would not be appropriate to include the approved house sites in such conditions unless they were also subject to approved land use consents.
124. Mr Lloyd notes that the proposed “*conditions rely on the limits in NZS6808:1998 but with additional sub6808 quiet background sound conditions at which times the noise limit is reduced from the baseline L_{Aeq} 40dBA to L_{Aeq} 35dBA. This criterion provides for noise limits that are significantly below the limits expressed by the World Health Organisation*”. The importance of pre-installation monitoring is recognised and as such there was a requirement that this had to be undertaken prior to the commencement of the operation of the Project West Wind wind farm. Overall, Mr Lloyd agrees with the conclusions set out in the Hayes NIA, and recommends that the conditions proposed by the applicant be included on the consent, subject to minor amendments. As indicated by Mr Lloyd, the proposed noise conditions are considered appropriate for this site as these have been determined by the Environment Court to be appropriate mitigation measures for a wind farm in the immediate area (i.e. the West Wind site). Mr Lloyd has amended the review condition to include a clause stating that if monitoring of the West Wind site reveals that noise emissions differ significantly from those predicted then the Mill Creek conditions can be reviewed.
125. With respect to construction noise Mr Lloyd comments that “*the works will take place at locations remote from the nearest residential dwellings (that are not affected persons signatories) and this will ensure that noise levels are substantially below those that are*

provided for in NZS6803: 1999". There is also a condition which prevents concrete from being manufactured outside of the hours of 6.00am and 10.00pm.

126. In terms of traffic noise, Mr Lloyd recognises that there will be a noise impact on the properties at the northern end of Ohariu Valley Road. This noise will be at its worst during the first two months of the construction period when the road access is under construction. Mr Lloyd comments that *"the construction traffic at the northern end of Ohariu Valley Road will generate around L_{Aeq} 50dB at the closest dwellings to the road. Overall this is a low level of road traffic noise. The increase in noise will be quite marked at these dwellings because currently the traffic flows are very light and existing traffic noise levels are consequently particularly low"*. Therefore, conditions are recommended limiting construction traffic on this road to 7.00am to 7.00pm Monday to Friday, and 8.00am until 6.00pm on Saturdays; with no vehicles permitted on Sunday or Public Holidays.
127. Mr Lloyd has also considered the potential traffic noise in the Porirua City area, particularly the noise associated with late night truck movements. He notes that both the truck movements and the associated traffic management measures such as setting up cones and moving barriers, have the potential to have an impact on noise sensitive activities in residences and the Kenepuru Hospital. However, Mr Lloyd is confident that the noise associated with the heavy night time traffic in the Porirua area will be acceptable. Furthermore, the presence of SH1 to the east of Kenepuru Drive already generates a high level of traffic noise in this area.
128. In summary, we accept that the surrounding residents will experience some noise from the construction and operation of the wind farm but agree with Mr Lloyd's conclusions that the proposed conditions of consent will restrict the noise to an acceptable level consistent with NZS6803: 1999 and the World Health Organisation.
129. Additionally, Mr Lloyd has considered the potential benefits of removing the G series of turbines and concluded that there is likely to be about a 3 – 4 decibel reduction for those properties close to the proposed wind farm along Takarau Gorge Road. This is significant as this will reduce the noise levels at some of the most noise affected properties. While we propose the removal of these turbines on visual grounds we also see benefits with controlling noise.

Health Effects Associated with Noise

130. Numerous submitters have raised concerns regarding the health effects associated with living in close proximity to a wind farm, citing international evidence that indicates wind farms and the noise (including sub-audible noise) can result in symptoms such as elevated heart rates, loss of sleep, stress and anxiety, and vibra-acoustic disease (VAD).
131. Mr Lloyd has commented that *"the predicted wind farm sound is such that it is highly unlikely that any impact on health will be caused. The wind farm sound levels are predicted to comply with the NZS6808:1998 criteria which will provide adequate protection to community health and the World Health Organisation Standards will be complied with if compliance with the conditions is achieved. Additional sub6808 measures are recommended to assist in providing some protection to the quiet background sound amenity levels that have been shown to exist in the area"*.

132. Furthermore, the NIA in Appendix 1 of Mr Hayes's assessment appropriately deals with health issues with respect to infrasound and low frequency noise and the levels that are being provided for are below those as set out by the World Health Organisation.
133. It is expected that the applicant will further address this issue within the forum of the hearing process.

Ecological Effects

134. The applicant has provided a separate report detailing the ecological effects of the proposal. This report has been peer reviewed by Paul Blaschke, Rutherford and Blaschke (refer to Appendix 6). It is intended that this section of this report is read in conjunction with both of these documents.
135. Mr Blaschke has commented that "*overall the existing terrestrial environment currently has low natural ecological values, and its natural values are somewhat degraded by the intensive farming land use*". However, Mr Blaschke goes on to state that "*the freshwater environments of the principal streams draining the study area, although also highly modified by land clearance and farming, are far more ecologically significant...they offer some stretches of good stream habitat, and support a moderate to good diversity of aquatic life, as indicated by the stream surveys*". These streams also feed into and are in close proximity to the Makara Estuary, which is recognised as a regionally important ecological site. The stream and native bush remnant in the location of the proposed culvert 1 is also identified as worthy of protection.
136. Additionally, Mr Blaschke has commented that the "*site generally offers poor habitat for birds and other terrestrial native wildlife*" and concludes that "*the adverse effects on birds and reptile communities in the receiving environment are likely to be minor*". Therefore, in terms of the terrestrial habitats Mr Blaschke does not consider that "*these earthworks would have significant direct adverse ecological effects (as opposed to indirect effects through sedimentation)*".
137. The most significant adverse ecological effects of the proposal will arise from the impact of erosion and sediment generated as a result of construction earthworks, entering the waterways within the project area. If not managed to avoid their entry into waterways, these sediments are likely to have significant adverse effects on waterways including the wetland in the Hawkins Stream downstream from the project area, and on the Makara Estuary. It is noted that the applicant has relocated the point at which the road crosses Mill Creek to avoid an area of high quality stream and riparian habitat.
138. It must be noted that there is a significant variation in terms of the volumes of sediment entering each catchment. Mr Baschke comments that "*the greatest impact will be on Hawkins Stream catchment, followed by the Mill Creek catchment, Smiths catchment and the Ohariu catchment above Mill Creek will be relatively less significantly affected*". Makara Estuary is the most significant ecological area potentially affected by the proposal given that it is at the furthest point downstream and is relatively close to the discharge from Hawkins Stream catchment which is likely to generate up to half the total sediment load.
139. In terms of sedimentation issues, it is noted that one of the functions of the Greater Wellington Regional Council is to focus on any effects associated with water quality, and this issue has been discussed in greater depth in its report, as have sedimentation

concerns in relation to the whole proposal. As this is an area where the Greater Wellington Regional Council has higher levels of expertise than Wellington City Council it is considered appropriate to defer to that Council on the sedimentation concerns.

140. It is noted that in addition to other more general sedimentation issues, some concern has been raised about the access track to F14 and the location of the turbine platforms of F13 and F14. It is noted that the applicant has agreed to relocate the access track to F14 away from a small high quality wetland environment and in a location which would reduce the length of the culvert and height of the gully infill. The applicant will present information to this effect at the hearing. In terms of the location of the turbine platforms, the issue arises as they *“are the most southerly in the windfram site and sediment from these two turbine excavations and the access track approaches would discharge furthest downstream on Hawkins Stream i.e. closest to the Makara Estuary”*. At this stage, as mentioned in the Greater Wellington Regional Council report, the erosion and sediment control measures are not sufficient to ensure that the Hawkins Stream and Makara Estuary are protected from significant ecological effects. Hence, the location of these turbines is not supported.
141. Mr Blaschke is also happy for fill areas to be identified post approval but has raised concern about one of the selection criterion which excludes gullies with perennial watercourses. However, it is noted that the Wellington City Council defers to the Greater Wellington Regional Council on any sedimentation issues arising from the fill areas.
142. Mr Balschke has commented that *“some of the tributaries of the Porirua Stream affected by the Spicer Forest access track have significant ecological values”* but considers that with *“good sediment management effects on these Porirua Stream tributaries would be short term and no more than minor”*.
143. In summary, the Wellington City Council it is considered appropriate to defer to that Council on the sedimentation concerns. However, it is noted the platforms associated turbines F13 and F14 where the effects on the ecological values of the Hawkins Stream and Makara Estuary are considered to be significant. Given the value of the ecosystems that these will directly effect the construction of turbines F13 and F14 are not supported. It is noted that with the best of conditions and intent of the consent holder, the cost of a possible sediment control failure is too high to justify the risk.

Effects Associated with the Access Track through Spicer Forest and Spicer Landfill

144. The proposal requires consent for the construction of the access track linking Broken Hill Road and Ohariu Valley Road within Spicer Forest and Spicer Landfill. Generally speaking Spicer Forest is within Wellington City Council jurisdiction and Spicer Landfill is within Porirua City Council jurisdiction. Earthworks are required to facilitate the construction of the access track. The approximate cut to fill volume will be 2700m³, the maximum height of cut and fill areas will be approximately 5.5m and the area of land disturbed will be approximately 5200m².
145. The proposed earthworks have the potential to generate visual effects which would be visible from the surrounding public environment. A portion of the proposed track would be located on the eastern hillside of Spicer Forest making it visible from the residential areas of Tawa and Porirua. The track would also be potentially visible from the

Colonial Knob Walkway and from within the Landfill. In terms of the immediate surroundings, it is considered that the visual quality of this area is already compromised by Spicer Landfill itself. The initial scarring caused by the earthworks will be a temporary effect in that the proposed cuts will be re-vegetated. Therefore, in terms of the distance of views from Porirua and Tawa it is considered that the proposed track will have no more than a minor visual amenity effects.

146. It is noted that no submissions expressed concerns about the potential effects of the proposed access track, or the associated use of the Porirua City road network for construction traffic, including heavy vehicles. The only relevant issue raised by submitters was a concern that the proposed access track would open up a thoroughfare between Porirua and Ohariu Valley that would be used by 'boy racers'. Under the "Relevant Background and History" section of this report we have discussed the landowner agreement and future implications of this access track, and the reasons why this will not be available for public use. Accordingly, we do not consider that the submitters' concerns about this track are valid.
147. The construction period will be approximately 2 months. The applicant has recommended conditions of consent to manage the effects of the proposed earthworks. This includes a condition requiring silt run-off caused during the earthworks to be appropriately managed by the consent holder. The proposed conditions have been reviewed by the Porirua City Council engineers who are confident that the effects of the proposal will be minor, subject to the proposed conditions being included on the consent.

Visual and Stability Earthworks Effects Associated with the Site (Mill Creek)

148. The proposal involves a cut to fill volume of 814,700m³ to create the access tracks, laydown areas, fill areas and turbine platforms.
149. The ecological effects of the earthworks have been considered above. This section will focus on the visual effects, dust effects and any stability issues.
150. The location of the access tracks within the site has been carefully considered by the applicant to reduce their visual impact when viewed from outside of the site. The main access track is located on the western side of the ridgeline which runs immediately parallel and adjacent to Ohariu Valley Road. There is one section of the track where the ridgeline dips and the track will be visible from properties within Ohariu Valley. The majority of the large cuts would not be visible from outside the site. For these reasons the visual effects of the proposed earthworks associated with the access tracks and turbine platforms are considered to be acceptable.
151. In terms of stability the applicant has provided a preliminary geo-technical assessment. John Boot, the Council's Civil Engineer, has reviewed this assessment and has not raised any concerns. Mr Boot has commented that the site is relatively large and the earthworks would not affect any of the adjoining properties. The applicant states that detailed geotechnical investigations at the detail design stage and on-site assessment during construction will be undertaken to confirm the above preliminary conclusions. It is recommended to require the consent holder to submit for approval, by way of condition or management plan, the detailed geotechnical investigation and detailed design. The general principle of the earthworks is considered to be acceptable subject to further consideration of design detail.

152. Dust is another potential issue arising from large scale earthworks. A condition is recommended requiring the consent holder to minimise dust hazard or nuisance. Generally, given the size of the application site and the location of the works within the application site it is considered that the consent holder could control dust to an acceptable level.

Fill Areas

153. Fill areas are proposed within the application site for excess material. The applicant has identified a set of selection criteria for identifying potential fill sites and some 'no go' areas which are generally for ecological reasons. The fill sites would be contoured to reflect the surrounding natural landform and re-vegetated accordingly. The general principle of fill sites is considered to be acceptable and given the size of the application site it is considered that there would be sufficient area within the site to dispose of the excess fill. The applicant has also stated that the site selection strategy will also consider visual effects by aiming to keep the fill areas internal to the site so that they are obscured from external view as far as possible. However, given the limited information on the location of the fill sites, should consent be granted, it would be recommended that the consent holder obtain approval for the location and design of the fill sites prior to the commencement of work.

Borrow Sites and Aggregate Crushing Plant

154. There is the potential to source basecourse aggregate on site. The applicant has completed a preliminary appraisal on the availability of suitable material on-site for roading and platform basecourse. The applicant has identified some potential borrow areas. The aggregate crushing plant would be a mobile unit that can be moved from area to area. The applicant will utilise the same set of selection criteria as those for the fill areas for the potential borrow areas. Therefore, visual effects of the borrow sites will be a consideration. The general principle of borrow sites is considered to be acceptable and given the size of the application site it is considered that there should be areas where material could be extracted without significant adverse effects. As per the fill areas, due to the limited information on the location of the borrow areas, should consent be granted it would be recommended that the consent holder obtain approval for the scale and location of the borrow areas prior to the commencement of works.

Traffic Effects

155. This assessment of effects on the traffic is intended to be read in conjunction with the assessment of environmental effects provided in support of the application and the traffic effects review provided by Soon Teck Kong, Manager Transportation Network, (Appendix 7), which is supported in terms of the assessment it provides. This section of the report is intended to be read in close reference to these documents and serves to identify the salient issues.

Wellington City

156. The applicant has proposed two options for transporting the turbine components from CentrePort to SH1 Ngauranga Gorge.
157. The preferred route is to take the turbine components through CentrePort land, past the Inter-Islander Ferry Terminal, over the railway tracks and connect into Hutt Road at this point. This would avoid the turbine components having to travel through the central city. This is also Wellington City Council's preferred route. It is recommended that the applicant explore all opportunities to utilise this route. We recognise that this is an issue that may not be able to be resolved before the hearing. However, we request that the applicant provides information in their evidence to the committee about where the negotiations with the land owner have come to, and how likely it is that this route can be used.
158. The second option is to take the turbines components through the central city. There are two potential routes from the CentrePort to Hutt Road. The most direct route is to travel along Waterloo Quay and Aotea Quay to the Hutt Road. The other route involves travelling south on Waterloo Quay, then Bunny Street, Lambton Quay and Thorndon Quay to the Hutt Road. This route avoids the structural constraints of the Aotea Overbridge and the pedestrian subway under Thorndon Quay but does require a number of turns and disrupts several intersections. For these reasons the preferred route is through the CentrePort land.
159. Mr Kong has commented that, if there is no alternative but to use the route via Bunny Street, *"the applicant's proposal to replace the existing traffic islands and use traffic cones will not be acceptable from a traffic management and safety perspective. It is unacceptable to temporarily modify the traffic islands without considering the effects on existing traffic equipment, signal displays, signs and traffic control. The use of cones and temporary protections for these essential items of traffic control devices and signage is not adequate"*. He, therefore, requires the applicant to further discuss with the Council methods to ensure that existing traffic control devices will be maintained and modified, if required, to comply legally with current NZ legislation. Furthermore, he notes that *"the applicant is to bear all costs associated with these changes, and to ensure compliance with current NZ legislations, and in gaining Council's approval to the use of this route"*. For these reasons, a condition is recommended requiring details to be submitted and approved of the final route through the city and how this would be managed to reduce the disruption to the traffic network to a minimum.
160. In summary, we strongly prefer the option of transporting the turbine components through CentrePort and entering the Wellington City Council roading network at the Hutt Road. However, subject to the above condition the potential traffic effects to the Wellington City Council roading network is considered to be acceptable as there is no reason to believe that a suitable solution cannot be reached regarding appropriate traffic management and controls should the less preferred route be used instead.

Porirua City

161. From SH1 the turbines components are proposed to travel through Porirua City from Mungavin Bridge, along Kenepuru Drive, Rahia Street onto Broken Hill Road, and then into the Spicer Landfill. This route travels through a relatively industrial/commercial area of Porirua.
162. The level of construction traffic on the Porirua City roads between SH1 and the Spicer Landfill is considered to be acceptable due to the wide nature of these roads and the industrial nature of the area. All residential properties adjoining these roads were served notice of the application and it is noted that no submissions were received in opposition to the proposal.
163. The Porirua City Council, Consents Engineer, David Berwick, has provided comments in relation to the use of the Porirua roading network (refer to Appendix 9). Mr Berwick notes that there is an existing access agreement with the applicant and Porirua City Council as the owners of Spicer Landfill. Details of this agreement are provided above in the “Background and Relevant History” section of this report. He has therefore recommended conditions of consent to mitigate the effects of the additional traffic on these roads. These are set out in Appendix 10 of this report. Mr Berwick also notes that a separate Council permit will be required prior to the transportation of any over-weight loads. This will address potential issues to do with the use of the Mungavin Bridge for this traffic, and enable the Council to identify which bridge is most appropriate closer to the time.
164. Porirua City Council officers have also questioned when the over-size and over-weight traffic will be leaving the site. It is recommended that the applicant provides information at the hearing that details the return truck journeys.

Spicer Landfill and Spicer Forest

165. Mr Kong has commented that all construction traffic including the delivery of construction equipment, material and workers is to travel to the wind farm site via Porirua and the new access road through Spicer Forest. To ensure the safety of vehicles one of the requirements of the traffic management plan is that vehicles do not pass each other on this section of track. In addition, appropriate safety measures will need to be put in place including road markings, signage and guardrails.
166. Submitters have expressed a concern that this track will create a new direct route from Porirua to Ohariu Valley, and that this will compromise the nature of Ohariu Valley and the security of the residents there. We have discussed the landowner agreement and potential future use of the track in the “Relevant Background and History” section of this report, where it is noted that the conversion of the access track to legal road would require a number of additional processes to be undertaken by the Council. The Council has no intention to vest the access track as legal road. Once the construction of the wind farm is completed the track will be blocked and no vehicles will be able to use it. Therefore we do not consider there is any risk to residents resulting from the construction of the proposed access track through Spicer Forest.
167. Submitters have also commented that the use of the Spicer Forest for construction vehicles will pose a risk to the safety of recreational users of the area (including walkers, cyclists and horse riders). To segregate the existing recreational track from the

new track the existing track will be shifted so that it runs parallel to the wind farm access track. This will prevent conflicts between wind farm traffic and recreational users of Spicer Forest.

Ohariu Valley Road/Boom Rock Road

168. A number of submitters, particularly those living along the northern section of Ohariu Valley Road, have raised concerns about the widening of the road and the potential for effects on the quality of their existing site accesses. Concerns have also been raised about the potential for an increase in the speed of vehicles travelling on Boom Rock and Ohariu Valley Roads, and for the resultant effects on the safety of road users (including recreational users).
169. Mr Kong has commented that the existing rural roads are “*substandard for the movement of the large number of over-weight and over-dimension loads which will be transported to the wind farm site together with the haulage of substantial quantities of construction equipment and materials using heavy trucks over the construction period of the project*”. Accordingly, it is proposed to upgrade and widen the northern section of Ohariu Valley Road and a portion of Boom Rock Road to enable the construction vehicles to access the site. The applicant has stated that all works will occur within the boundaries of the legal road. There are a number of driveways to properties which meet the road at slightly difficult angles and/or have limited sight line distances.
170. The proposed width where possible intended for Ohariu Valley Road is 6.5m which includes 0.5m sealed shoulders on either side. The 6.5m sealed width is to protect the pavement from damage due to construction traffic using the unsealed road edge. This width has been agreed after consultation between the applicant and the Council. The applicant has indicated that there are portions of the road which would not achieve the 6.5m width due to the physical constraints associated with the existing width of legal road and the curves. Mr Kong is not satisfied that the information provided to date adequately shows where the 6.5 metre width will not be achieved, and has recommended a condition requiring the applicant to provide detailed survey construction plans and cross sections of Ohariu Valley Road and Boom Rock Road where the 6.5m sealed road may not be achievable based on the criteria agreed with Council.
171. Mr Kong notes that “[T]he efficient and safe operation of this route is dependent on providing adequate safe passing areas along the route for vehicles to pass the truck and trailer unit and in particular during the transport of over-dimension and over-weight loads for both following traffic and opposing traffic”. He does not agree with the applicant’s claim that passing areas will not be required along the stretches of public road, and considers that passing areas will be needed to ensure that the delay to other vehicles will be no more than 2 minutes during the construction period, particularly during the transport of the over-dimension and over-weight loads.
172. Mr Kong’s requirements as noted above are to ensure “*wind farm related construction traffic can be accommodated on all sections of the route ... and that the safety and convenience of the public (including walkers, cyclists and horse riders) as well as the construction vehicles and personnel can be assured along this route*”. Throughout the duration of the project the applicant will be required to construct and maintain the road to a standard agreed with the Council. The Council will require the applicant to pay the total cost of any necessary realigning of road boundaries and construction of the

upgraded road, including the purchase of land for road and vesting for road formation should this be necessary.

173. Mr Kong also notes that “[D]espite the statement in the report that workers will use the Spicer Forest route, there will undoubtedly be an increase in traffic flow along the southern length of Ohariu Valley Road” and suggests the applicant provide a survey of the road alignment to identify any potential bottlenecks. This is not considered to be necessary should the conditions recommended be imposed to restrict the consent holder to only using the Spicer Forest access route. It should also be required that the consent holder maintain a vehicle log to prove that all vehicles access the site via the consented route.
174. Once construction is completed the roads will need to be restored by Meridian to a level that is acceptable to the Council. This is to mitigate any long term effects on the public roads that may result from the use of these for heavy construction traffic.
175. A full set of the conditions recommended by Mr Kong is included in Appendix 8. We concur with Mr Berwick and Mr Kong’s assessments, and recommend that the suggested conditions be included on the consent if it is granted. We note that the significant traffic related effects of the proposal will essentially be limited to the 18 month construction period, and with the implementation of the mitigation measures proposed we consider that these effects will be no more than minor.

Effects Associated with the Buildings and Structures

176. There are a number of temporary and permanent buildings and facilities proposed to support the construction, operation and maintenance of the proposed wind farm.

Substation and Operations Building

177. The proposal includes the construction of a substation and an operations building that will be located at the northern end of the G turbine road, to the east of turbine G01 and the 220kV transmission line. The substation is required to connect the turbines to the transmission grid. A maximum cut height of approximately 17 metres will be required on the western side of the construction site to create a footprint for this building. The substation will occupy an area of approximately 72 metres by 105 metres (i.e. 7560m²), with the final design of the substation incorporating colours that reflect the surrounding landscape. A wire mesh fence (approximately 1.2 metres high) will be constructed around the perimeter of the substation site, and an internal 2.3 metre high wire mesh security fence will be installed at a distance of 10 metres within the boundary fence.
178. A permanent operations and maintenance building will be constructed on the western side of the transmission line, opposite the substation. This building will house a workshop, control room for managing the turbines, and amenities. The building will have a footprint of approximately 180m², and a maximum height of 5.5 metres. Communication dishes will be mounted on the side of the building to support telecommunications within the wind farm site.
179. Once the construction of the substation and maintenance buildings has been completed the surrounding area that has been disturbed will be re-vegetated with pasture grasses. The buildings will also be painted in a colour that is compatible. The applicant has stated that the substation and operations buildings would be within an area of the site

that is screened from any nearby viewpoints. However, they will potentially be visible from elevated viewing points such as Mt Kaukau, the Skyline Track and the Makara Walkway. Both the substation and the maintenance and operations building are ancillary structures necessary to the operation of the wind farm. Whilst these may be large in scale, we note John Hudson's comments that it is the turbines that will dominate the view. A condition is recommended to ensure that the substation is located to minimise its visibility. Therefore, subject to this condition the effects associated with the substation are considered to be acceptable. The applicant is encouraged to provide more information on the siting of the substation at the hearing.

180. As noted earlier in this report we have significant concerns about the G series of turbines and have recommended that these be removed from the proposal. This may have implications for the location of the substation and operations and maintenance building, that we recommend the applicant addresses at the hearing.

Concrete Batching Plant

181. A concrete batching plant is proposed and the applicant has stated that the plant would be located at least 100m from any watercourses and would be obscured from nearby residential properties. It is considered that given the size of the application site there is sufficient space to adequately provide for the location of such a plant. However, it is expected that the applicant would provide further information regarding the location of the plant at the hearing, to provide the commissioners with more certainty. A condition is recommended on the consent requiring details of the location of the concrete batching plant to be submitted to and approved prior to its location on the site. Therefore, subject to the recommended condition and no additional information arising to the contrary, the proposed concrete batching plant is considered to be acceptable.

Site Office and Fuel Tank

182. The main site office is to be located near the beginning of Road A. The detailed layout of this area is yet to be determined. However, it would include temporary site offices, workshops, stores, fuel tank and other construction facilities. The applicant has stated that in general the site office structures would comprise single storey sandwich panel prefabricated structures with a combined area of approximately 300m² in area and a typical height of 2.8m. It is noted that accessory buildings for rural activities are permitted to be a maximum height of 8m and a maximum aggregated total gross floor area of 800m² in area, provided that they are at least 6m from a boundary. Therefore, it is considered that the proposed site offices would be of a similar scale to a permitted accessory building, or buildings, which is anticipated by the District Plan.
183. The proposed diesel tank would be capable of containing 30,000 litres of fuel. It would be double skinned which would provide containment if the inner tank ruptured. The proposal is considered to be acceptable by Kareema Yousif, the Council's Hazardous Substances Officer, subject to conditions relating to the design and operation of the fuel tank facility. Additionally, the fuel tank would be located away from the site boundaries. For these reasons, the proposed fuel tank is considered to be acceptable.

Security Gates at Spicer Forest

184. Two security gatehouses are also proposed at each end of the Spicer Forest Access Road to control access into and out of Spicer Forest. These structures are relatively small and are of a temporary nature. Therefore, the potential environmental effects of these structures are considered to be acceptable.

Signage

185. During the construction phase the applicant will be required to erect temporary signage mainly for the safety of construction vehicles. The application states that any signage required will be designed to comply with the maximum size requirements for temporary signage in the Rural Area and Open Space B Area. Accordingly, any effects generated by this signage are consistent with the level of effects that the District Plan anticipates and are considered to be acceptable. In addition, the signage will improve safety, which is considered positive.

Transformer Buildings

186. It is proposed that each turbine has a transformer building located at its base. The transformer building would be 2.5m high, 4.5m long and 3m wide. The transformer buildings would be visible in distant views where the viewer is at the same elevation as the wind farm such as the Makara gun emplacements. The applicant has stated that the buildings would be painted to match the colourings of the surrounding pastoral land and have suggested a condition to this effect. However, while these buildings are not large in size, views from nearby residential properties are a possible concern. Therefore, we recommend a condition is imposed that would ensure that the transformer buildings are painted to match the surrounding landscape as suggested by the applicant, and that the transformer buildings are hidden from the view of nearby residential properties. This may require earth bunding and/or planting in some situations to screen the building from view. It is considered that subject to the recommended condition the visual effects associated with the transformer buildings would be acceptable.

Internal Cabling

187. A 33kV internal cable reticulation system is required to link the turbines to the substation. It is intended for this cabling to be placed in trenches running along the formed access tracks. The applicant has stated it maybe necessary to adopt some overhead reticulation but no details of this has been provided. The principle of overhead cabling is considered to be acceptable provided it does not significantly intrude on the rural character and amenities of the surrounding area. Therefore, a condition is recommended that require details of any overhead cabling be submitted and approved by the Compliance Monitoring Officer. Any overhead cabling considered unacceptable would have to be reticulated underground instead.

Relocation of the HVDC Electrode Earth Transmission Line (HVDC)

188. The applicant proposed to realign the existing HVDC which runs west to east across the southern portion of the application. The line would be moved slightly to the north. The new tower supporting the HVDC would be slightly different to the existing structures. The new towers would be a simple double timber pole structure of approximately 25m

in height. The repositioning of the HVDC and design of its supporting structures would have a limited impact on the surrounding environment and is considered to be acceptable. A condition is recommended to ensure that the HVDC is relocated within the realignment corridor identified by the applicant.

Wind Monitoring Masts

189. Two 70 metre high wind monitoring masts are proposed to provide wind data for operation purposes. The location of the wind masts would be within a 150m radius of that shown on the plans. One is located to the north of F03 and the other located between the K and G series of turbines. The masts are relatively lightweight structures and would be smaller and lighter in appearance than the wind turbines. The masts are also located some distance from the site boundaries. For these reasons, the visual effects associated with the proposed masts are considered to be acceptable. Additionally, a condition is recommended to restrict the location of the masts.

Cultural Effects

190. District Plan Policy 20.2.2.2 requires that tangata whenua be consulted where resource consent is required for any activity within a Māori Precinct. As identified previously, the subject site is located within the Ohariu- te Ika a Maru Precinct. Several potential sites of significance to Māori have been identified within the subject site. These typically occur towards the coastal side of the site, although it has been recognised that there are potential relics of Māori gardening in the region of the F, G and K turbine ridges.
191. Te Runanga o Toa Rangatira and The Wellington Tenth Trust have been consulted by the applicant and both have produced Cultural Impact Assessment reports that were included with the application.
192. The Wellington Tenth Trust, Cultural Impact Assessment, prepared by Raukura Consultants, concludes that the proposal will have little impact on the sparse sites of significance to Māori, which are generally closer to the coast. The Wellington Tenth Trust has requested that an accidental discovery protocol condition be included if the consent is granted requiring consultation with Māori should any artefacts or sites of significance be discovered during the construction period. The Wellington Tenth Trust also request that stringent controls are put in place to manage the effects of earthworks on water quality.
193. Te Runanga o Toa Rangatira indicated that they have strong historical links to the area and desire to see this connection maintained. As well as preparing the Cultural Impact Assessment that was included with the application, Te Runanga o Toa Rangatira made a submission to the Council. Both the submission and the Cultural Impact Assessment state that the key concerns for Te Runanga o Toa Rangatira relate to earthworks effects and effects on historical sites. Accordingly, Te Runanga o Toa Rangatira has indicated that they are confident that the potential effects of the proposal can be managed through the mitigation measures and conditions proposed.
194. A submission from Ngati Tama stated that this iwi also has significant links to the Ohariu Valley Area, and that they were concerned that they had not been approached prior to the application being lodged or given the opportunity to provide a Cultural Impact Assessment. Meridian has indicated that it was their understanding that Ngati

Tama came under the umbrella of the Wellington Tenth Trust, and therefore that the report prepared by Raukura Consultants in association with the Wellington Tenth Trust would have appropriately addressed their Ngati Tama concerns. However, the submission from Ngati Tama expresses a concern that their presence on the coast has been downplayed in the application and they strongly oppose the application as, in conjunction with West Wind, the wind farm will *"turn the whole of an important customary area of Ngati Tama into an industrial landscape"*.

195. Nicky Karu, the Council's Treaty Advisor, has stated that the Council has a 'Memorandum of Understanding' with both Wellington Tenth Trust and Ngati Toa. Further, while they are an active body, Ngati Tama are not a crown recognised mandated body at this time. Therefore, it is not the Council's place to consult with this group of Ngati Tama iwi directly, as this is the task of the mandated iwi representative organisations via their processes.
196. However, the cultural effects of the proposal must be considered as part of this application and this consideration is not limited to any particular iwi. The majority of the sites and the precinct identified within the District Plan would not be disturbed as part of this application. The areas where there is some doubt (F, G and K turbines ridges) are specifically recognised within the proposed condition. It is considered that the proposed condition recognises the importance of this area to Māori and protects the sites of historical importance.
197. In summary, the proposed wind farm has the potential to create adverse cultural effects both due to damage to both known and unidentified historical sites, industrialisation of the landscape and through sedimentation of waterways which hold special significance to Māori. However, we consider that the proposed conditions can effectively avoid or mitigate these effects. The effects associated with the industrialisation of the landscape and sedimentation of the waterways have been assessed in other sections of this report as being acceptable subject to the removal of the turbines identified as having too greater an effect. We therefore do not consider that Ngati Tama would be affected by the proposal in a manner contrary to the intent of the Resource Management Act's cultural considerations.

Historical/Archaeological Effects

198. The archaeological report included with the application states that there is a very low likelihood of sites of European origin in the Mill Creek area, as no known occupation has been documented north of Makara. Submitters have not raised any concerns about European archaeological sites. Nevertheless, the applicant has proposed that conditions be included on the consent that will minimise any damage to historical sites that may be discovered during the construction period. We agree that these mitigation measures will appropriately address any potential archaeological effects, and recommend that these conditions be included if the consent is granted.
199. Furthermore, it is noted that New Zealand Historic Places Trust has submitted on the application and commented that that *"potential adverse effects on historic heritage have been assessed and appropriate recommendations have been made to remedy, mitigate or avoid these impacts"*.

Radio Interference

200. The applicant has provided a report by Kordia, February 2008, which comments on the Mill Creek wind farm and its compatibility with radio services. This report has identified four types of services in the vicinity of the wind farm which could potentially be affected:
- Broadcast analogue television and radio;
 - Fixed radio linking services;
 - Aeronautical RADAR;
 - Other wide area coverage services (i.e. Land Mobile VHF, Cellular Services and Broadband Wireless Access).
201. The Kordia report identifies 35 building points at high risk of suffering effects from the wind farm. The applicant has suggested a condition which requires the consent holder to restore the reception for free to air channels at the consent holder's expense to the level of reception quality in existence prior to wind farm construction. A condition is recommended to ensure that any television interference which directly results from the installation and operation of the wind turbines would be remedied at the consent holders' expense. It is accepted that a condition of this nature would remedy any potential effects associated with television reception interference.
202. The Kordia report has identified two fixed radio links in which turbines are located. The Kordia report states that "*the proposed wind farm is highly unlikely to cause any interference to these two radio links*" due to their low frequency and analogue characteristics. The applicant does not appear to have consulted with these parties who are the Marlborough Marine Radio Association and the Royal New Zealand Coastguard Federation. Conditions are recommended to require the consent holder to consult with, and apply any requirements of the Marlborough Marine Radio Association and the Royal New Zealand Coastguard Federation to ensure adverse effects arising from the turbine installation are adequately avoided, remedied or mitigated to ensure the safe and efficient operation of their radio links.
203. The Kordia report identifies five aeronautical RADAR systems that could potentially suffer interference which are associated with the proximity of the site to the flight paths of Wellington International Airport. Conditions are recommended to require the consent holder to consult with, and apply any requirements of the Airways Corporation of New Zealand Limited to ensure adverse effects arising from the turbine installation are adequately avoided, remedied or mitigated to ensure the safe and efficient operation of the air transport network. It is noted that Meridian is currently consulting with the Airways Corporation of New Zealand Limited.
204. The Kordia report considers other wide area coverage services and the minimum separation distances necessary. The proposed wind farm maintains the separation distances identified by Kordia. The minimum separation distance is relatively small, at 320m.
205. In summary, the recommended conditions of consent are considered to provide for satisfactory remediation if required.

Blade Glint and Shadow Flicker

206. Submitters have expressed concerns about the potential effects of blade glint and shadow flicker on their properties.
207. Shadow flicker is the stroboscopic effect that occurs when the blades of a turbine cast moving shadows on the ground or structures. Mr Hudson commented that shadow flicker will dissipate at a distance 10 times the diameter of the blade due to the relative smallness of the blade in relation to the largeness of the sun. In this case, the shadow flicker would dissipate at a distance of 820m. The only existing dwellings in close enough proximity to the wind turbines to experience shadow flicker will be the baches in Smiths Bay, and that this will be for a maximum of 8 hours per year, between 7.00am and 7.30am in February and again in October/November for an average of two weeks each season. The proposed dwelling at 1000 Makara Road is also within an 820m radius of the turbines and would be likely to experience a similar effect to the baches given its location. Mr Hudson has commented that *“while the effect of this may be annoying, particularly in the February period of summer when the baches are possibly in greater use, it is my opinion that the limited exposure will not result in amenity effects that are any more than minor”*. In summary, we agree with Mr Hudson’s conclusion and consider the level of effect to be acceptable given the time of day the flicker would occur and the limited time period of the occurrence.
208. Blade glint is caused by sunlight being reflected off rotating blades of a turbine, causing flickering or flashing beams of light. The application notes that blade glint can be experienced up to 12 km away from a turbine, but that this is only an occasional phenomenon that is sensitive to small changes in angle and view. Mr Hudson has commented that this effect is *“hard to predict and can be affected by factors like sun angle, viewing location and light conditions that must all coincide to create the right circumstances for glint to occur.”* The applicant proposes to paint the turbines in a low reflective light grey colour as mitigation, which assists in reducing the potential for blade glint to occur. Mr Hudson concludes that in his opinion *“due to the infrequency of occurrence, the effects on amenity values are no more than minor”*. In summary, we agree with Mr Hudson’s conclusions and consider the reduction in amenity values associated with blade glint to be acceptable.

Effects on Recreational Activities

209. There are a number of recreational activities which occur along Ohariu Valley Road and within Spicer Forest which may potentially be affected by this proposal.
210. Mr Kong has considered the conflicts between recreational activities (such as horse riding, cycling and walking) and construction traffic and has commented that the proposed upgrading of Ohariu Valley Road would provide sufficient space for construction traffic to pass and not conflict with recreational activities, subject to the suggested conditions of consent.
211. The access track to be constructed through Spicer Forest would be separate from the existing recreational tracks within Spicer Forest and therefore should not disturb existing recreational activities. Meridian has an agreement with the owners of the Spicer Forest land (i.e. Wellington City Council and Porirua City Council) that involves making a contribution towards the development of a recreational track in the forest, being an extension of Te Araroa which is a hiking track being developed throughout the

length of New Zealand. This will result in a positive outcome in terms of the recreational use of this land.

212. We note that the proposed wind farm may alter the current perception of recreational users of the area, such as walkers and mountain bikers on the Skyline Walkway, Mt Kaukau and Colonial Knob, and diminish the sense of remoteness that some people value. However, this would be subjective in that others may appreciate the additional interest and dimension that wind turbines will bring to the views.
213. Overall, we consider that the wind farm will have no more than minor effects on the recreational use of the immediate and wider area.

Effects on Horses

214. A number of the submitters have raised concerns regarding the impact of construction traffic, particularly noise and vibration, on horses located within paddocks close to the road. This is a particular concern for submitters who only own small blocks of land and therefore have nowhere else on their properties to graze their horses. This will only be an issue through the construction period. A requirement of the Traffic Management Plan is to restrict the speed limit of construction related vehicles to 40km/hr which should help reduce these effects to an acceptable level.

Cumulative Effects

215. The Environment Court issued its decision to grant a proposal for the construction, operation and maintenance of a 62 turbine wind farm on a site known as Project West Wind on 14 May 2007. West Wind is located to the south of the subject site and is being constructed at present. The cumulative effects associated with Mill Creek and West Wind need to be considered as part of this assessment. The main cumulative effects are considered to be visual, noise and potentially ecological.
216. It is considered that there are no cumulative effects associated with the construction of the proposed wind farm such as traffic generation and construction noise overlap due to there being different access routes to the respective sites, and that there is sufficient separation such that different communities are affected by the traffic generation and construction noise.

Visual Effects

217. Mr Hudson has commented in his report for Greater Wellington Regional Council that when considered in conjunction with Project West Wind *“the Mill Creek wind farm is undoubtedly a case of sprawling development in the local scale and cumulative effects will occur for the people of Makara and Ohariu Valley. However, due to the wind farms’ relative separation from the city and visual isolation from it, the sprawl and cumulative effects are limited to the localised west coast areas. These will affect the visual amenity of rural character for residents and visitors, and natural character of the coastal environment for those visiting the coastal locations from where the wind farms can both be seen consecutively or together. In my opinion, while these effects will occur for the local situation, there are limited opportunities for appreciating them and the effects will not be significant”*. We agree with Mr Hudson’s comments regarding cumulative visual effects and consider them to be acceptable.

Noise Effects

218. Mr Lloyd has considered the cumulative effect of both West Wind and this application and recognises the difficulty in calculating this effect as in this case it would be impossible for a dwelling to be located downwind of both wind farms. The NIA has adopted a directivity correction which is used in the UK to take into account the potential attenuating effects of various wind directions. Mr Lloyd does not consider that the cumulative noise effects of West Wind and this application will be a concern.

Ecological Effects

219. Mr Blaschke has considered the potential of cumulative impacts on the Makara Stream and Estuary as a result of the recent construction of West Wind, and the potential construction of this application within a relatively short period of time. He has commented that existing land uses contribute to the ecological health and integrity of the area. He concludes that *“the proposed wind farm is only one land use change and influence among many changes taking place in the catchment, albeit a major one...in that context the Mill Creek proposal will have cumulative environmental effects, but not in a markedly different sense from other changes occurring in the catchment”*. He agrees with the applicant that the likelihood of significant cumulative effects will be low provided a robust EMP process, including best practice sediment and erosion management is implemented. For these reasons, the cumulative ecological effects are considered to be acceptable subject to the removal of turbines F13 and F14 and the recommended conditions.

Use of Contaminated Land

220. The applicant has provided information which indicates the location of various sheep dip sites. The sheep dip sites are within areas of the site which would not be disturbed as part of this proposal. Hence, the level of risk associated with these areas of contamination is considered to be very low, particularly as sheep dip sites would have resulted in fairly specific areas of contamination. For these reasons, the wind farm proposal will have no effects relating to any contaminated land within the site.

Loss of Property Values

221. A number of submitters are concerned that the proposed development will result in a loss of property value to other properties within the area, or limit future development of their land. Property values are an economic consequence of environmental effects, and are not matters addressed in the District Plan.
222. Therefore, whilst we acknowledge the local residents concerns about the loss of value to their land we are not able to take these into account within the context of the District Plan or the RMA. We have assessed the environmental effects associated with the proposal, as per our function under the RMA, and any conclusions reached may indirectly affect property values.

Sustainable and Renewable Energy Benefits

223. The applicant and a number of submitters in support of the application have commented on the positive impacts of the proposal. The proposed wind farm would utilise a renewable energy resource to provide a source of electricity close to an area of high demand. This is considered to be beneficial and in line with current national policy direction.

Summary of Environmental Effects

224. In summary, the proposed wind farm represents a positive effect in that it provides a source of renewable energy; however, due to the scale of the proposal there are a significant number of adverse effects. The adverse effects of greatest concern are visual amenity, natural character, noise, health, traffic generation, construction noise, and sedimentation and erosion control arising from earthworks, cultural and ecological effects. It is acknowledged that a certain level of effect is unavoidable; however, this level of effect must be acceptable. The effects that are not considered to be acceptable are the visual amenity effects on some private dwellings associated with turbines F13 and F14 and the G series turbines, natural character effects of the F Series on the coastal environment, and the ecological effects on the Hawkins Stream wetland and the Makara Estuary resulting from the earthworks associated with the construction of turbines F13 and F14. Therefore, the effects conclusion which is yet to be considered subject to Part 2 is that the G and F series of turbines have unacceptable adverse environmental effects.

Additional Effects Raised by the Submitters

- 225 The following issues are a concern for submitters and can not be considered as part of the resource consent application but are worthy of comment:

Sense of Community Effects

226. Submitters have expressed a concern about the social impact of the proposal on the Ohariu Valley community. This is exacerbated by the fact that whilst a small number of the community stand to benefit from the proposal, the majority of the community will receive no benefits but will have to live with the effects. We have heard anecdotal evidence that the community has been divided, and realise that this has been an effect resulting from this application.
227. A condition of the West Wind decision required a community liaison group be established to facilitate on-going communication between the community and the applicant. We note that this approach has been problematic, and that the applicant has not proposed a similar condition be included on this consent. However, we think that there is merit in having a community liaison group as this allows the community to remain involved in the project. With a suitable framework in place, this may also assist in rebuilding community relationships. We, therefore, recommend a condition requiring a community liaison group be established, subject to the criteria set out under the condition proposed. It is noted that we have recommended a slightly different condition to that imposed on the Project West Wind consent so as to provide a clearer understanding of the role of the community liaison group.

Concerns about the Consultation Process & Accuracy of Information

228. Submitters, particularly those living in Ohariu Valley, have raised concerns about the consultation process undertaken by the applicant (both by Windcorp Limited representing the owners of the land, and Meridian), and the accuracy of the information provided to them. In particular, they are concerned that the visual simulations provided from individual and public viewing points are misleading. The Council cannot comment on the accuracy of the visual simulations but would recommend that the commissioners undertake site visits to help determine the visual effects for themselves.
229. We note the Wellington International Airport Case, which is considered to be relevant case law on consultation, states that: “*consulting involves the statement of a proposal not yet finally decided upon, listening to what others have to say, considering their responses and then deciding what will be done*”; and that whilst consultation does not extend to “*negotiating an agreement*”, there must at least be an opportunity for meaningful discussion.
230. It is also noted, however, that under section 36A of the Act the applicant has no duty to consult any persons regarding a resource consent application.
231. We recognise the submitters’ concerns and are anticipating that the concerns relating to both the consultation process and the accuracy of the information provided will be addressed by the applicant during the hearing.

Possible Further Wind Farm Developments

232. A number of submitters have indicated that they were under the impression that the proposed wind farm would be located further to the north, within the area of Boom Rock. Some submitters have also highlighted concerns about an additional possible wind farm development in the Boom Rock area. We are only able to consider the application as it was lodged and we are unable to consider any potential future development at this time. Any future wind farm proposal would be subject to a resource consent application and would be assessed on merit at that time.

Development on Unformed Legal Road

233. The proposal involves the construction of three wind turbines on a section of unformed legal road. The applicant has applied for a Landowner Consent (Encroachment Licence) to occupy this land. The proposal will be assessed against the Road Encroachment Policy by the Encroachment, Property and Parking Services Team, Wellington City Council, and this is a separate process with no guarantee that if resource consent is granted, so would Landowner Consent. At this stage Landowner Consent has not been granted for these three turbines.
234. It is noted that should this consent, for whatever reason, not be forthcoming, under the terms of the application, the turbines could be relocated within 100m of the identified site and thereby avoid the legal road.

Section 104(1)(b) Assessment:

235. In respect of the assessment in terms of section 104(1)(b) the consent authority must have regard to any relevant provisions of any national policy statement, a New Zealand Coastal Policy Statement, a Regional Coastal Policy Statement and a plan or proposed plan. In this case, the following documents are considered relevant:

- Wellington Regional Policy Statement;
- Wellington City Council Operative District Plan;
- Wellington City Council Plan Change 32 and 33;
- Wellington City Council Plan Change 65;
- Porirua City Council Operative District Plan.

New Zealand Coastal Policy Statement

236. The purpose of the New Zealand Coastal Policy Statement (NZCPS) is “...to state policies in order to achieve the purpose of this Act in relation to the coastal environment of New Zealand”. The NZCPS is the only mandatory national policy statement under the RMA. The current NZCPS was issued on 5 May 1994, and provides general rather than specific directives regarding management of the natural and physical resources within New Zealand’s coastal environment. The NZCPS is currently under review.

237. The NZCPS sets out national priorities for the preservation of the natural character of the coastal environment. These include protecting areas of significant indigenous vegetation and significant habitats of indigenous fauna; protecting features that are essential or important elements of the natural character of the coastal environment; and protecting the integrity, functioning and resilience of the coastal environment.

238. Of particular relevance are the visual effects on the coastal environment is Policy 1.1.3, which states that: *...it is a national priority to protect the following features, which in themselves or in combination, are essential or important elements of the natural character of the coastal environment:*

(a) *landscapes, seascapes and landforms, including:*

- (i) *significant representative examples of each landform which provide the variety in each region;*
- (ii) *visually or scientifically significant geological features; and*
- (iii) *the collective characteristics which give the coastal environment its natural character including wild and scenic areas.*

239. The natural character of the coastal environment would be affected by the wind turbines, as they would be visible from the Makara Walkway, Makara gun emplacements and from the sea. These effects have been discussed under the section 104(a) assessment earlier in this report and are considered to be unacceptable.

240. There is a draft NZCPS 2008 which is in proposed form, and as such, cannot be given as much statutory weight as the current operative 1994 NZCPS. We have assessed the relevant objectives and policies of the draft NZCPS and consider that any applicable are in alignment with the operative NZCPS. The outcomes sought also align.

Wellington Regional Policy Statement

241. The Regional Policy Statement 1995 (RPS) is an overview document that provides the framework for managing the resources of the Wellington region in a sustainable way. The RPS lies beneath the central government instruments (national policy statements, national environmental standards and the New Zealand Coastal Policy Statement).
242. Section 12 of the RPS (Energy) advocates that the region needs to aim to reduce energy demand, increase energy efficiency in energy use, manage non-renewable sources and develop renewable sources. The Policy Statement recognises that an appropriate mechanism to implement this promotion of consideration is through provisions in District Plans. This is recognised in the Council's Sustainable Development Strategy, which identifies five priority action areas: sustainable transport solutions, sustainable living practices, key support elements, biodiversity and sustainable energy solutions, with a particular focus on fostering energy efficiency and the development of Wellington's wind power resource.
243. Section 7 of the RPS within Policy 1 identifies the Makara Stream Estuary as a site of regional significance for indigenous vegetation or significant habitats for indigenous fauna.
244. The coastal escarpments and small beaches from Paekakariki to Owhiro Bay (excluding Pukerua Bay settlement, Porirua Harbour and Plimmerton) are listed as landscapes and seascapes of regional significance in Section 10 of the RPS. The marine terraces at Tongue Point are listed as an outstanding landform of national significance, and the Makara Stream Flats are identified as an outstanding landform of regional significance.
245. These effects have been discussed below and have flowed down into the Wellington City Council and Porirua City Council District Plans, an assessment of which will follow below.
246. It is noted that, in March 2008 the Wellington Regional Council released a draft proposed Regional Policy Statement (RPS) for public feedback. This draft RPS indicates the future policy direction for the Wellington region, such as the introduction of more stringent controls on projects that affect the natural landscape. Whilst some submissions refer to this document, and consider it should be given significant weight, we note that the draft RPS has not yet been publicly notified and may change significantly prior to notification. Accordingly, the draft RPS is not accorded any weight in this assessment.

Wellington City Council District Plan Documents

247. In respect of the assessment against section 104(1)(b), the objectives and policies of the District Plan are relevant as they express the aspirations of the community. Its policies and objectives can be used as guidance on whether an adverse effect is to be regarded as minor, and are therefore taken into account (and referred to) in the assessment that follows. It is also appropriate to be mindful of the assessment criteria under the relevant controlled and discretionary activity rules in the District Plan relating to activities on land within the Rural Area. The relevant objectives and policies of the Wellington City District Plan are set out under Appendix 2 of this report.

Operative District Plan

248. Objective 14.2.1 seeks to promote “*the efficient use and development of natural and physical resources in the Rural Area*” with the supporting policies recognising the benefits of urban development. The proposal most certainly represents ‘development’, but not in the conventional sense. The location of this proposal within the Rural Area does not result in any additional inefficiency in terms of resources. In fact, the location of the proposed wind farm is entirely compatible with the existing farming activities as these can continue to operate alongside the wind farm meaning a greater efficiency in the use of the available land resource will occur than through just pastoral farming.
249. Objective 14.2.2 seeks “*to maintain and enhance the character of the Rural Area by managing the scale, location and rate of new building development*”. The policies supporting these objectives focus on the impacts of new building development and the important character of rural areas. Mr Hudson has considered the proposal in respect of the public views and general impact on the rural character of the landscape and has commented that the character of the landscape is not particularly suited to the industrial appearance of wind turbines but “*when considered in relation to the extent of roading and opportunities for public appreciation of the rural landscape, the effect that the turbines will have on visual amenity values is not significant*”.
250. Objective 14.2.3 seeks “*to maintain and enhance the amenity values and rural character of Rural Areas*”. The supporting policies recognise the influence of non-rural activities and noise on amenity values and rural character. The construction and operational noise of the proposed wind farm has been considered by Mr Lloyd and he has commented that noise associated with the construction and operation of the wind farm would be audible to the neighbouring properties. However, he is satisfied that the conditions of the consent would restrict noise emissions to an acceptable level. The visual amenity impacts are of a greater concern. These have been considered by Mr Hudson and discussed in depth above in the section 104(1)(a) Assessment. In summary, Mr Hudson, commented that there were 9 turbines which would result in a substantial visual amenity effect for neighbouring properties and went further to highlight six turbines which were of greatest concern. The proposal is not considered to be consistent with Objective 14.2.3 with reference to Policy 14.2.3.1 given its impacts on the visual amenities of some of the surrounding properties.
251. Objective 14.2.5 seeks “*to maintain and enhance natural features (including landscapes and ecosystems) that contribute to Wellington’s natural environment*”. The proposed turbines would be located on the edge of the area identified as the coastal environment but would be located on undeveloped ridges and intrude upon undeveloped skylines. Mr Hudson has considered the impacts of the proposed wind farm with regard to these issues and has concluded that the effects on natural character of the coastal environment would be significant. Mr Blaschke has considered the proposal in terms of its impacts on the ecosystems within the area and is unable to support turbines F13 and F14 due to the potential impacts on the Hawkins Stream and the Makara Estuary that would result from the earthworks required to construct the turbine platforms. The sedimentation concerns are deferred to the Greater Wellington Regional Council. For this reason the proposal is considered to be contrary to Objective 14.2.5.
252. The quality of the coastal environment is recognised within Objective 14.26 and its supporting policies. At present, there is limited access to this section of the Wellington coastline. The existing access which is along the beachfront at Makara Beach would be

unaffected by this proposal. The proposed turbines would be located outside the coastal marine area and as discussed above would also be on the edge of the defined coastal environment. However, they would be partially visible from Smiths Bay and the entire farm would be visible from the Makara Walkway, Makara gun emplacements and from out at sea. The views from the Makara Walkway and gun emplacements have significant effects on the natural character of the coastal environment.

253. Objective 14.7.2 seeks to “*avoid or mitigate the adverse effects of natural and technological hazards on people, property and the environment*”. The location of a fault line along Ohariu Valley Road is not considered to result in any significant issues for the application.
254. Objective 14.2.8 seeks to prevent or mitigate effects associated with hazardous substances and contaminated sites. The proposed fuel tank would meet the requirements of the New Organisms and Hazardous Substances Act and conditions are recommended to ensure that effects are mitigated. The areas of contamination have been identified by the applicant and are located within parts of the site which are unaffected by the development of the proposed wind farm.
255. Objective 14.2.9 and its supporting policies provide for the efficient, convenient and safe access for people. The traffic effects associated with the construction, operation and maintenance of the proposed wind farm have been considered by Mr Kong. There will be unavoidable effects associated with construction traffic along the northern portion of Ohariu Valley Road; however, it is considered that the Traffic Management Plan and other conditions of consent would mitigate these effects to level which would retain an acceptable level of access for the local residents and general public.
256. Objective 14.2.11 and 20.2.2 seeks to facilitate and enable the exercise of tino rangatiratanga and kaitiakitanga by Wellington’s tangata whenua and other Māori. The site holds significance to tangata whenua, in terms of historic relationships with the area and association with the life supporting capacity of the land and surrounding waters. As mentioned earlier, subject to the removal of a number of turbines, the proposal is not considered to have unacceptable cultural effects on tangata whenua or other Māori. The recommended conditions of consent are considered suitable to mitigate the potential adverse effects of the proposal on water quality, and the disturbance of any areas of significance. Therefore, with these conditions the proposal is considered to be consistent with this objective.
257. Some of the works proposed within Spicer Forest are located within the Open Space B area. Objective 16.5.1 seeks to “*maintain, protect and enhance the open spaces of Wellington City*” and Objective 16.5.2 seeks to “*maintain and enhance natural features that contribute to Wellington’s natural environment*”. The proposed track through Spicer Forest would be separate to the existing recreational tracks within the area and would therefore not significantly affect recreational activities. Furthermore, at the completion of the construction period the new track would be available for use by recreational users such as mountain bikers and walkers. The proposed track would be of a minimal width and would be located within the pine forest and therefore would not result in the removal of any areas of significant native vegetation. There is also a strip of land running along the coastline which is zoned Open Space B. It is assumed that this area covers the shoreline only and the impacts of the proposal on this area are considered to be acceptable as due to the topography the turbines would only be

partially visible. The proposal is considered to be consistent with these objectives and policies.

Summary of Operative District Plan Provisions

258. In summary, the objectives and policies of the operative District Plan may not directly refer to wind farm developments but they do cover a range of potential effects associated with non-rural activities. The proposal in its entirety as currently lodged is considered to be contrary to the objectives and policies of the operative District Plan due to the impacts on the G series turbines and F13 and F14 turbines on the visual amenities of the rural area as viewed from nearby residential properties, the impacts of turbines F13 and F14 on the Hawkins Stream and the Makara Estuary and the impacts of the F series turbines on the natural character of the coastal environment.

Plan Changes 32 and 33

259. As discussed earlier, there are appeals on Plan Changes 32 and 33, which are relevant to these provisions and are yet to be resolved.

260. Plan Change 32 proposes Objective 25.2.1 which seeks to “*encourage efficient in energy use and the development and use of energy from renewable resources*”. Policy 25.2.1.1 seeks to ‘*encourage the efficient use of energy and the greater use of renewable energy*’. The proposal is considered to be consistent with the aim of this policy as it involves the use of a renewable energy resource. However, the second policy, Policy 25.2.1.2, states that proposals should “*provide for renewable energy development, while at the same time avoiding, remedying or mitigating adverse effects on the environment*”. In this case, the wind farm is considered to generate a series of adverse effects particularly with regard to the landscape, visual amenity, ecosystems and traffic generation. Some of these effects are considered to be acceptable however some of these effects are unacceptable. Hence, the proposal in its entirety is considered to be inconsistent with this objective and Plan Change 32. However, with the removal of the G series turbines and turbines F13 and F14 the proposal when considered with regard to Part 2 would be acceptable.

261. Plan Change 33 amended the Rural Area section and introduced the Rural Area Design Guide. The main changes centred a round the redefinition of the ridgelines and hilltops and no new objectives and policies were introduced. Please refer to the above Operative District Plan assessment.

Plan Change 65

262. As mentioned earlier Plan Change 65 was notified on 1st July 2008 and replaces the Earthworks Bylaw. The objectives and policies of Plan Change 65 focus on the visual amenity, stability and sedimentation issues associated with earthworks. The visual amenity and stability effects associated with the proposed earthworks are considered to be acceptable subject to conditions, and accordingly are consistent with the policies of the Plan Change in this regard.

263. However, the proposal is considered to be contrary to the Objective 19A.2.1 which “*provides for earthworks for the use development and protection of land throughout the city while avoiding, remedying or mitigating any adverse effects of earthworks,*

landslips and associated structures on the environment” due to the effects associated with the turbine platforms of F13 and F14 and the possible sedimentation effects that could occur.

264. In terms of sedimentation issues, it is noted that one of the functions of the Greater Wellington Regional Council is to focus on any effects associated with water quality, and this issue has been discussed in greater depth in its report, as have sedimentation concerns in relation to the whole proposal. As this is an area where the Greater Wellington Regional Council has higher levels of expertise than Wellington City Council it is considered appropriate to defer to that Council on the sedimentation concerns.

Porirua City Council District Plan Documents

265. The proposed works are within the Rural Zone under the Porirua City District Plan, and the land is also designated for landfill purposes. The relevant objectives, policies and rules in the Porirua City District Plan seek to ensure that activities in the Rural Zone do not detract from the character or quality of the rural environment. The relevant objectives and policies and assessment criteria of the Porirua City Council District Plan form Appendix 3.
266. Specific objectives and policies relating to earthworks seek to protect areas susceptible to erosion, maintain visual character and protect ecologically significant areas. For the reasons discussed in the section 104(a) effects assessment above, the proposal is considered to meet the Rural Zone objectives and policies of the Porirua City District Plan. The Environmental Outcomes Anticipated section is also met.
267. With respect to the relevant Porirua City objectives and policies that relate to traffic, we note that the conditions proposed by David Berwick of Porirua City Council are designed to mitigate any adverse effects on the existing road network, and to protect the safety and efficiency of Porirua City road users. This is a major development which will have traffic implications for Porirua City as the bulk of the traffic will travel through Porirua City and the Spicer Landfill. As noted earlier in this report the existing Porirua roads are considered to be of a suitable quality to handle the additional traffic movements, and as the traffic will pass through mainly industrial areas residential parties are unlikely to be adversely affected.
268. The landscaping and visual effects of the proposal have been discussed by Paul Blaschke and John Hudson in their respective reports (refer to Appendices 4 and 6). For the reasons outlined in these assessments we are confident that the proposal will have no more than minor visual and ecological effects in Porirua City, and that these effects can be appropriately managed through conditions of consent. We note that the works within the Spicer Landfill will occur in an area that is already visually and ecologically compromised due to the presence of the Landfill itself.
269. Overall, we consider that the proposal is consistent with the objectives, policies and environmental outcomes anticipated by the Porirua City District Plan.

Section 104(1)(c) - Other Matters:

270. The following other matters have been identified and discussed below:

- New Zealand Energy Strategy
- Ohariu Valley Community Plan
- Makara Community Plan

New Zealand Energy Strategy

271. The Government released the New Zealand Energy Strategy to 2050 – Powering Our Future (NZES) in October 2007. The NZES vision is for "a reliable and resilient system delivering NZ sustainable, low emissions energy services". Its purpose is to provide long-term direction and leadership to put New Zealand firmly on the path to an energy system that supports economic development, while being environmentally responsible and with a renewed commitment to promoting energy efficiency and renewable sources of energy. The Strategy promotes the development of a National Policy Statement for renewable energy under the Resource Management Act, along with other initiatives to address the effects of climate change. The development of wind farms in New Zealand is largely accepted as contributing to the goals and objectives of the NZES, including the target of 90% renewable energy by 2025.

272. Accordingly, the proposal will assist in meeting the energy targets set by the government with respect to climate change.

Ohariu Valley Community Plan

273. The Ohariu Valley Community Plan was prepared after extensive consultation with the Ohariu Valley residents, and represents the community's vision for the area. The Plan was approved by the Council in February 2002. The Plan identifies that the key objective for the Ohariu Valley is to "maintain and enhance rural character, amenity and identity for people living, working and visiting Ohariu Valley". Community members expressed that they were generally opposed to subdivision for 'lifestyle block' farming, and that traffic safety and roading was a key issue. The Ohariu Valley Community Plan is a non-statutory document that is guiding only.

274. It is noted that the above concerns are reflected within the objectives and policies of the District Plan and are covered within the above assessment. Therefore, the proposal is inconsistent with the Ohariu Valley Community Plan for these same reasons as it is inconsistent with the objectives and policies of the District Plan.

Makara Community Plan

275. The Makara Community Plan represents the community vision as identified by the residents of Makara. As with Ohariu Valley residents, the Makara community had an overriding goal of protecting the rural amenity of the area. Other key objectives included limiting development to appropriate types of activities, developing community facilities, and improving roading and transport. As with the Makara Community Plan above, this guiding document can be taken into account but has no statutory weight.

276. It is also noted that the above concerns are reflected within the objectives and policies of the District Plan and are covered within the above assessment. Therefore, the

proposal is inconsistent with the Makara Community Plan for these same reasons as it is inconsistent with the objectives and policies of the District Plan.

Lapse Date

277. The applicant has requested an extended lapse period of seven years as construction will be dependant on the future demand for electricity. We are comfortable with this extended lapse period and recommend that it be approved should consent be granted.

Community Fund

278. The applicant has stated that “*if Project Mill Creek proceeds to construction, it is intended that a fund be established for the Project Mill Creek communities with appropriate annual committed funding*”. This is not part of the consideration of this consent. However, the applicant may wish to provide further information about the proposed fund at the hearing, and the commissioners may wish to consider including a condition of consent to reflect this offer.

Part 2 of the Resource Management Act

279. As directed by section 104(1), the consideration of resource consent applications and any submissions received must be undertaken subject to Part 2. In addition, Part 2 of the RMA requires the Council to recognise and provide for matters of national importance (section 6); have particular regard to other matters (section 7); and to take into account the principles of the Treaty of Waitangi (section 8) when determining whether a proposal meets the purpose and principles of the Act (section 5).

280. The provisions under section 6 that are relevant to this application are:

Section 6(a) – The preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use and development;

Section 6(b) – The protection of outstanding natural features and landscapes from inappropriate subdivision, use and development;

Section 6(c) – The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna;

Section 6(d) – The maintenance and enhancement of public access to and along the coastal marine area, lakes and rivers;

Section 6(e) - The relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu , and other toanga; and

Section 6(f) – The protection of historic heritage from inappropriate subdivision, use and development.

281. The provisions under section 7 that are relevant to this application are:

Section 7 (a) – Kaitiakitanga

Section (aa) – The ethic of stewardship;

Section 7(b) – The efficient use and development of natural and physical resources;

Section 7(ba) - The efficiency of the end use of energy;

Section 7(c) – The maintenance and enhancement of amenity values;

Section 7(d) – Intrinsic values of ecosystems;

Section 7(f) – Maintenance and enhancement of the quality of the environment;

Section 7(i) – The effects of climate change; and

Section 7(j) – The benefits to be derived from the use and development of renewable energy.

Section 8 – Treaty of Waitangi

282. Section 8 of the Act requires that all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).
283. The Treaty and its principles are an important part of the cultural and constitutional identity of New Zealand. Treaty principles interpret the Treaty as a whole, its underlying meaning, intention, and spirit, to provide further understanding of the expectations of the signatories.
284. As evidenced in the 104(1)(a) assessment above, issues relating to Māori have been taken into account during our assessment of this proposal. Furthermore, Māori have been consulted by both the applicant and the Council, in accordance with the principles of the Treaty. Sites and values significant to tangata whenua have been identified throughout and the process of managing these sites and values has been undertaken in consultation with tangata whenua, with the fullest practicable active protection given. A condition is also recommended to ensure on-going participation by the relevant iwi groups as the development progresses.
285. It is therefore considered that the principles of the Treaty have been taken into account.

Section 7 – Other matters

286. Section 7 includes additional matters that particular regard must be given to. A number of these section 7 matters are of relevance to this proposal, including the efficient use and development of natural and physical resources; the maintenance and enhancement of amenity values; and maintenance and enhancement of the quality of the environment. Furthermore, the RMA Amendment Act 2004: Climate Change and Renewable Energy added sections 7(i) and 7(j), requiring that particular regard must also be given to the effects of climate change and the use of renewable energy.

287. Our discussion of the relevant section 7 matters is as follows:

7(a) and 7(aa) Kaitiakitanga and the ethic of stewardship;

288. The proposal is considered to be consistent with sections 7(a) and 7(aa) of the RMA for the reasons outlined in the section 104(a) assessment of Cultural Effects. Both the Wellington Tenth Trust and Te Runanga o Toa Rangatira have expressed a desire to maintain their kaitiaki relationship to the site. The proposed Accidental Discovery Protocol condition requires on-going contact with tangata whenua during the construction period, and provides for iwi to be involved as kaitiaki. It is noted, however, that the wind farm site is private land and that tangata whenua would not have access to the land as of right. Overall, we consider that the proposal has suitable provisions for the involvement of iwi, should artefacts or sites of significance to iwi be discovered during the construction period. The proposed earthworks and silt/sedimentation control measures also respond to the concerns of iwi in their position as kaitiaki of this land. We consider these conditions are also responsive to the concerns expressed by the submission lodged by representatives of Ngati Tama.

7(b) the efficient use and development of natural and physical resources

289. The proposal is considered to be an efficient use of natural and physical resources, in that it utilises the significant and renewable energy resource of the wind within this site, while allowing for the continuation of the present farming and recreational activities. The proximity of the site to the existing utility infrastructure, including the HV transmission line, is beneficial in terms of section 7(b). This allows for the energy generated by the wind farm to be efficiently transferred into the national grid, minimising energy loss; as well as the need for additional infrastructure. The additional benefit is that the land can continue to be utilised for pastoral and rural recreational type activities meaning an even more efficient use of the current resource. Hence, the proposal is considered to be consistent with this matter.

7(c) the maintenance and enhancement of amenity values

290. Amenity value is defined under section 2 of the Act as:

“those natural or physical qualities or characteristics of an area that contribute to people’s appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes”.

291. We note Mr Hudson’s assessment that the Ohariu Valley landscape is notable for its pleasant rolling hills, and is accordingly considered to be an “amenity landscape”. As such, this landscape is likely to be appreciated by local residents as adding to the amenity of their homes and properties, and dramatic changes to the landscape can be expected to detract from the existing level of amenity that these residents experience. We note, however, that the site and surrounding area is already somewhat modified by the existing transmission towers that cross this area, leading from the coast in the west into the city in the east. Nonetheless, the addition of up to 31 large (111m) structures will greatly and permanently alter the existing landscape. We consider that the effects of the proposed 31 turbines on the landscape will be contrary to the intentions of section 7(c) and the removal of the G series turbines and turbines F13 and F14 would assist in mitigating these effects.

7(d) the intrinsic values of ecosystems

292. As mentioned above, the proposal is considered to have significant impacts on the Hawkins Stream and the Makara Estuary ecosystems and the removal of turbines F13 and F14 are considered to be the only appropriate mitigation measure. The issues of sedimentation have been deferred to the Greater Wellington Regional Council report. Therefore, in its entirety the proposal is considered to be inconsistent with this matter but with the removal or relocation of turbines F13 and F14 an amended proposal maybe acceptable.

7(f) the maintenance and enhancement of the quality of the environment

293. The definition of environment under the Act is broad ranging and includes amenity values and ecological systems as mentioned above in the assessment of section 7(c) and 7(d) the proposal is considered to have significant effects on the visual amenities of the some of the surrounding properties and the ecological value of some of the surrounding ecosystems. Hence, the proposal is not considered to meet the intention of section 7(f) unless the G series turbines and turbines F13 and F14 are removed.

7(i) the effects of climate change

294. The proposal is considered to be consistent with this section as the proposal provides a sustainable and renewable energy resource which does not produce greenhouse gas emissions which are recognised as contributing towards the effects of climate change. Accordingly, the proposal will assist in meeting the energy targets set by the government with respect to climate change.

7(j) the benefits to be derived from the use and development of renewable energy

295. In utilising the power generating capability of wind, the proposal not only captures the otherwise unrealised potential of an infinite energy source, but by providing an alternative to other methods of power generation the proposal will provide greater 'security of supply'. Importantly, the proposal represents an alternative to greenhouse gas emitting energy sources. Hence, the proposal is considered to be consistent with this matter.

Section 6 – Matters of national importance

296. Section 6 of the Act introduces matters of national importance that are to be recognised and provided for in achieving the purpose of the Act. The section 6 provisions of relevance to the issue of renewable energy use and development are those that promote the protection and preservation of the natural character of the coastal environment, outstanding natural features and landscapes, significant indigenous vegetation and fauna, and tangata whenua values.

(a) The preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:

297. The impacts on the coastal environment have been discussed above in the section 104(1)(a) Assessment. It was acknowledged that the F series of turbines would be located on the inland boundary of the coastal environment. Mr Hudson has considered the proposal in terms of its impact on Smiths Bay, Makara Beach and the Makara Walkway as the turbines would be visible from these locations. The steep nature of the escarpments and the setback of the turbines mean that in his opinion the proposal would be prominent in relation to the natural character of the coastal environment and would have a significant adverse effect.

(b) The protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:

298. Mr Hudson has reached a conclusion as to what constitutes an area of outstanding natural landscape in relation to this application. The conclusion was the entire area defined as the coastal environment. For similar reasons to those applicable to section 6(a) the layout of the turbines is considered to have a significant adverse effect on this outstanding natural landscape.

299. As can be seen the issues arising within section 6(a) and 6(b) are interlinked in terms of the definition of coastal environment and outstanding natural landscape and both depend upon the appropriateness of the development. In respect to the appropriateness

of the development, the specific characteristics of the site must be considered. This site offers an area of land which is exposed to consistently high wind speeds over a relatively high number of days per year. The site is also in close proximity to an area of high electricity demand which would benefit from the development of a renewable energy resource that does not produce greenhouse gas emissions. There are existing transmission facilities located within the site which the development would connect to, thereby, reducing the need for further transmission lines. Therefore, the site is considered to be highly suited to wind farm development, subject to the consideration of the localised environmental effects. Additionally, there are flow-on national benefits which arise from the development of renewable energy resources on sites which are highly suitable to wind farm development. For these reasons, the site itself is considered to be appropriate for this type of development.

300. It is noted that both section 6(a) and 6(b) protect the natural character of the coastal environment and any outstanding natural landscapes from inappropriate development. Therefore, there is an expectation that they are not protected from appropriate development. In this case, we believe in terms of section 6(a) and 6(b) this development is appropriate for this site, and it is this appropriateness which must take precedence when all the benefits and other factors relating to this location are considered; in this instance over the preservation of the natural character of the coastal environment and the outstanding natural landscape.

(c) The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:

301. The main areas of concern ecologically are the sedimentation of the Hawkins Stream and the Makara Estuary. The proposal in its entirety is considered to be inconsistent with this matter but as Mr Blaschke has commented the removal of turbines F13 and F14 would solve this issue. The effects associated with the sedimentation and erosion control have been deferred to the Greater Wellington Regional Council.

(d) The maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers:

302. At present there is limited public access to this section of the coastline. The proposal will not result in the reduction of public access to and along the coastal marine area and would fully retain the current access arrangements. Hence, the proposal is considered to be consistent with this matter.

(e) The relationship of Māori and their culture and traditions with ancestral lands, water, sites, waahi tapu, and other taonga:

303. As discussed above, in the section 104(1)(a) Assessment, the proposal is considered to be acceptable in terms of cultural impacts. The application has clearly identified known sites of significance and conditions relating to sediment control and an accidental discovery protocol requirement are recommended to ensure protection of known waahi tapu, and other taonga and the ability to undertake further investigation during the construction period. The proposal is considered to be consistent with this matter.

(f) The protection of historic heritage from inappropriate subdivision, use, and development.

304. As mentioned above, the archaeological report included with the application states that there is a very low likelihood of sites of European origin in the Mill Creek area, as no known early occupation has been documented north of Makara. However, there are a few old house sites scattered around that possibly predate 1900. A condition is recommended regarding an accidental discovery protocol to address archaeological discoveries. For this reason the proposal is considered to be consistent with this matter.

Part 2 Conclusion

305. As mentioned above, the purpose of the Act is to promote the sustainable management of natural and physical resources. This purpose sets the tone and basis for measuring all actions taken under the Act. The purpose of the Act must be given practical expression through all decision-making under the Act, including policies, plans, and resource consents.

306. Within section 5 sustainable management is defined as *managing the use, development and protection of natural and physical resources to enable people and communities to provide for their social, economic and cultural well being and their health and safety, while:*

- (a) Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and*
- (b) Safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and*
- (c) Avoiding, remedying, or mitigating any adverse effects of activities on the environment.*

307. Section 6 identifies ‘matters of national importance’ which should be recognised in achieving the purpose of the Act, section 7 identifies ‘other matters’ which the consent authority must have particular regard to, and section 8 must be taken into account in achieving the purpose of the Act. There is now a weighing exercise which must be undertaken to determine whether this proposal meets the purpose of the Act between section 5(2)(a) and sections 5(2)(b) and (c). As part of this exercise section 6 matters must be recognised and provided for and particular regard must be given to section 7 matters and section 8 must be taken into account.

308. Case law has commented that there is an internal ranking making section 6 more important than section 7. However, it has also commented that where a section 6 matter conflicts with a section 7 matter, section 6 does not necessarily prevail.

309. Section 5(2)(a) refers to the ability of future generations to meet their needs. Increasing energy supply is considered to be consistent with meeting the foreseeable needs of future generations, and the production of energy from renewable sources is considered less detrimental to the environment than alternative forms of energy production. It is also noted that energy use for the nation has continued to increase and it can reasonably be expected that in a growing economy such patterns will continue as people and communities seek to provide for their social and economic well-being.

310. In terms of section 5(2)(b) the proposal on a regional and national scale provides for the life supporting capacity of air, water, soil and ecosystems as in it provides a source of renewable energy. The sedimentation and erosion control measures and their subsequent effects have been deferred to the Greater Wellington Regional Council.

311. Section 5(2)(c) which requires that any adverse effects on the environment should be avoided, remedied or mitigated. Section 3 of the Act defines environment as including the following:
- Ecosystems and their constituent parts, including people and communities; and
 - All natural and physical resources; and
 - Amenity values; and
 - The social, economic, aesthetic, and cultural conditions which affect the matters stated in the above definition or which are affected by those matters.
312. The proposed wind farm due to its nature has unacceptable adverse effects on the visual amenity, natural character of the coastal environment, and the ecosystems of the surrounding rural area.
313. The fundamental question is where does the weighting lie between the positive benefits for the wider community and environment of creating a renewable energy resource and the adverse effects on the local residents and environment. In terms of the proposal in its entirety we consider that the cost to the local residents and environment is too substantial and the positive benefits do not outweigh this cost.
314. Therefore, a second question arises, what is a reasonable cost for the local residents and environment to bear? It is recognised that a development of this scale will have adverse effects on the surrounding environment but these adverse effects must be at an acceptable level. Therefore, in respect of the majority of the turbines the positive benefits outweigh the negative effects. Our major concern is with the G series turbines, and secondly with turbines F13 and F14 where the effects on the local residents and environment are at a level where the positive benefits are questioned to a point which means that the proposal does not achieve the purpose of the Act. The impacts of these turbines on the visual amenities of the surrounding residents and the ecosystems of Hawkins Stream and Makara Estuary are too substantial to support. Therefore, it is recommended that these turbines be removed.

Conclusion

Wellington City Council

315. Firstly is acknowledged that the proposal represents a positive effect in that it provides a source of renewable energy. However, due to the scale of the proposal there are a significant number of adverse effects. While a certain level of effect is unavoidable, this level of effect must be acceptable. The majority of the adverse effects, such as construction noise, operational noise, traffic generation, health, and cultural can be adequately addressed by the imposition of appropriate conditions of consent, to the extent that these effects will be at level considered to be acceptable. It is noted that the consideration of the sedimentation and erosion control effects have been deferred to the Greater Wellington Regional Council.
316. The adverse effects of greatest concern are the visual amenity effects on some private dwellings associated with turbines F13 and F14 and the G series turbines, natural character effects of the entire F Series on the coastal environment, and the ecological effects on the Hawkins Stream wetland and the Makara Estuary resulting from the earthworks associated with the construction of turbines F13 and F14. These effects are deemed to be significant and result in the proposal in its entirety being contrary to the

objectives and policies of the District Plan and Plan Change 32, Plan Change 33 and Plan Change 65.

317. Part 2 of the Act is fundamental to the consideration of resource consent applications. In relation to the F series section 6(a) and 6(b) protect the natural character of the coastal environment and any outstanding natural landscapes from inappropriate development. Consideration has been given to the appropriateness of this development, and the conclusion reached that the development is appropriate given the regional and national benefits of the location within an area of relatively high wind speeds and regular wind in the area; that the site is close to an area of high electricity demand; and the proximity to existing transmission facilities. Therefore, it is considered that in terms of section 6(a) and 6(b) this development in a general sense is appropriate for this site, and it is this appropriateness which must take precedence in this instance over the preservation of the natural character of the coastal environment and the outstanding natural landscape.
318. On this basis, the F series turbines with the exception of turbines F13 and F14, which also have ecological effects, are considered to meet the purpose and principles of Part 2 and are recommended for approval.
319. In regard to the G series turbines and turbines F13 and F14 the localised effects (visual and ecological impacts) are considered too significant to be outweighed by the positive benefits or other relevant matters under Part 2 of the Act. Therefore, the effects of the proposal in its entirety, subject to the Part 2 assessment, are considered too substantial and the positive benefits do not outweigh these costs.
320. However, consideration has also been given to what level of effect would potentially be acceptable balancing these effects with the matters set out in Part 2 of the Act. As noted our major concern is with the G series turbines and with turbines F13 and F14. Therefore, with the removal of these turbines the proposal would then be able to be considered acceptable and could be recommended for approval on this basis.

Porirua City Council

321. The proposal requires resource consent for the construction of an access track through the Spicer Landfill and Spicer Forest to be used as the main access for the wind farm. The main effects associated with this development are visual effects, sedimentation effects, and traffic effects. These effects are considered to be acceptable subject to the recommended conditions.
320. The proposed effects have been considered in terms of the objectives and policies of the Porirua City Council District Plan and are considered to be consistent with their intentions.
321. The Part 2 assessment raises no further issues for the aspect of the proposal. In conclusion, approval is recommended for the proposed earthworks required to construct the access track within the Spicer Landfill which is associated with the provision of access to the wind farm.

Wellington City Council Recommendation:

322. The below recommendation is subject to the sedimentation and erosion control assessment which has been deferred to the Greater Wellington Regional Council. Should this not prove satisfactory and Greater Wellington Regional Council concerns not be resolved this recommendation would change accordingly as the control of sediment and erosion is also a matter of concern for the District Council.
323. For the reasons discussed above, it is considered that the proposed wind farm, subject to the removal of turbines F13, F14, G01, G02, G03 and G04, meets the objectives and policies of the Wellington City District Plan and Part 2 of the Resource Management Act and it is our recommendation that the Commissioners, acting under delegated authority from the Wellington City Council and pursuant to section 104B of the Resource Management Act 1991, grant consent, subject to the conditions of consent attached in Appendix 8, to construct, use, and maintain a wind farm known as Project Mill Creek on the land generally located between Ohariu Valley and Wellington's west coast, which is legally described as Lots 2 - 4 DP 347825, Lot 2 DP 385946, Lots 2 - 3 DP 78259, Secs 73 - 75 Ohariu District, Sec 77 Ohariu District, Lots X, XI and XII Ohariu District, Pt Sec 111 Ohariu District, Pt Sec 7 Ohariu District, Pt Sec 4 Ohariu District, Sec 3 Ohariu District, Lots 2 - 6 DP 303803, Lot 1 DP 302866, Lot 14 DP 302866, Lots 17-20 DP 302866, Lot 1 DP 334043 139480, Pt Lot 2 DP 54371, Lots 2 - 3 DP 77503, Lot 1 DP 52949. It is also recommended that consent be granted for the road improvement works on legal road. This consent would have a lapsed period of 7 years.

Porirua City Council Recommendation:

324. The below recommendation is subject to the sedimentation and erosion control assessment which has been deferred to the Greater Wellington Regional Council. Should this not prove satisfactory and Greater Wellington Regional Council concerns not be resolved this recommendation would change accordingly as the control of sediment and erosion is also a matter of concern for the District Council.
325. For the reasons discussed above, it is considered that the proposed earthworks within Spicer Landfill which are associated with the provision of access to a wind farm within the Wellington City Council jurisdiction meets the objectives and policies of the Porirua City District Plan and Part 2 of the Resource Management Act, and it is our recommendation that the Commissioners, acting under delegated authority from the Porirua City Council and pursuant to section 104B of the Resource Management Act 1991, grant consent, subject to the conditions of consent attached in Appendix 10, to undertake earthworks and the construction of an access track in association with a wind farm known as Project Mill Creek, over the land located at Spicer Landfill, Broken Hill Road, Porirua (being Lots 2 - 3 DP 77503, Lot 1 DP 52949). This consent would have a lapsed period of 7 years.

Conditions

326. Appendices 8 and 10 of this report set out recommended Wellington City Council and Porirua City Council conditions, should the commissioners be of a mind to grant consent. These conditions are considered to be a starting point for discussions throughout the hearing, and it is expected that in response to the issues raised within this report and further matters identified by submitters throughout the course of the hearing, the conditions will be added to or amended to address the issues raised.

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