



## **ATTACHMENT 1**

CONTACT ENERGY LIMITED

### **SOUTHLAND WIND FARM**

Fast-track Approvals Referral  
Application

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## 1. APPLICANT

### 1.1 APPLICANT DETAILS

**Person or entity making the request:** Contact Energy Limited

Contact Energy Limited (“**Contact**”) is the second largest electricity generator/retailer in New Zealand, with a flexible and largely renewable portfolio of electricity generation assets.

Contact commenced operations in early 1996 when it acquired a portfolio of electricity generation assets from the state-owned electricity generator (Electricity Corporation of New Zealand). Contact owns and operates 11 generating stations across the country and generally produces 80-85% of its electricity from renewable hydro and geothermal resources. Contact is committed to contributing to New Zealand's achievement of its climate change targets and assisting the New Zealand Government in meeting its climate change goals through the development, construction, maintenance, and operation of renewable electricity infrastructure. Contact has \$1.7b of investment in clean energy currently underway, or near completion.

**Contact Person:** Matthew Cleland

**Organisation:** Contact Energy Limited

**Job Title:** Head of Wind & Solar

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**Postal Address:** PO Box 10742  
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### 1.2 AGENT ACTING ON BEHALF OF APPLICANT

**Organisation:** Mitchell Daysh Limited

**Contact Person:** Claire Hunter

**Job Title:** Director

**Phone:** s 9(2)(a)

**Email:** s 9(2)(a)

**Postal Address:** PO Box 489  
Dunedin  
9054

### 1.3 CORRESPONDENCE

Please direct all correspondence relating to this application (including correspondence from MfE) to:

**Contact Person:** Steve Harding

**Organisation:** Roaring40s Wind Power Limited

**Phone:** s 9(2)(a)

**Email:** s 9(2)(a)

### 1.4 COMPLIANCE AND ENFORCEMENT HISTORY

As noted above, Contact has been a major operator of large power stations since 1996. Contact has an extensive portfolio of electricity generation assets and has a proven track record of environmental compliance in relation to Contact's operation of these sites.

Contact has a strong commitment to the environment and robust processes to ensure compliance with the resource consents and other approvals it holds. Contact has 11 generation sites located throughout New Zealand. Contact holds approximately 120 resource consents associated with the construction, operation and maintenance of these generation sites. These consents are comprised of 3,500 conditions. Contact has reliable and regularly reviewed and audited systems in place to ensure adherence to these conditions. This includes a regular environmental monitoring programme, effective site management, public disclosure of compliance in annual integrated reports, and effective policies and procedures.

Since the formation of Contact in 1996 there are only three instances where compliance and/or enforcement actions have been taken against Contact by a local authority under the Resource Management Act 1991 ("**RMA**"). All of these have been remedied by Contact.

1. Contact has extensive environmental offset and restoration conditions associated with its Ohaaki Geothermal Power Station, including in relation to wetland areas. In April 2021 it received an abatement notice from Waikato Regional Council in relation to aerial (helicopter) boom spraying of pest plants and weeds in the Torepatutahi Wetland in February 2020. The spraying was conducted in accordance with Contact's consents and permitted activity guidelines, however, it also resulted in kill of non-target species.

The abatement notice directed Contact to be more selective in conducting pest control methods. Contact has undertaken a full review of the ecological restoration programme in communication with mana whenua and stakeholders and prepared an Annual Work Plan to inform interested parties and guide activities in and around the wetland.

2. In February 2019, a geothermal reinjection well on Contact's Wairākei geothermal steamfield over-pressurised, causing geothermal water to be discharged into a nearby soakage pond not intended to store such volumes. Consequently, the pond gave way, causing soil and geothermal water to flow into the nearby Waipuwera Stream. Contact was prosecuted and participated in an ā-kanohi restorative justice process with the affected hapū of Ngāti Tūwharetoa, culminating in a comprehensive cultural impact assessment, formal apology and full suite of long-term mitigations agreed with tangata whenua and the Court. An important outcome was the development of a much stronger and deeper understanding by Contact of Ngāti Tūwharetoa and their relationship to the whenua and awa, and their role as kaitiaki and mana whenua.
3. In July 2022, Otago Regional Council ("**ORC**") issued Contact with an abatement notice directing it to submit to ORC a revised Landscape and Visual Amenity Plan ("**LVAMP**") for the Kawarau Arm of Lake Dunstan. The LVAMP manages the landscape and visual amenity effects associated with the on-going operation of the Clyde Dam as they occur in the Kawarau Arm (near Cromwell). The condition requires Contact to reassess the LVAMP every five years. The draft of the 2019 to 2024 reassessment was forwarded to the ORC and Central Otago District Council for consultation and mistakenly approved. A further draft of the reassessed LVAMP was submitted in June 2022, however, ORC considered that the new LVAMP did not appropriately cover key matters such as plant pest management and driftwood accumulation and requested further assessment. Contact worked proactively with the Councils and key stakeholders to prepare a new LVAMP. This was submitted to ORC for approval, and subsequently the abatement notice was uplifted in March 2023.

Considering the breadth of Contact's electricity generation assets, the organisation has established a commendable record of environmental compliance in relation to the construction, operation, and maintenance of these facilities. Contact is committed to upholding best management practices and compliance standards to ensure adherence to its consent conditions. Furthermore, the company will implement the necessary strategies and resources to facilitate this commitment.

## **2. REFERRAL APPLICATION SUMMARY**

### **2.1 PROJECT NAME**

Southland Wind Farm

### **2.2 PROJECT DESCRIPTION AND LOCATION**

#### **2.2.1 Project Description**

##### **2.2.1.1 Summary**

The Southland Wind Farm Project will include the following key components:

- > Construction and operation of up to 55 wind turbines, each up to approximately 7MW in capacity and a ‘tip height’ of up to 220m;
- > Electrical reticulation, consisting of underground cables and wind turbine transformers;
- > A wind farm substation to collect the power generated by the wind turbines. This will be located on Jedburgh Station;
- > A switching station (also known as Grid Injection Point (“**GIP**”)) located adjacent to the existing Transpower 220kV circuit between Invercargill and Dunedin (the North Makarewa to Three Mile Hill A Circuit);
- > An overhead single or double circuit 220kV transmission line between the wind farm substation and the GIP to provide connection to the Transpower National Grid;
- > Up to two permanent meteorological masts each up to approximately 140m in height;
- > An operations and maintenance building; and
- > Construction of roading, turbine foundations and “hard stand” areas adjacent to each turbine.

An indicative layout of these components is illustrated in **Attachment 2**. Further detail of each Project component is provided below.

##### **2.2.1.2 Wind Turbine Layout**

The Southland Wind Farm layout will be comprised of up to 55 wind turbines, located over three properties, Jedburgh Station, Glencoe Station and Matariki Forests’ “Venlaw” forestry plantation (refer to **Attachment 2**).

The wind turbine layout has been largely determined by the availability and most efficient use of the wind resource, while taking into account engineering requirements and, in

particular, the need to avoid and minimise effects on the environment, including on landscape values, high value indigenous vegetation, habitats for flora and fauna, and natural inland wetlands. The wind turbine layout has been designed for a rotor diameter of approximately 170m and a hub height of approximately 135m. The tip height of the wind turbines (including the height of the rotor) will be up to 220m.

Each wind turbine typically consists of:

- > A foundation and wind turbine platform. The turbine platform is retained as a gravel 'hard-stand' pad for turbine maintenance activities;
- > A tapered tubular steel tower;
- > A nacelle which sits on top of the tower and houses the generator, gearbox (depending on the turbine model), main control and safety systems, and a rotor shaft which transmits the rotating energy from the wind turbine rotor. The nacelle will house a gearbox to transmit the power from the rotor shaft to the generator; and
- > A three bladed wind turbine rotor and nose cone. Wind turbines will be painted with the same industry standard low reflectivity finished in an off-white colour.

Wind turbine foundations will be either gravity pads or a piled solution, depending on the results of the geotechnical ground investigations undertaken during detailed design.

Gravity pads will likely have a width of between 20-25m, and be approximately 2m thick and consist of approximately 800-1000m<sup>3</sup> of concrete with reinforcing steel. Piled foundations would be smaller in diameter and contain less concrete, but would extend deeper into the ground.

A transformer for each wind turbine will be located either within the turbine nacelle, in the base of the wind turbine tower, or adjacent to the tower (and located outside the edge of the foundation), depending on the wind turbine model selected. If located outside of the tower, the transformer will be housed in a cubicle steel box approximately 4.5m long, 3m wide and 3m tall, on a small concrete pad.

Platform areas (aka 'crane pads' or 'hardstands') beside each wind turbine are required for storage of components and the placement and erection of a crane for installation. The geometry of the hardstands will depend on the wind turbine model selected but could be up to approximately 125m long by a varying width of approximately 30-65m, with an additional extension of approximately 70m by 13m for crane assembly (inclusive of the support crane pads for erection of main crane).

### 2.2.1.3 Electrical Reticulation

Each turbine will be connected to the on-site substation located within the Wind Farm Site using 33kV (or potentially 66kV) cables. The electrical reticulation will be underground with cables buried (at approximately 0.9m depth) in, or alongside, the roads that will be constructed between the turbines and the substation. In some situations, where underground cables are not feasible, such as stream crossings, above ground solutions may be considered. These include cable trays mounted on stands around 1m in height, or overhead transmission lines may be considered, supported by wooden, concrete or steel poles no more than 25m in height. This will be determined following the completion of detailed design investigations. The cabling between the turbines, and to the substation will also include a fibre optic cable, to allow for control of the wind farm and the transfer of operational data.

### 2.2.1.4 Substation

The substation is a point where the output of all wind turbines is collected and then “stepped up” in voltage, if necessary, to match the voltage of the local electricity network, or Transpower National Grid to which the wind farm will be connected. For the Southland Wind Farm, the electrical reticulation between the wind turbines will be at 33kV (or 66kV) and then “stepped up” to 220kV to match the voltage of the Transpower National Grid which the wind farm will connect to. The substation will be approximately 2.5ha in area and will include the following components:

- > Perimeter stock fence and security fence;
- > A car parking area;
- > A control building approximately 10m by 20m and 6m in height;
- > Two switchrooms each approximately 7m by 32m, which will house 33kV (or 66kV) indoor switchgear, control panels, communications, power supply and associated equipment;
- > Up to two gantry structures for 220kV line termination up to 20m height;
- > 220kV bus work, switch gear and associated equipment which may include STATCOM and Harmonic filters;
- > Lightning protection, communication and lighting towers up to 35m in height; and
- > Two 33kV / 220kV (or 66kV / 220kV) transformers.

The substation transformers will contain approximately 60,000 litres of oil each. Low level bunding will be formed around the transformers and sized to exceed the volume of oil



contained within the transformers, in order to capture all oil in the unlikely event of an oil spill. Stormwater collected within the bund will be discharged via a water / oil separation system.

The substation site will also contain an office and ablution facilities for workers. The water supply is intended to be via rainwater collection and storage tank. A septic tank will be located within the substation site to capture sewage from the ablution facilities. All sewage will be removed by truck.

A temporary laydown area will be established adjacent to the substation for equipment and storage during the construction period.

#### **2.2.1.5 Grid Injection Point (GIP)**

The GIP facilitates a reliable and controllable connection point between the Southland Wind Farm substation and the Transpower National Grid. The GIP will be located adjacent to the existing Transpower 220kV North Makarewa – Three Mile Hill A circuit. The GIP will be located in the Gore District.

The GIP site will be approximately 1.5ha in area and will consist of the following:

- > Perimeter stock fence and security fence;
- > A car parking area;
- > A control building of approximately 15m by 8m and approximately 6m in height;
- > Up to eight gantry structures for 220kV line termination up to 30m height (includes lightning peaks);
- > 220kV bus work, switch gear and associated equipment (no taller than 10m); and
- > Lightning protection, communication and lighting towers up to 35m in height.

The control building will house protection and control panels, communication, power supply and associated equipment. The control building will also contain ablution facilities for workers. The water supply is intended to be via rainwater collection and storage tank. A septic tank would be located within the GIP site to capture sewage from the ablution facilities. Sewage will be removed from the GIP site by truck.

#### **2.2.1.6 Transmission Line**

A new 220kV transmission line will form the connection between the wind farm substation and the GIP. The transmission line will be approximately 16km long and will be either single or double circuit 220kV supported on steel lattice towers or poles typically 40m in height,

but up to 55m in height where necessary (i.e. where the topography requires the use of taller towers/poles). Approximately 50 towers may be required for the transmission line with a typical spacing of 300-400m. If a double circuit line (which is the most likely), the towers will carry three 220kV conductors on each side plus an overhead earth wire containing optical fibre. A 400m wide envelope 'corridor' (200m either side of the centreline) is sought for consent to allow for tower placement micro-siting at the detailed design stage. No structures associated with the transmission line will be placed in any areas identified as wetlands, high value vegetation or streams.

#### **2.2.1.7 Operations and Maintenance Building**

An Operations and Maintenance ("O&M") building will be located within Jedburgh Station and will be approximately 1,500m<sup>2</sup> in area (approximately 60m in length by 25m in width) and 7m in height. This building will contain site offices, meeting rooms, ablution facilities, a kitchenette and workshop containing machinery and tools. The water supply will be via rainwater collection and a storage tank.

A septic tank will also be located within the O&M site to capture and dispose of sewage from the ablution facilities. Sewage will be treated and disposed of to a disposal field near the O&M building. The disposal system will be designed and installed in accordance with Sections 5 and 6 of NZS AS/NZS 1547:2012 – On-site Domestic Wastewater Management.

A carpark with an area of approximately 1,500m<sup>2</sup>-3,000m<sup>2</sup> will be located adjacent to the building. The O&M building will have a perimeter stock fence and security fence. Lighting for O&M tasks and security will be installed around the buildings - but these will only be on when required (i.e. when staff are present and working in or around the O&M building at times of the day/night when lighting is required). Two storage units of up to 5m by 7m and up to 4m in height will be used for storage within the O&M facility grounds. The colour of the O&M building will be selected to minimise visual impacts.

#### **2.2.1.8 Wind Farm Construction Footprint**

The Wind Farm Site area totals approximately 5,800ha (58km<sup>2</sup>). The construction footprint comprises approximately 2.8% of this Wind Farm Site area. Fill disposal sites (part of the construction footprint) will cover approximately 0.5% of the Wind Farm Site area. A total track length of approximately 65km will be required within the Wind Farm Site to facilitate access between the wind turbines and the substation. Of this, approximately 25km of the access tracks will follow existing farm and forestry tracks. Typical track width within the Wind Farm Site is nominally 8m (carriageway). The access tracks to the Wind Farm Site can be narrower (nominally 6-6.5m carriageway width) as the main wind turbine installation crane will not be tracking along this route assembled.

Foundations for the wind turbines will likely be gravity pads, in the range of 20-25m in diameter (most likely in an octagonal shape) and contain approximately 800-1,000m<sup>3</sup> of concrete each. If piled foundations are preferred (following detailed design), these will have a smaller footprint and contain less concrete. Precise sizing and volume of the wind turbine concrete foundations will not be known until detailed design has been completed following turbine selection. The foundations will be within, and part of, the wind turbine platform area.

#### **2.2.1.9 Site Access**

There are two proposed access routes into the Wind Farm Site, one from the west, via Thornhill Road (off Venlaw Road), and the other from the north, through the Port Blakely forest property accessed from Davidson Road West (off Kaiwera Downs Road). The northern route makes the greatest use of the state highway network and provides a direct link to SH93 and SH1, while the western access route follows rural roads between Wyndham and the Wind Farm Site, including Mimiha School Road, Waiariki Mimiha Road and Venlaw Road. Once the Southland Wind Farm is operational, access to the Wind Farm Site will likely make use of both site access options.

The existing forestry road through the Port Blakely forest will be upgraded and formed to a typical carriageway width of 6-6.5m (with localised widening on corners where necessary) and will be the main route for the delivery of wind turbine components. Both access routes will likely be used during the bulk earthworks phase when the major earthwork activities on-site are being undertaken. This will enable a faster civil works programme, which may be critical given the possible constraints on the ability to undertake major earthworks over the winter months when access through the more elevated parts of the Wind Farm Site may be more difficult.

The transport of aggregate to the Wind Farm Site will constitute the greatest volume of heavy vehicle movements over the construction period. There are currently four identified potential sources of aggregate to the north of the Wind Farm Site and three to the west. If aggregates are transported via the most direct routes from each of these potential sources, truck volumes would be relatively evenly distributed between the northern and western access routes.

After the civil works have been mostly completed, and while the wind turbine foundations are being poured, the delivery of wind turbine components into the Wind Farm Site will be undertaken. It is proposed that the delivery of wind turbine components between the port in Bluff (South Port) and the Wind Farm Site will be via the Port Blakely property, while the passage of trucks leaving the Wind Farm Site and heading back to South Port may prefer to use the more direct, Venlaw Road, access route.

In regard to the turbine component deliveries into the Wind Farm Site, the transportation of the very heavy loads (including the nacelles and tower sections), will mainly utilise the state highway network between South Port and Pukerau before turning right off SH1 and heading south along Kaiwera Road to SH93 (Old Coach Road) and then east along SH93 for 400m before turning right into Kaiwera Downs Road and then through the Port Blakely Forest and into the Wind Farm Site.

For the wind turbine blades, the route is similar until Edendale at which point the route heads east towards Wyndham and over the bridge over the Matura River (which cannot accommodate the weight of the heavy loads, but can accommodate the weight of the blades). The route then traverses north on Wyndham Road (on the eastern side of the Matura River) and continues on SH93 until turning right into Kaiwera Downs Road and then through the Port Blakely Forest and into the Wind Farm Site.

Within the Wind Farm Site, tracks will be formed between the wind turbines to facilitate construction access (and subsequently ongoing operations and maintenance access). These tracks will be formed to the same standard as the site access tracks but will likely have a carriageway width of up to 8m with localised widening on corners to accommodate the tracking of the wind turbine components. They will also have drainage channels of approximately 1.5m width, on both sides if required.

The proposed roading network required for the Southland Wind Farm crosses a number of streams, most of which are very minor, but three 'notable' stream crossings are as follows:

- > Mimiha Stream North Branch within the Port Blakely Forest – where there is an existing ford crossing for forestry vehicles;
- > Mimiha Stream South Branch within Matariki Forest – where there is an existing bridge for forestry vehicles; and
- > An un-named tributary to Mimiha Stream South Branch within Jedburgh Station – where there is an existing ford for farm vehicles.

To enable the transport of the wind turbine components, Contact is proposing to construct formed stream crossings at these sites. This will involve constructing a new bridge to replace the existing bridge over the Mimiha Stream South Branch crossing and installing box culverts at the two aforementioned existing ford crossings. Culverts would also be required at other, smaller stream crossings.

#### 2.2.1.10 Concrete Batching Plants and Water Storage Ponds

Due to the large quantities of concrete required for the turbine foundations, concrete will be batched on-site as opposed to trucking ready-made concrete into the Wind Farm Site. Two locations for the batching facilities have been identified. Both locations may be used during wind farm construction if this assists in expediting the construction programme. Each concrete batching facility will be comprised of two batching plant units. Each concrete batching plant facility will have an area of approximately 15,000m<sup>2</sup>. The concrete batching facilities will be decommissioned following the completion of construction works.

Measures to contain any dust, spillage and wash down of plant or trucks will be outlined in the Construction Environmental Management Plan (“CEMP”). Such measures are likely to include cement storage within a silo, aggregate storage bins, a temporary concrete slab beneath the loading area and containment bunding around the batching plant.

Water storage ponds will be formed in close proximity to the concrete batching plants. These will be sized to hold a maximum of 10,000m<sup>3</sup> of water each and will ideally be used for all water construction demands. If required, temporary water tanks will be located close to the concrete batching plants to ensure the water to be used in the concrete batching process is not contaminated with impurities. If necessary (i.e. if the stream supply is not of a suitable quality), the water required for concrete batching may be trucked into the Wind Farm Site from a nearby municipal water supply. Following construction, the ponds may remain on-site and be used as resources for stock water and / or firefighting or be decommissioned and rehabilitated – whichever is the preference of the landowner. To clarify, the water take from the stream will cease upon construction being completed (i.e. there will be no operational water take required for the wind farm, and if the ponds are retained for use of the landowner, e.g. for firefighting purposes, they will be entirely fed by rainwater).

#### 2.2.1.11 Temporary Laydown Area(s)

Laydown or stockpile areas will be required for temporary storage of turbine components (as well as other materials such as electrical cables, crane components), ahead of installation. This is to allow for sufficient components / materials to be stockpiled on-site to meet the demand of construction crews, as well as to accommodate the arrival of several large shipments of turbine components. It is also likely that the laydown areas will provide space for portable site offices, workshops, stores and other construction crew facilities.

The temporary laydown areas will likely be located close to the Wind Farm Site entrance(s), with one on the property owned by Contact at Davidson Road East, and another within Jedburgh Station, possibly close to the northern-most wind turbines at the end of Thornhill

Road. The location of the laydown areas will be identified within the final CEMP and will be constrained to land that is of 'low', or 'negligible' ecological value.

#### **2.2.1.12 Construction**

##### **Completion of Site Enabling Works**

Site enabling works include site-wide geotechnical investigations, and the preliminary works to allow the construction facilities to be set up on-site. This includes construction of the site construction compounds and site access points, discussed in more detail above. Traffic management and traffic controls may be required for safe movement of loads and local traffic. Existing weather monitoring on-site may be complemented with a weather monitoring station for on-site construction monitoring.

##### **Construction of Internal Tracks**

Internal access tracks are required to facilitate construction access. Much of the internal access track network will follow existing farm / forestry access tracks, which will be upgraded to the standard required for the wind farm traffic, while other tracks will be newly created. Some of the existing road upgrades will be done as part of the enabling works stage of the construction programme.

The tracks will typically be metalled and to a standard capable of bearing the heavy loads (i.e. the wind turbine nacelles, substation transformers and the main crane). On tracks constructed on very steep gradients asphalt or chip seal surfaces may be used. The construction of the tracks will also include the formation of temporary silt ponds, in place for the duration of the construction period, and form the site drainage for the completed wind farm.

##### **Construction of the Wind Turbine Foundations**

The construction of the turbine foundations will commence once access to a number of turbines has been established. As outlined previously, the foundations for the wind turbines will likely be gravity pads, approximately 20-25m in diameter and approximately 2m deep. The foundations will include reinforcing steel, turbine anchor bolts, electrical conduits and shuttering (to hold the concrete in position). Once the steelwork is completed, concrete, batched on the on-site batching plants, will be trucked to each of the turbine locations and pumped into the foundation.

## **Electrical Reticulation**

Each turbine will be connected to the substation. In most instances, cables will be buried, but in some situations, where underground cables are not feasible (such as stream crossings), above-ground solutions may be used.

The ends of each cable enter each turbine via the conduit installed in or below the foundation. Typically, these cables connect to switchgear, protection and a transformer located within the turbine. The wind turbines within the wind farm are electrically connected to a number of separate circuits referred to as “strings”. The number of turbines on an individual string will vary and be dependent on the turbine capacity, string length, electrical cable size and ground conditions. Each of the electrical strings will be connected to the wind farm substation.

## **Construction of the Substation and Operations and Maintenance Facility**

The construction of the substation is ideally undertaken early in the construction programme and so will likely commence as soon as access to the substation site is feasible and the civil works to prepare the site have been completed.

The construction of the permanent O&M facility will likely occur towards the end of the wind farm construction programme. The facility will include a building approximately 1,500m<sup>2</sup> in area (approximately 60m in length by 25m in width) and 7m in height. This building will contain site offices, meeting rooms, ablution facilities, a kitchenette and workshop containing machinery and tools. The water supply will be via rainwater collection and a storage tank.

A septic tank will also be located within the O&M site to capture and dispose of sewage from the ablution facilities. Sewage will be treated and disposed of to a disposal field near the O&M facility. The disposal system will be designed and installed in accordance with Sections 5 and 6 of NZS AS/NZS 1547:2012 – On-site Domestic Wastewater Management.

The O&M facility will have a perimeter stock fence and security fence. Lighting for O&M tasks and security will be installed around the buildings - but these will only be on when required (i.e. when staff are present and working in or around the O&M building at times of the day/night when lighting is required). Two storage units of up to 5m by 7m and up to 4m in height will be used for storage within the O&M facility grounds. The colour of the O&M building will be selected to minimise visual impacts.

A carpark with an area of approximately 1,500m<sup>2</sup>-3,000m<sup>2</sup> will be located close to the O&M building.

### **Formation of the Wind Turbine Hard Stands**

The wind turbine hard stands allow for the assembly and placement of the main installation crane when constructing each of the turbines and includes space for the temporary storage of wind turbine components. Construction of each of the wind turbine hard stands can be completed once the electrical cables have been installed.

The hard stand areas must be completed prior to the assembly of the wind turbine. The hard stand areas are retained as gravelled platforms for the life of the wind farm to enable ongoing maintenance on the turbines when required.

### **Wind Turbine Assembly**

Once sufficient turbine components have been delivered to the Wind Farm Site to allow continuous assembly of the wind turbines, the wind turbine assembly will commence. This requires a large crane to lift the top tower, nacelle and blades to the hub height of the turbine. The assembly of the turbine commences with the lower or base tower section, followed by the intermediate sections, before the top tower section is lifted into place. The nacelle and drive train are then lifted into place before fitting the hub. Once the turbine hub is in place, the three blades are installed. Once the turbine is erected, it is usually followed by a mechanical and electrical completion where internal fit-outs are completed. The crane then moves on to the next turbine site and repeats the process.

### **Commissioning of the Wind Turbines and Electrical Infrastructure**

Once all electrical and mechanical fit-outs are completed, several pre-livening electrical tests are required. After they are complete, the turbine will be energised to allow electrical power to flow into the turbine. The energisation of the turbine will then allow the full commissioning and testing of further sub-systems prior to the wind turbine being tested in a generation mode. Once generating, the turbine will go through some acceptance tests however from this point, it will be free to generate and export energy when the wind blows. The substation, transmission line and switching station all need to be completed prior to the first wind turbine being commissioned. If required, wind monitoring stations may be installed in the Project Site to provide information on the wind resource and used to measure the performance of the wind farm. Final commissioning and testing of the entire wind farm is undertaken once all the turbines are operational.

### **Upgrades to the External Roothing Network**

Some sections of the delivery route will need to be upgraded to allow for the overlength loads (in the order of 85m long for the wind turbine blades) and the overweight loads (in the order of 150 tonnes for the substation transformers). These upgrades will be undertaken in



accordance with standard roading maintenance and upgrade procedures and agreed with the roading authority, NZ Transport Agency or the relevant council. This upgrade work will need to be completed prior to the first turbine deliveries arriving at Southport.

### **Construction of the Transmission Line**

The construction of the transmission line will follow standard transmission line construction methodology. Foundations will be constructed, then support towers erected. Once the towers are in place, the electrical lines will be rolled out over the length of the route and fixed to the towers. The transmission line will be built while the wind farm is being built and needs to be completed prior to the commissioning of the wind farm substation.

### **Construction of the Grid Injection Point**

The construction of the GIP will take place in conjunction with the transmission line construction and will meet Transpower's design requirements.

### **Earthworks**

The following indicative earthwork volumes are anticipated for the construction of the Southland Wind Farm:

- > Approximately 1,800,000m<sup>3</sup> of cut;
- > Approximately 800,000m<sup>3</sup> of excavated material to be used as engineered fill; and
- > Approximately 1,000,000m<sup>3</sup> of excavated material to be disposed of.

The total earthworks area is approximately 160ha.

### **Fill Disposal**

The fill disposal sites will largely be located within flatter areas of the pasture dominated areas of the site, using a blanket approach where it is practicable to do so. Fill disposal will be designed as engineered fill embankments. The fill disposal sites will be selected against a criterion that will exclude fill disposal from the following areas:

- > No disposal shall take place into within 10m of any areas identified as wetlands or high or very high ecological value vegetation and habitat types (as identified in the ecological assessment);
- > No disposal shall take place within 10m of any permanent or intermittent rivers or streams, ephemeral waterbodies and gullies; and
- > No disposal shall take place into very steep slopes (>15°) or erosion-prone land.

Fill disposal sites will be appropriately rehabilitated and planted with like for like vegetation following the completion of works.

### **Water Use**

The works associated with the Southland Wind Farm construction that require water include:

- > Earthworks for road construction and turbine platforms;
- > Mobile crushing of aggregate;
- > Concrete batching;
- > Dust control; and
- > General activities.

It is anticipated that the maximum daily quantity of water required for these activities is approximately 500m<sup>3</sup>. However, it is noted that not all of these activities will occur concurrently (such as concrete batching), and thus, for most of the time, the daily quantity of water required on-site will be much less than the maximum daily volume described above.

Two water take locations have been identified to provide flexibility of water supply for the contractor at various construction phases and location of specific areas of works. One water take location is on the Mimiha Stream (South Branch) and the other is on a tributary to this stream. Water will be pumped from the streams to header tanks and then to the water storage area (which may be as ponds or as a collection of water tanks), which will have a volume of up to 10,000m<sup>3</sup>. From here, water will be taken directly by water carts/tankers or supplied to the concrete batching facilities as required.

### **Rehabilitation**

At the completion of construction, all construction equipment and temporary buildings that are not required for the continued operation and maintenance of the wind farm will be removed from the site (for example, the concrete batching plants). The land occupied by these construction buildings and activities will be re-contoured (where necessary) and rehabilitated back to pasture.

Likewise, exposed areas around the turbine platforms, electricity substation / switchyards and any operational buildings will be rehabilitated back to pasture (or alternative cover such as like for like indigenous vegetation as appropriate).



### 2.2.1.13 Wind Farm Decommissioning

Following completion of the operation of the Southland Wind Farm, Contact will remove all wind turbines and above ground structures from the Site. Contact will re-vegetate any exposed surfaces and all turbine foundations, hardstand areas and other ancillary building foundations will be covered with topsoil and/or cleanfill material and revegetated with like for like vegetation of the area immediately surrounding each component.

### 2.2.2 Project Site Description

The proposed Southland Wind Farm comprises two main components - a Wind Farm, where the wind turbines, wind farm substation, and wind farm roads are located - and the Grid Connection works – being the infrastructure required to connect the wind farm to the Transpower National Grid. This comprises a high voltage (220kV) overhead transmission line and a switching station, also known as the grid injection point (GIP). From a property perspective, these two project aspects are described as follows:

- > **Wind Farm Site (aka ‘site’):** the land upon which the wind turbines, wind farm substation and wind farm roads are located. This area is entirely in the Southland District and the Southland Region.
- > **Project Site:** the Wind Farm Site, plus the land also required for the grid connection works (i.e. the transmission line and the GIP). This area is partly in the Southland District and partly within the Gore District, and entirely in the Southland Region.

In addition, the main access route into the Wind Farm Site is through the privately owned Port Blakely forest. This is partly within the Southland District and partly within the Gore District (the boundary following the Mimiha Stream (North Branch) which flows through this property).

The Wind Farm Site is located on Slopedown Hill in eastern Southland, approximately 50km east of Invercargill, 30km southeast of Gore and 23km east of Edendale. The Wind Farm Site covers approximately 58km<sup>2</sup> of privately owned land, including land which forms part of two sheep and beef farms (Jedburgh Station and Glencoe Station), and Venlaw plantation forest owned by Matariki Forests (refer to **Attachment 2**).

The land holdings for the Southland Wind Farm are as follows (the Record of Titles are attached as **Attachment 3**):

- > Section 3 Block IX Slopedown Survey District, RT SL9D/824;
- > Section 2 Block IX Slopedown Survey District, Section 1 Survey Office Plan 9639 and Section 1 Survey Office Plan 10255, RT SL8D/456;



- > Lot 1 DP 3613 and Section 1 Survey Office Plan 9465, RT SL155/79;
- > Lot 2 DP 363843 and Lot 1 DP 13176 and Section 1-2 Survey Office Plan 9464 and Section 15 Block X Tuturau Survey District and Part Section 16 Block X Tuturau Survey District, RT 259751;
- > Lot 1 DP 363843, RT 259750;
- > Lot 1 DP 12509, RT 407674;
- > Section 61-62 Block III Wyndham Survey District, RT SL9B/866;
- > Lot 2 DP 362693, RT 255758;
- > Lot 1 DP 15096, RT SL12A/655;
- > Lot 4-7 DP 15305, Lot 1-4 DP 15076 and Lot 1 DP 15078, SL12B/81;
- > Section 26 Block II Slopedown Survey District, 265526;
- > Section 11, Section 16-17 and Part Section 9-10 Block II Slopedown Survey District, RT SLA4/151;
- > Section 5 and Section 20-22 Block II Slopedown Survey District, RT SL17/134;
- > Lot 1-3 DP 15305 and Lot 1 DP 15306, SL12B/80; and
- > Road reserve and unformed legal road (paper roads).

## 2.3 INELIGIBLE ACTIVITIES

In accordance with section 5 of the Fast-track Approvals Act 2024 (“**FTAA**”), the Project does not meet the definition of an ineligible activity as the Project:

- > Will not occur on identified Māori land;
- > Will not occur in a customary marine title area;
- > Will not occur in a protected customary rights area;
- > Will not occur on Māori customary land;
- > Will not occur on land set apart as a Māori reservation as defined in section 4 of Te Ture Whenua Māori Act 1993;
- > Is not an aquaculture activity;
- > Does not require an access arrangement under the Crown Minerals Act 1991;
- > Is not an activity that would be prevented under section 165J, 165M, 165Q, 165ZC or 165ZDB of the Resource Management Act 1991;



- > Will not occur on land that is listed in Schedule 4 of the FTAA;
- > Will not occur on a national reserve held under the Reserves Act 1977;
- > Will not occur on a reserve held under the Reserves Act that is managed by someone other than the Department of Conservation or a local authority;
- > Is not a prohibited activity under the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012 or regulations made under that Act;
- > Is not an activity that is described in section 15B of the RMA or an activity that is prohibited by section 15C of the RMA;
- > Is not a decommissioning-related activity; and
- > Is not an activity undertaken for the purposes of an offshore renewable energy project.

Therefore, the Project is eligible to use the FTAA consenting process.

## **2.4 EXEMPTIONS FROM REQUIREMENT TO PROVIDE AGREEMENT**

### **2.4.1 Mining Activities**

The Project is not for an activity that is prospecting, exploration, mining or mining operations of Crown-owned minerals undertaken below the surface of any land or area.

### **2.4.2 Land Exchange**

The Project is not located on land proposed to be the subject of a land exchange.

## **2.5 MINISTERIAL APPROVAL**

The Project is not an activity that is seeking a ministerial determination under section 23 or 24 of the FTAA.

## **2.6 APPROPRIATENESS FOR FAST-TRACK APPROVALS PROCESS**

### **2.6.1 Purpose of the FTAA**

The Project is an infrastructure project that will have significant regional and national benefits. The Project is key in contributing to building a better, cleaner and more sustainable New Zealand and deliver another significant step along the country's urgent decarbonisation pathway. Electrification of the economy through rapid investment in new renewable projects like this is needed to meet the unprecedented electricity demand growth predicted and New Zealand's climate targets.



The generation capacity for the Project is intended to be between approximately 250-350MW with a generation output in the range of 900-1,200GWh/annum. This is sufficient electricity to power 110,000-150,000 households. The Project also therefore represents a major opportunity to support the Government's commitment to double the overall volume of electricity from renewable sources by 2050 and transition to a low-emissions future.

The Ministry of Business, Innovation and Employment (MBIE) has recently released a report on electricity demand and generation scenarios. Latest Government projections are that total electricity demand will grow by between 35.3 and 82 percent by 2050, driven by industry switching from fossil fuel use to electricity (such as for space and process heating) in the short-term, and the electrification of the transport fleet through increased uptake of electric vehicles, particularly from the late 2030s.

If new generation infrastructure, such as that provided by this Project, is unable to be brought online in a timely way, large power outages and rapidly increasing costs to industry (including major exporters) and consumers are unlikely to be tolerable; rather, New Zealand would likely increase its reliance on imported coal and may move towards importing gas to provide the required electricity supply, which would have obvious consequences in terms of carbon emissions and cost.

The Southland Wind Farm will therefore generate a nationally significant source of renewable electricity which will help to decarbonise the economy by replacing other forms of energy generation which cause negative environmental effects. The Project will also have significant economic benefits for local communities, creating up to 240 jobs during construction, with an estimated \$230 million to \$280 million added into the New Zealand economy. The Project is therefore clearly an infrastructure project with significant national and regional benefits, and is therefore strongly aligned with the purpose of the FTAA (being to facilitate the delivery of such projects).

## **2.6.2 Criteria for Assessing Referral Application**

Referring the Project to the fast-track approvals process will meet the criteria outlined in section 22, as outlined in the following sub-sections.

### **2.6.2.1 Would facilitate the project, including by enabling it to be processed in a more timely and cost-effective way than under normal processes**

In mid-2023, Contact applied to the Minister for the Environment for referral under the COVID-19 Recovery (Fast Track Consenting) Act 2020 ("**Covid Fast-track Act**"), and on 6 July 2023, Schedule 105 – Southland Wind Farm was inserted into the COVID-19 Recovery (Fast-track Consenting) Referred Projects Order 2020.

In late 2023 Contact submitted its substantive application with the EPA to have the resource consents for the Southland Wind Farm Project considered under the Covid Fast-track Act. That process has concluded, and the outcome was a decline of consent. This has already resulted in significant delays to Project delivery dates.

The Project will progress faster by using the processes in the FTAA rather than reverting to standard processes under the RMA and other legislative processes (e.g., to obtain Wildlife Permits, Archaeological Authorities, and Concessions).

Overall, the consenting process associated with the FTAA is anticipated to be completed within 6 months of lodgement of the consent application. If the referral application is accepted, Contact intends to apply to the Minister for a determination under section 38 of the FTAA that the Project is a priority project.

**2.6.2.2 Is unlikely to materially affect the efficient operation of the fast-track approvals process**

Given the previous application made by Contact for the Southland Wind Farm Project under the Covid Fast-track Act, Contact is very well advanced in its project development and has completed preparation of a robust resource consent application, including the supporting technical assessments. It is therefore considered that the Project is appropriate for the FTAA process and the Project can fit seamlessly into the efficient operation of the Fast-track Approvals process.

**2.6.2.3 Has the Project been identified as a priority project in a central government, local government, or sector plan or strategy (for example, in a general policy statement or spatial strategy), or a central government infrastructure priority list**

The New Zealand government has set clear emissions reduction targets to contribute to the international effort to combat the effects of climate change. The Project will increase the electricity supply from renewable sources and aid New Zealand to achieve decarbonisation. The Project therefore will contribute to New Zealand achieving its climate change targets that are set out in central government policies and plans, including assisting the New Zealand Government to meet:

- > The emissions reduction target established by the Climate Change Response Act 2002 of reducing New Zealand's greenhouse gas emissions (except biogenic methane) to net zero by 2050;
- > The targets for the energy system set out in the Emissions Reduction Plan, including the Government's target of reaching 50% of total final energy consumption from renewable sources by 2035 and the aspiration of transitioning to 100% renewable energy generation by 2030; and



- > The target of doubling New Zealand's renewable generation capacity as set out in the Electrify NZ policy.

**2.6.2.4 Will the Project deliver new regionally or nationally significant infrastructure or enable the continued functioning of existing regionally or nationally significant infrastructure**

As mentioned above, the generation capacity for the Project is intended to be between approximately 250-350MW with a generation output in the range of 900-1,200GWh/annum. This is sufficient electricity to power 110,000-150,000 households. The Southland Wind Farm will therefore generate a new nationally significant source of renewable electricity which will help to decarbonise the economy by replacing other forms of energy generation which cause negative environmental effects.

**2.6.2.5 Will the Project increase the supply of housing, address housing needs, or contribute to a well-functioning urban environment (within the meaning of Policy 1 of the National Policy Statement on Urban Development 2020)**

The Project does not directly contribute to the supply of housing, and is not located within an urban environment.

However, access to secure, sufficient, affordable and reliable renewable electricity is of critical importance to meeting housing needs and to the functioning of urban environments. Sufficient electricity will be required to support the projected increase in housing supply in Southland and New Zealand. As noted above, the 'energy transition' will require significantly more electricity to reduce emissions and bring down prices for consumers. It will be important that this comes from a range of sources to increase resilience.

**2.6.2.6 Will the Project deliver significant economic benefits**

The Project will have significant economic benefits for local communities and New Zealand as a whole, with an estimated \$230 million to \$280 million added into the New Zealand economy.

The Project stands to generate 160-240 direct jobs in the Southland region during the construction of the Southland Wind Farm. These are full time equivalent jobs for the period of construction, so the annual equivalent would be 80-120 direct jobs. While a number of these positions will likely be filled by locals, some with the specialist skills required may need to be imported from other regions.

Once the Southland Wind Farm is commissioned, there will be direct employment of 10-14 FTE operational staff. In addition, there will be some contractor roles to support activities like site security, ongoing maintenance (i.e. mechanical, civil and electrical), pest and



predator control and other environmental maintenance activities, and transportation of supplies. Wages to local staff and payments for contract services will be the principal means of continued injection of funding into the local economy.

Based on the total operation and maintenance cost for previously consented wind farms, the Southland Wind Farm is expected to spend \$8 million to \$12 million per year on operations, of which over half would be spent locally on resident staff, contractors and other suppliers.

Further, a secure, resilient electricity system is fundamental to people's social, economic, and cultural wellbeing, and the Southland Wind Farm will increase the diversity of electricity supply in New Zealand, which will provide a number of benefits, right down to the end consumer. This includes the potential to increase the amount of electricity generation in Southland that is available for supporting local industries, particularly those that are transitioning away from reliance on fossil fuels. A greater supply of electricity will contribute to reducing the cost of electricity. The Project's contribution to the supply of renewable electricity will of itself deliver significant economic benefits.

#### **2.6.2.7 Will the Project support primary industries, including aquaculture**

The commercial viability of New Zealand's primary industries is underpinned by having a reliable and efficient supply of electricity, with its long-term sustainability dependent on increasing the supply of electricity. If new electricity generation infrastructure, such as that provided by this Project, is unable to be bought online in a timely way, large power outages and rapidly increasing costs to industry are unlikely to be tolerable.

Government bodies such as Transpower and the Energy Efficiency and Conservation Authority ("EECA") have undertaken considerable analysis confirming that the primary sector and other businesses in Southland will increasingly convert to using more renewable electricity in the future. EECA, for example, has worked to identify decarbonisation opportunities by cataloguing existing New Zealand process heat sites with a capacity of at least 500 kW that currently rely on fossil fuels. Drawing on this analysis, Transpower has identified that the Otago-Southland region has many industries with considerable potential to decarbonise, which would increase electricity demand. Clearly new renewable generation is needed in Southland to support this transition. The Project will therefore contribute to supporting primary industries.



**2.6.2.8 Will the Project support development of natural resources, including minerals and petroleum**

The Project is an efficient use of resources. The Southland Wind Farm will utilise a natural resource (wind) to generate electricity. Due to the quality of the wind resource at the site, Contact expects the wind farm to be generating electricity for about 92% of the time. As such, the Project will enable the use of this natural resource to ensure it is used in the most efficient way and meet the electricity needs of New Zealanders, while allowing existing forestry and farming activities within the Wind Farm Site to continue virtually unaffected – and in some ways improved (in regards to access).

**2.6.2.9 Will the Project support climate change mitigation, including the reduction or removal of greenhouse gas emissions**

The Southland Wind Farm will positively contribute to New Zealand's efforts to mitigate climate change by providing a nationally significant new source of renewable energy. The New Zealand Government has set a target of achieving 50% of total final energy consumption from renewable sources by 2035 and reducing New Zealand's net carbon emissions to zero by 2050. To achieve this goal, large parts of the economy that are currently dependent on fossil fuels, such as transport and industrial activities, will need to be electrified.

To meet the growth in demand and phase down fossil-fuelled thermal generation, new renewable generation sources will need to be developed at an unprecedented rate. Analysis from Boston Consulting Group indicates that to reach net zero by 2050 the country will require 5,700MW of new wind generation capacity. This equates to about 16-25 wind farms equivalent to the size of the Southland Wind Farm (depending on final design), almost one per year (until 2050). To reach this goal New Zealand needs to maintain a robust and steady pipeline of new developments and increase the pace of new development coming on to the market. However, the pipeline of currently consented wind farms is low, and it is challenging to get new wind farm projects approved anywhere in New Zealand due to the various legislative planning hurdles. Accelerating the consenting process for the Southland Wind Project will provide a significant boost to achieving this demand and contribute to keeping New Zealand on track to meet its decarbonisation goals.

A recent independent study (Isabella Pimentel Pincelli, Jim Hinkley & Alan Brent (14 May 2024)): Developing onshore wind farms in Aotearoa New Zealand: carbon and energy footprints, Journal of the Royal Society of New Zealand) assessed the carbon and energy footprint of wind farms in New Zealand, focusing on the Harapaki wind farm. The study looked at the energy and carbon footprint of the wind farm through a full Life Cycle Assessment using information collated during construction of the wind farm and from the

supply and manufacturing of the wind turbines. The results from this study showed that wind farm to have an energy payback time (“**EPBT**”) of 0.4-0.5 years (i.e. just a handful of months). The energy payback is described as the time period for the energy generated by the wind farm to balance with the energy required over the whole life cycle of the power plant (i.e. to manufacture, operate and decommission it).

The carbon footprint of the Harapaki wind farm was calculated as 10.8-9.7 g CO<sub>2eq</sub>/kWh, factoring in the carbon emissions equivalent produced during the full wind farm lifecycle, versus the energy generated from the wind farm. This can be used to create a measure of the time it takes for the wind farm to balance the carbon emissions from its creation through the calculation of the greenhouse gas payback time (“**GPBT**”), compared with offsetting emissions from other generation types on the National Grid. For the Harapaki wind farm, the study calculated a GPBT of 1.5-1.7 years, assuming that the electricity generated would replace generation from combined cycle gas turbines, and therefore, avoid the associated carbon emissions of that generation type. If the average carbon emissions for all generation feeding into the National Grid were considered instead, the GPBT for Harapaki was calculated as 3.1 years.

Contact has analysed these results and compared them with the proposed parameters of the Southland Wind Farm. Contact expects a similar result for the EPBT, carbon footprint, and the corresponding GPBT as was calculated for the Harapaki wind farm, and perhaps even a lower carbon footprint, given the high-quality wind resource at the site and the size of the proposed wind farm. Therefore, in just several years’ time (at most) after the Project is commissioned, it will ‘break even’ in carbon terms.

As such, the Project will provide a significant contribution to reducing greenhouse gas emissions.

#### **2.6.2.10 Will the Project support climate change adaptation, reduce risks arising from natural hazards, or support recovery from events caused by natural hazards**

The Project will contribute to strengthening New Zealand’s resilience as it will contribute to increasing the supply and diversity of New Zealand’s electricity generation sites. This will be critical in the recovery from events caused by natural hazards.

#### **2.6.2.11 Will the Project address significant environmental issues**

Climate change is a significant environmental issue that New Zealand faces. The Project will provide a major new source of renewable electricity, which is urgently needed in New Zealand to support the decarbonisation of New Zealand’s economy and reduce reliance on coal.

The most recent report of the Intergovernmental Panel on Climate Change, published in 2023, makes for sobering reading. Key findings include:

*"It is unequivocal that human influence has warmed the atmosphere, ocean and land. Widespread and rapid changes in the atmosphere, ocean, cryosphere and biosphere have occurred (...). The scale of recent changes across the climate system as a whole and the present state of many aspects of the climate system are unprecedented over many centuries to many thousands of years. It is very likely that [greenhouse gas (GHG)] emissions were the main driver of tropospheric warming and extremely likely that human-caused stratospheric ozone depletion was the main driver of stratospheric cooling between 1979 and the mid-1990s. It is virtually certain that the global upper ocean (0–700m) has warmed since the 1970s and extremely likely that human influence is the main driver (...) Global mean sea level increased by 0.20 [0.15 to 0.25] m between 1901 and 2018. The average rate of sea level rise was 1.3 [0.6 to 2.1] mm yr<sup>-1</sup> between 1901 and 1971, increasing to 1.9 [0.8 to 2.9] mm yr<sup>-1</sup> between 1971 and 2006, and further increasing to 3.7 [3.2 to 4.2] mm yr<sup>-1</sup> between 2006 and 2018 (high confidence). Human influence was very likely the main driver of these increases since at least 1971 (Figure 3.4). Human influence is very likely the main driver of the global retreat of glaciers since the 1990s and the decrease in Arctic sea ice area between 1979–1988 and 2010–2019. Human influence has also very likely contributed to decreased Northern Hemisphere spring snow cover and surface melting of the Greenland ice sheet. It is virtually certain that human-caused CO<sub>2</sub> emissions are the main driver of current global acidification of the surface open ocean.*

*Human-caused climate change is already affecting many weather and climate extremes in every region across the globe. Evidence of observed changes in extremes such as heatwaves, heavy precipitation, droughts, and tropical cyclones, and, in particular, their attribution to human influence, has strengthened since [2014] (...). It is virtually certain that hot extremes (including heatwaves) have become more frequent and more intense across most land regions since the 1950s (...), while cold extremes (including cold waves) have become less frequent and less severe, with high confidence that human-caused climate change is the main driver of these changes. Marine heatwaves have approximately doubled in frequency since the 1980s (...), and human influence has very likely contributed to most of them since at least 2006. The frequency and intensity of heavy precipitation events have increased since the 1950s over most land areas for which observational data are sufficient for trend analysis (...), and human-caused climate change is likely the main driver (...).*

*Human-caused climate change has contributed to increases in agricultural and ecological droughts in some regions due to increased land evapotranspiration (...). It is likely that the global proportion of major (Category 3–5) tropical cyclone occurrence has increased over the last four decades. Climate change has caused substantial damages, and increasingly irreversible losses, in terrestrial, freshwater, cryospheric and coastal and open ocean ecosystems (...). The extent and magnitude of climate change impacts are larger than estimated in previous assessments (...). Approximately half of the species assessed globally have shifted polewards or, on land, also to higher elevations (...). Biological responses including changes in geographic placement and shifting seasonal timing are often not sufficient to cope with recent climate change (...). Hundreds of local losses of species have been driven by increases in the magnitude of heat extremes (...) and mass mortality events on land and in the ocean (...). Impacts on some ecosystems are approaching irreversibility such as the impacts of hydrological changes resulting from the retreat of glaciers, or the changes in some mountain (...) and Arctic ecosystems driven by permafrost thaw (...). Impacts in ecosystems from slow-onset processes such as ocean acidification, sea level rise or regional decreases in precipitation have also been attributed to human-caused climate change (...). Climate change has contributed to desertification and exacerbated land degradation, particularly in low lying coastal areas, river deltas, drylands and in permafrost areas (...). Nearly 50% of coastal wetlands have been lost over the last 100 years, as a result of the combined effects of localised human pressures, sea level rise, warming and extreme climate events (...)"*

As the Project progresses, it will support New Zealand’s biodiversity, including rare and threatened species, in a tangible, long term way through a raft of guaranteed measures, including the generous offset and compensation package discussed further below.

#### **2.6.2.12 Is the Project consistent with local or regional planning documents, including spatial strategies**

The Project seeks resource consents pursuant to the Southland Regional Council, Southland District Council and Gore District Council planning instruments. The Southland Regional Policy Statement (“**Southland RPS**”), Southland Water and Land Plan (“**SWLP**”), Southland District Plan and Gore District Plan all recognise the value and importance of renewable electricity generation activities at a local, regional and national level. A brief assessment of the Project against the relevant planning documents is provided below.



## **Southland Regional Policy Statement**

The Southland Wind Farm will meet the definition of both regionally and nationally significant infrastructure in the Southland RPS.<sup>1</sup> The Southland Wind Farm will provide a nationally significant new source of renewable electricity and is strongly supported by the provisions in the Energy chapter of the Southland RPS, which seek to increase the electricity generation capacity and security of supply at a local, regional and national level. These provisions also provide for the offsetting and compensation of residual adverse effects that cannot be avoided, remedied or mitigated, and this is the approach Contact has adopted to the management of effects associated with the Project, as discussed further below. This is of particular relevance to the management of ecological effects, which has been informed by the guidance of the Energy and Biodiversity chapters of the RPS.

In accordance with the relevant policy direction of the Southland RPS, Contact has engaged with Te Rūnanga o Ngāi Tahu and TAMI (on behalf of Te Rūnaka o Murihiku) to ensure the cultural or historical associations with the Project Site are understood and managed appropriately. Contact has reached a mitigation and relationship agreement with Te Rūnanga o Ngāi Tahu and Papatipu Rūnaka ki Murihiku which confirms that the cultural and te taiao effects relevant to mana whenua have been appropriately addressed, including through agreed consent conditions.

In addition, the proposed management of effects associated with the Project will ensure water quality is maintained through the implementation of best practice erosion and sediment control measures, the life-supporting capacity, mauri and health of soils is safeguarded, air quality is maintained, and the Project is considered to be consistent with the working rural landscape of the Project Site and surrounding area.

The Project is therefore consistent with the Southland RPS.

## **Proposed Southland Water and Land Plan (operative in part)**

The region wide objectives of the SWLP most relevant to the Project seek to sustainably manage land and water and associated ecosystems, provide for tangata whenua values and interests, manage the quality and quantity of water in surface bodies to safeguard the life-supporting capacity and aquatic ecosystem health, ensure the quantity, quality and structure of soils are not degraded and improve fish passage. The Project will ensure these objectives are met including through the implementation of best practice construction

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<sup>1</sup> Glossary and Definitions, Southland Regional Policy Statement.



management, erosion and sediment control measures, water quality monitoring and appropriate rehabilitation of sites following the completion of construction activities.

The SWLP recognises the importance of Southland’s regionally and nationally significant infrastructure (of which the Southland Wind Farm meets the definition) and seeks to enable its sustainable and effective development and operation. The effects of the Southland Wind Farm will be appropriately managed in a way that is sustainable and consistent with the relevant policy direction provided for in the SWLP. This includes the management of the effects of the Project on wetlands and streams for which Contact will adopt the effects management hierarchy, a pathway that is provided for through the policy direction in the SWLP and consistent with the National Policy Statement for Freshwater Management (“**NPS-FM**”). In this regard, it is confirmed that the Project is for the operation of specified infrastructure, and therefore the ‘exception’ pathway under the NPS-FM (and SWLP) is in play. As part of its substantive application Contact will clearly demonstrate how there is a functional need for this activity to be located at the site, and how Contact will use the effects management hierarchy to ensure there is no more than a minor overall effect on wetland and stream extent, values and hydrology, and that unavoidable residual effects have been offset and compensated to at least a ‘no-net-loss’ standard.

Acknowledging there will likely be some loss of wetland/stream extent and value, Contact engaged Wildlands and Tonkin and Taylor to undertake comprehensive ecological and wetland assessments on the site and develop an overall effects mitigation package.

These assessments have also determined that most, if not all, of the Wind Farm Site is currently significantly affected by pest animals, particularly in forest, scrub and shrubland habitats. The presence of feral ungulates (deer and pigs) is having a significant adverse effect on terrestrial and wetland habitats in terms of browsing, pugging, and inputs of nutrients to what is naturally a low-nutrient ecosystem. Deer and pigs also negatively affect the quality and structure of lizard and invertebrate habitats, while also posing a severe risk to mātātā/South Island fernbird, particularly during breeding season. It is also assessed that the presence of ungulates at the Wind Farm Site is significantly impeding the regeneration of many plant species, which is evident in the large areas of indigenous shrubland on the plateau that are not succeeding in indigenous forest.

Predators such as feral cats, rats, possums, mustelids, and hedgehogs are also identified as exerting further pressure on bird, lizard, and invertebrate populations.

Wildlands and other independent experts (as evident from the Covid Fast-track process, including from Dr Graham Ussher who was engaged by the Panel to consider the proposed offset and compensation scheme) is of the view that the offsetting and compensation

package proposed by Contact (also developed by independent experts) will result in significant gains for indigenous biodiversity at the Wind Farm Site (and beyond).

It is therefore considered that the proposed measures to avoid, minimise, remedy, offset and compensate for the loss of area, function and quality of wetlands strike an appropriate balance between the “protection” and “prevention” requirements set out in relevant regional and national policies and other provisions which provide a pathway for the development of regionally and nationally significant infrastructure to apply the effects management hierarchy with respect to managing its effects on wetlands and streams.

The Project is therefore consistent with the SWLP.

### **Southland District Plan**

The Southland District Plan seeks to enable electricity generation while ensuring appropriate management of effects are in place, including measures to avoid, remedy and mitigate for adverse effects, and where any residual adverse effects remain, there is provision for these to be offset and compensated for. The Southland District Plan recognises the electricity generation activities have functional, technical and operational requirements to be sited at particular locations, in particular to be located where the renewable electricity resource is. This policy direction recognises the national significance of the generation of renewable electricity.

As noted further below, and in accordance with the provisions of the Southland District Plan, as a priority, Contact will seek to avoid, remedy or mitigate adverse effects on terrestrial ecology and freshwater values as far as practicable. Where there are any significant residual environmental effects, Contact will offset and compensate for these effects, which is consistent with Policy ENG.8 of the Southland District Plan in particular. The ecological assessments confirm these measures will appropriately provide for the effects of the Project and ensure there is No Net Loss of wetland or terrestrial biodiversity as a result of the Southland Wind Farm.

Contact accepts that due to the nature of the Project, the wind farm will result in effects on visual amenity values. Visual effects, to the extent practicable, have been avoided, remedied or mitigated through various measures including site selection, colour of the wind turbines, reduction in night-time lighting, use of existing disturbance footprints and remediation of the site, including ecological restoration. The site is located in a sparsely populated rural area in Southland, which is characterised by a mix of land uses, such as agriculture, forestry and other renewable electricity projects, including wind farms, as well as more natural areas. In this context, the development of a wind farm at this site is





consistent with the surrounding rural character. Further, the Project Site is not located within a scheduled Outstanding Natural Feature / Landscape in the Southland District Plan.

The Project is therefore consistent with the Southland District Plan.

#### **Gore District Plan (Operative and Proposed)**

The GIP and a section of the proposed transmission line will be located within the Gore District, and the transport of over-weight and over-sized wind turbine components and other materials required for the construction of the wind farm will also utilise roads in the Gore District. As above, the Gore District Plan provisions are enabling of renewable electricity generation activities where the effects can be appropriately managed. The transmission line and GIP infrastructure will be constructed and maintained in a way that appropriately manages effects on the environment, including compliance with the relevant noise provisions and consistency with the surrounding working rural landscape. Any road upgrades that are recommended in the transport assessment will be undertaken by Contact to ensure the function and operation of the transport network is not compromised.

The Project is therefore consistent with the provisions of the Gore District Plan (both operative and proposed).

### **3. PROJECT DETAILS**

#### **3.1 TIMING OF CONSTRUCTION**

It is anticipated that construction of the Southland Wind Farm will commence in 2027 and be completed in 2030.

#### **3.2 APPROVALS REQUIRED**

##### **3.2.1 Resource Management Act 1991**

**Southland Regional Council:**

Rule	Rule Summary	Project Activity	Activity Status
<b>Regional Air Plan 2016</b>			
5.5.5	Any industrial or trade processes that are not strictly provided for in the Regional Air Plan.	Discharge of dust from construction activities including road improvement works and discharge of contaminants to air from the onsite concrete batching facilities.	Discretionary

Rule	Rule Summary	Project Activity	Activity Status
<b>Proposed Southland Water and Land Plan (operative in part)</b>			
Rule 5	Discharge of contaminants or water to a waterbody, namely sediment during construction, that meet the rule conditions.	It is anticipated that with the appropriate management practices in place, including an Erosion and Sediment Control Plan (ESCP), Contact will avoid discharging sediment to water beyond what is permitted in the SWLP. However, as the Project involves activities near streams, including the construction of stream crossings, as a precaution, Contact is seeking resource consent to discharge sediment to surface water during construction activities. Contact will implement water quality monitoring during construction in accordance with the ESCP, and this will ensure the relevant water quality standards are met.	Discretionary
Rule 42(b)	Discharge of cleanfill associated with the earthwork disposal sites associated with the wind farm construction greater than 500m <sup>3</sup> .	The construction of the Southland Wind Farm will involve the discharge of approximately 1,000,000m <sup>3</sup> of cleanfill to land within the Wind Farm Site and 800,000m <sup>3</sup> of cleanfill to be used as engineered fill within the Wind Farm Site.	Restricted discretionary
Rule 49(c)	The taking, use and diversion of surface water for infrastructure construction.	The take of water at a maximum rate of 5L/s at one site within Jedburgh Station and one site within Matariki Forest will exceed the permitted volume. The maximum daily volume of take at each site will not exceed 432m <sup>3</sup> and the instantaneous water take will not exceed 10% of the flow, with compliance with the permitted activity rules of the SWLP when the minimum stream flow is Q95. Water will be used during construction including for earthworks activities, aggregate crushing, concrete batching, dust control and general Project activities.	Discretionary
Rule 53(a)	The drilling and construction of a bore.	Geotechnical investigations will be required as part of the enabling works and will include the drilling of a bore at each of the proposed wind turbine sites. The activity will comply with the conditions of the Rule.	Controlled



Rule	Rule Summary	Project Activity	Activity Status
Rule 59(b)	The placement and erection of culverts in, on, under or over the bed of a river and any associated bed disturbance and discharge resulting from carrying out the activity that does not meet one or more of the conditions of Rule 59(a).	Culverts have been designed in accordance with the New Zealand Fish Passage Guidelines and the National Environmental Standards for Freshwater. Some of these culverts will exceed the 1,200mm limit specified by Rule 59(a) of the SWLP.	Controlled
Rule 69	Any use, erection, maintenance, placement of any structure in, on, or over the bed of a river or wetland, not provided for by a rule in the Plan.	The Project involves activities within streams and wetlands, including the construction of a bridge, culverts and access road. As a precaution, for any activities that are required that are not otherwise covered by another rule in the SWLP, consent is being sought under this rule.	Discretionary
Rule 74(c)	The use of land within a natural wetland that is not for the purposes listed in Rule 74(a).	Civil works within a natural wetland(s).	Non-complying

## Southland District Council

Rule	Rule Summary	Project Activity	Activity Status
<b>Section 2.2 Biodiversity</b>			
BIO.3	The clearance, modification or removal of indigenous vegetation that is not provided for as a permitted or controlled activity.	The Project will involve the clearance of approximately 60ha of indigenous vegetation, primarily to enable the construction of the access tracks and wind turbine foundations.	Discretionary
<b>Section 2.9 Energy, Minerals and Infrastructure</b>			



Rule	Rule Summary	Project Activity	Activity Status
INF.4(1)	The construction of a new transmission line that is not provided for by another rule.	The construction a new 220kV transmission line to form the connection between the wind farm substation and the GIP.	Discretionary
INF.4(2)	The construction of new transformers, substations and switching stations that distribute electricity (including their ancillary buildings) that exceed 30m <sup>3</sup> in area.	A substation will be constructed on the Wind Farm Site and will be approximately 130m by 145m in area (or up to approximately 2.5ha).	Discretionary
<b>Section 3.1 Rural Zone</b>			
RURAL. 3(1)	Earthworks disturbance that exceeds 1,000m <sup>3</sup> in volume in a 12 month period and alters the existing ground level by more than 5m in depth or 2m in height.	The construction of the Southland Wind Farm will involve approximately 1,800,000m <sup>3</sup> of cut within the Wind Farm Site.	Restricted discretionary
RURAL. 3(1)	Earthworks greater than 25m <sup>3</sup> within a riparian margin.	The Project will require earthworks exceeding 25m <sup>3</sup> within a riparian margin during the construction of access roads and wind turbine platforms.	Restricted discretionary
RURAL. 3(1)	The discharge of more than 500m <sup>3</sup> of cleanfill.	The construction of the Southland Wind Farm will involve the discharge of approximately 1,000,000m <sup>3</sup> of cleanfill to land within the Wind Farm Site and 800,000m <sup>3</sup> of cleanfill to be used as engineered fill within the Wind Farm Site.	Restricted discretionary
RURAL. 4(1)	All other activities not provided for by another rule associated with the construction, commissioning, operation and maintenance of the wind farm.	The construction of the Southland Wind Farm involves a range of activities and resource consent is sought under this rule for any activities that are not otherwise provided for.	Discretionary

## Gore District Council

Rule	Rule Summary	Project Activity	Activity Status
<b>Operative Gore District Plan</b>			
7.9.3(e)	A new electricity line that will exceed 110kV.	The construction of a 220kV transmission line to form the connection between the wind farm substation and the GIP.	Discretionary
7.9.4(b)	A new electricity substation.	The GIP will include an electricity substation that will comprise of pole mounted structures that exceed a volume of 0.6m <sup>3</sup> .	Restricted Discretionary
4.13.1(1)	A land use activity that involves earthworks where the period of the commencement until of such earthworks until the completion of rehabilitation work exceeds 12 months.	Earthworks activities will be required for the construction of the transmission line, access road and GIP and these activities may exceed a period of 12 months.	Restricted Discretionary
<b>Proposed Gore District Plan</b>			
ENRG-R2	Large-Scale Renewable Electricity Generation construction, operation, maintenance, repairs and upgrading (including and structures and associated buildings).	The Southland Wind Farm meets the definition of a large-scale renewable electricity generation activity, and as such, any activities associated with the construction and operation of the Southland Wind Farm, including the transmission line and GIP, are provided for under this rule.	Discretionary

## National Environmental Standards for Freshwater

Rule	Rule Summary	Project Activity	Activity Status
<b>National Environmental Standards for Freshwater</b>			
45	Vegetation clearance, earthworks or land	The proposed access road intersects with narrow areas of	Discretionary



Rule	Rule Summary	Project Activity	Activity Status
	disturbance within, or within a 10m setback from, a natural inland wetland for the purpose of construction specified infrastructure.  The taking, use, damming or diversion of water within, or within a 100m setback from, a natural inland wetland.	fen wetland on Jedburgh Station plateau. This will require vegetation clearance, earthworks and land disturbance within the wetland. In addition, the construction of this road will require the diversion of water within the wetland. Culverts will be used to maintain the movement of water to maintain wetland hydrology below the crossing point.	

### 3.2.2 Conservation Act 1987

The transmission line route associated with the proposed Wind Farm Project may cross over a Public Conservation Area, administered by the Department of Conservation (Waiarikiki Stream, Mimihau). Contact is therefore seeking an approval under the Conservation Act 1987 for a concession for an airspace easement for the proposed transmission line to cross over this area, if the final design of the line requires it to pass over this area.

In addition, Contact intends to upgrade an existing forestry road through the Port Blakely Forest to be used during construction and operation as an access road into the Wind Farm Site. This will involve the construction of a culvert to replace an existing ford over the Mimihau Stream (North Branch). The Mimihau Stream is subject to Part 4A (Marginal Strips) of the Conservation Act 1987. Therefore, Contact will apply for an easement for a right of way to construct the culvert over this section of the Mimihau Stream. The transmission line will also pass over this marginal strip, in a different, but nearby, location to the culvert. As such, Contact is also seeking an approval for an air space easement over the Mimihau Stream (North Branch) Marginal Strip.

The location of the concessions is identified on the map attached as **Attachment 4** to this application.

### 3.2.3 Wildlife Act 1953

Approvals are required under the Wildlife Act 1953 for the intentional disturbance of wildlife, including for the purposes of catching, holding and releasing. Contact is therefore seeking an approval(s) for a Wildlife Act Authorisation for any activities relating to the disturbance of lizards and terrestrial invertebrates. This will likely involve searching for certain lizard and

terrestrial invertebrate species prior to civil works taking place in areas that have either confirmed or expected presence of these animals and translocating them to new habitats (including fenced and predator controlled areas associated with the offsetting and compensation proposed for the Project).

#### **3.2.4 Heritage New Zealand Pouhere Taonga Act 2014**

The archaeological assessment has identified two archaeological sites that could potentially be affected by the Project. As a precaution, Contact is seeking to obtain an approval for a 'global' archaeological authority for the Project, that covers the entirety of the Project Site for the duration of the construction of the Southland Wind Farm.

#### **3.2.5 Freshwater Fisheries Regulations 1983**

The Project involves constructing culverts within streams. The freshwater ecology assessment has identified that, in certain watercourses within the Project Site, it may be necessary to prevent trout from passing through in order to protect the threatened *Gollum galaxias* populations. The FTAA includes specific permissions under the Freshwater Fisheries Regulations. At this stage, it is assumed that Contact will need to apply for approval for the proposed culverts under this regulation or seek an appropriate dispensation under section 42 or 43 of the Freshwater Fisheries Regulations 1983.

##### **3.2.5.1 Other Approvals**

No other approvals, including consents, certificates, designations, concessions or other legal authorisations are required to authorise this Project.

### **3.3 STAGING OF THE PROJECT**

Construction of the wind farm is anticipated to take approximately 30-36 months. Turbine construction is not proposed to be staged or staggered in any way. In other words, all 55 turbines will be constructed within this timeframe. Following completion of the wind farm construction, the wind turbines will be operational for a period of up to 30 years and then it is currently intended that they will be 'repowered' (replacement of the wind turbines with new wind turbines) for a second 30-year period.

### **3.4 ALTERNATIVE PROJECT**

The Project is not proposed as an alternative project.





### **3.5 ADVERSE EFFECTS**

#### **3.5.1 Summary of Adverse Effects**

##### **3.5.1.1 Cultural Effects**

Contact recognises that Kā Papatipu Rūnaka ki Murikihu hold ahi kaa, mana whenua and mana moana within the Murihiku takiwa, and acknowledges the relationship Mana Whenua have with the Pawakataka/Slopedown area. Contact understands that it is for mana whenua to describe any cultural or historical associations with the Project Site.

During 2023 and 2024 Contact consulted widely about the Project with Te Ao Marama Inc and Te Rūnanga o Ngāi Tahu on behalf of Kā Papatipu Rūnaka, as well as with the individual Murihiku rūnaka. This included Contact taking on board and responding to the issues described in the Ngā Hua o Āpiti Hono Tātai Hono report, as well as a cultural impact assessment prepared by Te Ao Marama Inc. (TAMI) in December 2023. Those documents laid the foundation for extensive kōrero between Contact and rūnaka representatives about the Project. This resulted in a comprehensive and substantial mitigation and relationship agreement (and agreed consent conditions) to address the cultural and taiao effects on mana whenua should the Project proceed.

Contact continues to engage with mana whenua throughout the Fast-track Approvals consenting process to ensure the effects of the Project on cultural values are appropriately addressed.

##### **3.5.1.2 Landscape and Visual Amenity Effects**

Isthmus has completed an assessment of the proposed Southland Wind Farm on landscape and visual amenity values.

#### **Construction**

Potential effects on visual amenity during construction include vehicle movements associated with the transport of wind farm components and materials, the presence of concrete batching facilities, cranes and other specialised construction structures and vehicles on-site. The isolated nature of the backslope and the distance from the closest residences and public viewpoints will minimise the visual effects during the construction phase of the Project. Construction lighting will only be used when necessary and during times where the normal daylight hours are insufficient to allow construction activities to be undertaken in a safe manner. Overall, construction activities will be largely localised, therefore, limiting impacts on the landscape during this period.

#### **Operation**





The scale of the surrounding landforms typically determines how dominant wind farms may be perceived. The *cuesta* which the Wind Farm Site is located on is a large-scale landform which is accommodating of the scale of the proposed Southland Wind Farm, that is, the large-scale landform provides a suitable platform for the large-scale structures of the Southland Wind Farm. The patterns of the wind turbines and roading layout are specifically designed to respond to the underlying landform and landcover, avoiding steeper land and gullies and indigenous vegetation, as far as is practicable. These landscape constraints have been considered with the sizing, placement and design of the wind farm project and have assisted in reducing the landscape and visual effects of the project on the surrounding environment. Landscape mitigation recommendations have been made to the wind farm design team throughout the iterative design process.

Overall, Isthmus considers the Southland Wind Farm to be consistent with the surrounding environment in which it is proposed, which includes typical rural-based activities as well as more natural areas, and the effects of the Southland Wind Farm on the landscape character of the site and surrounding area will be low-moderate. Mitigation, including location of turbines, set-back from the prominent high points of Mokoreta, Puke Mimiha and The Cairn, the pattern of turbine layout, roading and transmission line design and placement and specific landscape planting assists in limiting the effects on landscape character and over time will ensure the integration of the wind farm into the rural working environment.

The Southland Wind Farm will result in effects on visual amenity values, primarily on the views from dwellings, particularly in the Redan-Mokoreta area. The level of effect on each dwelling ranges from neutral to moderate-high, depending on the location, distance, and orientation to the wind turbines. Where effects on a dwelling are identified as moderate or greater (17 identified dwellings), Contact will consult with the landowner and offer to develop and implement a planting/landscaping plan for mitigation of visual effects of the Southland Wind Farm on the affected property.

The site is not a scheduled Outstanding Natural Landscape (“**ONL**”) or Outstanding Natural Feature (“**ONF**”) in any of the applicable statutory plans or policy documents; however, parts of the site have been identified as such through a separate report, which has not been through a public Schedule 1 consultative plan change process. Isthmus disagrees that this status is appropriate (particularly its extent); however, it has also been assessed that the wind farm will not physically alter the characteristics and qualities of the areas of highest landscape value within the Project Site, which is the escarpment. Therefore, the high and very high natural character values of the site will be largely avoided or protected by the Southland Wind Farm Project, and ecological and natural character values can be enhanced through the habitat and restoration package.

The selection of the route and location of the transmission line and GIP has been made to avoid or mitigate effects on the landscape character as well as avoiding, as much as practicable, effects on visual amenity values.

The majority of the Project's landscape, visual, and natural character effects are ultimately reversible, as the Project will be decommissioned and the turbines and transmission infrastructure removed at the end of its life.

### 3.5.1.3 Terrestrial and Wetland Ecology Effects

Wildlands has undertaken a wide-ranging and thorough assessment of the proposed Southland Wind Farm on terrestrial and wetland ecology. In addition, Bluewattle Ecology completed an assessment on the effects of the Project on long-tailed bats. Contact also engaged Tonkin and Taylor to undertake an independent peer review of the Wildlands report and overall assessment, focussing on the Jedburgh plateau (for the benefit of the Covid Fast-track Act application processing).

Potential ecological effects associated with the Project include:

- > Unavoidable loss of areas of indigenous vegetation, including wetlands, and habitat for indigenous fauna (including birds, long-tailed bats, lizards and invertebrates) associated with the construction of the Project;
- > The potential risk of collision with the turbines resulting in direct mortality of birds and long-tailed bats;
- > Habitat fragmentation; and
- > Potential for increased movement by introduced predatory mammals.

The technical assessments that have been completed for the Project and the outcomes of consultation with stakeholders, including Te Ao Marama Inc (“**TAMI**”), DoC, the Southland District Council and Southland Regional Council, have identified a range of management measures that Contact will implement to avoid, remedy or mitigate, and where required, offset and compensate for, adverse ecological effects associated with the Southland Wind Farm Project. As a first priority, Contact has sought to avoid effects, and where avoidance is not practicable, Contact will minimise and remedy these effects. Following the implementation of these measures, some residual effects will remain, and Contact will offset and compensate for these. This is consistent with the policy guidance of the national, regional and district planning documents.

Avoidance has largely been achieved through the careful iterative redesign of the wind farm layout, including the location of the wind turbines and access road. Following the



identification of high and very high ecological value vegetation areas, including wetlands, through the thorough mapping exercise completed by Wildlands, Contact has reconfigured the wind farm layout to reduce, to the extent that is practicable, the encroachment of the wind farm footprint on these identified features, and to volunteer strict and binding limits on the extent of any damage or loss. In addition, measures such as avoiding disposing of fill in areas identified as high or very high value vegetation will also contribute to protecting these areas. The implementation of an Erosion and Sediment Control Plan (“**ESCP**”) will also seek to avoid adverse effects associated with sedimentation and contaminated runoff into wetlands and streams to the greatest extent practicable.

Remediation and mitigation measures that will be employed by Contact will include the implementation of a number of management plans, including a Terrestrial and Wetland Ecological Management Plan, which will include monitoring and reporting requirements, the implementation of vegetation clearance protocols, the salvage and relocation of identified lizard and terrestrial invertebrates prior to clearance of vegetation in suitable habitat, curtailment of certain identified turbines and remediation of exposed areas disturbed during construction.

Where significant residual adverse effects remain on areas within the Project footprint, Contact is proposing to offset and compensate for such effects. The proposed offset and compensation measures have been designed in accordance with the principles for biodiversity offsetting and compensation outlined in the Southland RPS to achieve at least a ‘No Net Loss’ outcome and preferably a net gain in indigenous biological diversity. In addition, the proposed offsetting and compensation for effects on wetlands and stream extent are designed to be consistent with the NPS-FM. These measures will include the construction of a deer exclusion fence around a 250ha block of mānuka forest and scrub on Jedburgh Station, enrichment planting, restoration of habitat, extensive predator control over a total area of 11,400ha (both on-site and off-site), weed controls and wetland restoration. During the Covid Fast-track processing, these measures garnered considerable support from parties such as DoC and Ngāi Tahu.

#### **3.5.1.4 Freshwater Ecology Effects**

4Sight and Dr Greg Ryder completed an assessment of the effects of the Southland Wind Farm on freshwater ecology. Potential effects will primarily occur during construction and include potential discharge of sediment to watercourses, effects associated with the extraction of water, effects on freshwater ecology values associated with the construction and placement of new watercourse crossings and the risk of contaminants and new pest species entering watercourses.



In accordance with the policy guidance provided in the NPS-FM, Contact has applied and will continue to apply the effects management hierarchy to the management of identified effects on the extent and values of rivers and streams within the Project Site.

Greg Ryder has calculated that the stream length potentially impacted by the civil works footprint will range between 425m (MfE REC Classification) and 790m (NZ Rivers 50k topographic data). However, a portion of this estimate is already culverted (13 culverts in total), and therefore, the actual stream length affected by the Southland Wind Farm Project will be lower (potentially 200m less).

Identified effects on aquatic ecology will be managed through the implementation of best practice construction procedures, as well as management plans. A number of relevant measures, for example, fish recovery, the provision of fish passage through culverts, erosion and sediment control measures, water quality monitoring requirements and stormwater management will be detailed in the CEMP.

Contact will install fish screening devices on the water intake structures and restrict the amount of water that is taken to ensure that the existing freshwater ecology values of the Mimiha Stream (South Branch) are protected while water is taken for the construction of the Southland Wind Farm.

The culverts will be designed in accordance with the New Zealand Fish Passage Guidelines to ensure fish passage is provided for. However, 4Sight notes it may be more beneficial to prevent the passage of trout for the *Gollum galaxias* population present and this will be considered by Contact in consultation with TAMI, DoC and the Southland Regional Council. As such, an approval for this activity is sought.

To offset effects associated with the loss of stream extent, the Stream Ecological Valuation (“SEV”) method will be used to calculate the quantum of offsetting required. The SEV method will be used to describe the existing habitat values of the watercourse in a quantifiable way and ensure that enhancement offsets the stream crossing disturbance through increasing habitat elsewhere by a similar extent to that lost. Greg Ryder estimates that approximately 1-2km of stream length will be restored as an offset. Enhancement will be through fencing and planting to prevent stock access, restore stream shade, and reduce sediment and nutrient input via run-off. This will primarily occur at sites within the Mimiha Stream catchment, local to the Wind Farm Site.

Therefore, freshwater ecology effects can be appropriately managed to ensure there are no more than minor adverse effects.

#### **3.5.1.5 Hydrology Effects**

During construction, the Southland Wind Farm will require water for activities such as earthworks, concrete batching and dust suppression. The maximum daily water volume demand is estimated at up to 500m<sup>3</sup>, however, typical daily demand will likely be between 250-350m<sup>3</sup> per day. To meet this demand, Contact proposes to take water from two sites within the Wind Farm Site – one on the Mimiha Stream (South Branch) and the other on a tributary to this stream. The take at each location will be limited to 5L/s, or 10% of the stream flow, whichever is lower – with no take permitted when flows are Q95 or lower.

Riley assessed the effects of the proposed water take, including through assessing the flow record of the Mimiha Stream catchment. Riley considers the degree of hydrological alteration is likely to be low. Further, the Freshwater Ecology Assessment completed by 4Sight considers that with the appropriate management in place, such as the implementation of the measures in the ESCP, fish screening and restrictions on the amount of water that is taken, the existing freshwater ecology values of the Mimiha Stream (South Branch) will be protected while water is taken for the construction of the Southland Wind Farm.

#### **3.5.1.6 Geotechnical Effects**

Riley has prepared a geotechnical assessment for the Project. The assessment did not identify any fatal flaws with respect to the proposed development. Riley considers the seismic hazard at the Wind Farm Site is relatively low and liquefaction of low-strength and saturated soils is not considered to be a risk at the Wind Farm Site. It is therefore considered that the Wind Farm Site is suitable from a geotechnical perspective.

#### **3.5.1.7 Construction Effects**

Potential effects associated with the construction of the Southland Wind Farm include effects on wetlands, fill disposal, activities within streams, stormwater runoff, erosion and sediment effects, generation of dust and storage and use of hazardous substances.

Construction activities will be managed in accordance with industry-best practice and a Construction Environmental Management Plan (CEMP). This will include a number of management plans covering earthworks, erosion and sediment control, rehabilitation, fire management, flocculant management, construction noise and construction traffic management. It is anticipated the implementation of these plans will ensure any potential effects associated with the construction of the Southland Wind Farm will be appropriately avoided, remedied or mitigated.



Earthworks activities within and near wetlands will be managed to minimise the effects of these activities on wetlands. The geotechnical assessments prepared by Rileys have informed these and include measures such as forming a low permeability wedge prior to forming a cut face for the access track platform within or adjacent to a wetland to mitigate seepage from the wetland, and where a fill embankment is required through a wetland, a series of regularly spaced subsoil drains will be installed beneath the embankment to maintain conveyance of flow to all parts of the wetland. This will ensure the hydrological function of the wetland is maintained. Monitoring of the wetland hydrological function has also been proposed.

Contact will ensure fill disposal is managed in accordance with best practice and measures set out in the Council-approved management plans. This will include avoiding locating fill within streams, wetlands, high value vegetation and very steep slopes (>15 degrees). The disposal sites will be appropriately contoured and rehabilitated.

The general principles for sediment control for the construction of the Southland Wind Farm will be the implementation of measures reducing the potential for erosion of exposed soils during land disturbing activities and to adopt treatment devices that collect and retain sediment prior to discharging into the receiving environment. These measures will be outlined in the CEMP which will be prepared by a suitably qualified and experienced person.

It is therefore considered that with the implementation of best practice measures, the effects associated with the construction activities required for the Project can be appropriately managed.

#### **3.5.1.8 Archaeological Effects**

Origin has completed an archaeological assessment for the Project Site to determine whether there will be any effects of the proposed activity on archaeological values. The assessment has identified two archaeological sites within the Wind Farm Site – both in a similar location. There is a musterers hut (G46/17) which is approximately 100m from the nearby forestry track and further from the proposed wind farm civil works.

The other archaeological site (G46/13) is located approximately 250m from site G46/17 and is notable as being a site where an adze was found. This site is close to the proposed wind farm civil works. The archaeological material at this site was removed in 1987 and no additional above surface material was found during the survey of the site. However, it is possible subsurface deposits related to this surface find are present within the vicinity. As such, all works within 100m of the site marker and stream crossing will be monitored by a suitably qualified archaeologist and a representative from TAMI.

Despite there being only these two archaeological sites identified on the Project Site, as a precaution, Contact is seeking to obtain approval for an archaeological authority that covers the entire Project Site. This will include appropriate protocols in the event of the accidental discovery of archaeological material, in accordance with best practice.

Given the above, it is considered the proposed activity will have a negligible effect on the Project Site's archaeological values.

#### **3.5.1.9 Traffic Effects**

Stantec has undertaken an assessment of the transportation effects of the construction works required for the proposed Southland Wind Farm. The primary traffic effects relate to changes in traffic volumes, transportation of over-weight and over-dimension loads, resulting in mobile road closures and having the potential to cause damage to the road pavement.

The proposed transport route for over-weight and over-dimension loads has been designed in consultation with Gore District Council, Southland District Council and Invercargill City Council, as well as taking into consideration the transport route used for the Kaiwera Downs Wind Farm. It is proposed the transport of over-weight and over-dimension loads will occur overnight when traffic volumes on the road network are lower to minimise disruption to other drivers.

Prior to the commencement of construction works, Contact will record the existing state of the roads in a Base Condition Report and identify reasonably foreseeable pavement wear issues associated with the overweight loads and provide this to the road controlling authorities (Waka Kotahi NZ Transport Agency, South Roads, Gore District Council). At the completion of construction, or when an issue arises, another inspection will be undertaken to determine what inputs and actions are required by Contact to ensure the Project's effects on road pavements are remedied. Further, during construction, Contact will undertake regular maintenance of the unsealed pavements on Kaiwera Downs Road, Waiarikiki Mimiha Road and Venlaw Road. This will avoid adverse effects on ride comfort and vehicle operating costs experienced by other road users.

In addition, Contact will implement a Construction Traffic Management Plan throughout the construction of the Southland Wind Farm to manage potential effects on traffic. It is therefore considered that the construction works will not generate noticeable effects on the operation of the road network.

#### **3.5.1.10 Noise Effects**

A noise assessment for the Project has been completed by Marshall Day. This assessment concludes that the noise generated during both construction and operation of the Southland Wind Farm, as assessed by NZS6801, NZS6802 and NZS6808, will comply with the permitted activity provisions of the Southland and Gore District Plans as appropriate. A Final Operational Noise Assessment Report will be prepared prior to the construction of the Southland Wind Farm once the final wind farm layout is confirmed to ensure compliance with the noise limits outlined in NZS6808:2010.

A Construction Noise Management Plan will be prepared for the Project in general accordance with Section 8 and the relevant annexes of NZS 6803:1999 Acoustics – Construction Noise prior to the commencement of construction of the Southland Wind Farm.

Overall, the adoption of appropriate design and best practice management procedures will ensure the effects of the proposed activity associated with noise will be no more than minor.

#### **3.5.1.11 Aviation and Lighting Effects**

Contact has engaged closely with the Civil Aviation Authority (“**CAA**”) regarding the Project, including to determine the lighting of turbines which is required to ensure that risks to aircraft are suitably minimised. The CAA determination has confirmed that 16 of the 55 proposed wind turbines are required to be fitted with an Aviation Obstruction Warning Light System and Contact will comply with these requirements to ensure there are no adverse effects of the Southland Wind Farm on aviation.

The effects of aviation lighting have been minimised to the extent that is practicable, with the CAA revisiting its original decision and reducing the minimum number of marker turbines required to be lit to 16. An assessment undertaken by Leading Design Professionals also confirms that the effects of night lighting on neighbouring properties will be acceptable, and it will not result in adverse effects that are more than minor on the rural night sky.

#### **3.5.1.12 Shadow Flicker Effects**

Roaring40s Wind Power has completed an assessment on the potential shadow flicker effects associated with the proposed Southland Wind Farm. This confirmed that there will be no shadow flicker effects associated with the Southland Wind Farm.

#### **3.5.1.13 Radio Communication Services**

Kordia has completed an assessment of the effects of the Project on radio communication services operating in the vicinity of the Southland Wind Farm. This assessment concludes



that the Southland Wind Farm is not expected to cause any harmful interference effects to licenced radio communication services operating in the vicinity of the Wind Farm Site.

### **3.5.2 Prohibited Activities**

No activities involved in the Project are prohibited activities under the RMA.

## **3.6 PERSONS AFFECTED**

### **3.6.1 Persons, groups and/or entities who are considered likely to be affected by the Project**

Contact considers the following persons, groups and entities are likely to be affected by the Project:

- > Papatipu Rūnaka ki Murihiku, including Te Rūnanga o Ngāi Tahu, and Te ao Marama Inc (who acts on their behalf on resource management and environmental matters);
- > Department of Conservation;
- > Southland District Council;
- > Southland Regional Council;
- > Gore District Council;
- > Invercargill City Council;
- > Heritage New Zealand Pouhere Taonga;
- > Ministry for the Environment;
- > Waihopai-Toetoe Community Board;
- > Local residents, specifically, all immediate neighbours, and those identified by technical assessments as being impacted by the proposal (i.e. visual effects);
- > Transpower;
- > Civil Aviation Authority;
- > NZ Transport Agency; and
- > South Port.



### **3.6.2 Consultation undertaken with the above persons and/or groups and how this has informed the Project**

As discussed further below, Contact previously sought consents for the Southland Wind Farm Project under the Covid Fast-track Act. Over the past two years, throughout this process, including the development of the resource consent application and the processing of the application, Contact completed extensive consultation with the above persons and/or groups. This has directly helped shape the development of the Project and management of effects. Contact has received and considered extensive feedback from stakeholders, commenters, peer reviewers, mana whenua and the public on the Project. This has provided significant value to the development of the Project and Contact has carefully considered this feedback and endeavoured to incorporate all constructive feedback into the project design, proposed conditions, and management of effects.

The enhancements made to the Project as a result of the feedback provided to Contact through its engagement processes are wide-reaching and significant, and include:

- > Development and refinement of the proposed ecological offset and compensation package, which will have widespread benefits, including in biodiversity, cultural and landscape terms;
- > Development of a proposed suite of other measures to address the adverse cultural effects identified by mana whenua;
- > Provision of a community fund to support community activities and initiatives, which was a clear request made during community engagement and in comments received on the application;
- > Changes to earthworks design practices, including the location of fill disposal;
- > Optimised outcomes in respect of lighting on wind turbines. In this regard, following an initial determination by the CAA about the aviation warning lighting it considered necessary for safety, Contact responded to community concerns about the amenity effects of such lighting by preparing and filing an appeal ('petition') with the CAA, providing further information and modelling. The CAA responded to the petition on 16 August 2024 with a new determination that now requires a significantly reduced lighting plan. This will consist of only 16 out of the 55 proposed turbines requiring a single, medium-intensity light. These will be directed LED lights that will minimise light going below the horizontal plane; and
- > Updates to the proposed consent conditions, in consultation with DoC, TAMI, Te Rūnanga o Ngāi Tahu and Papatipu Rūnaka ki Murihiku, Southland District Council and Southland Regional Council, including setting hard environmental limits, within which



avoidance is the first priority to address concerns raised by these parties. Following this process, DoC confirmed that *'All technical experts are now satisfied that their concerns have been addressed in the latest set of conditions'*. Contact has also reached an agreement with Te Rūnanga o Ngāi Tahu and Papatipu Rūnaka ki Murihiku that the Project is acceptable culturally and in terms of te taiao, including agreed tangata whenua specific conditions.

In addition to the above, Contact has undertaken consultation in accordance with section 11 of the FTAA and is committed to continuing to engage with these parties throughout the FTAA consenting process and build on the existing relationships Contact has established with these parties. The below outlines this 'mandatory' FTAA consultation and how this has informed the Project.

**Te Rūnanga o Ngāi Tahu and Papatipu Rūnaka ki Murihiku (as the relevant iwi authorities and Treaty settlement entity)**

Contact has been consulting closely with representatives of Te Rūnanga o Ngāi Tahu and Papatipu Rūnaka ki Murihiku in relation to the Project, including in relation to this FTAA referral application. Contact has clearly stated its intention to submit a referral application to seek eligibility under the FTAA to each of those entities, and to Te Ao Marama Inc.

In a letter to Contact dated 1 April 2025 (attached as **Attachment 5** to this application), Te Rūnanga o Ngāi Tahu and Papatipu Rūnaka ki Murihiku confirmed that *'while the previous application for resource consents for the Southland Wind Farm was declined, the position of Ngāi Tahu ki Murihiku and Te Rūnanga in respect of the Project remains as confirmed in our agreement with Contact, and as explained in the 27 November 2024 joint memorandum. Contact has been consulting closely with Ngāi Tahu ki Murihiku and Te Rūnanga about the prospect of a referral application for the project being lodged under the Fast-track Approvals Act 2024. Ngāi Tahu ki Murihiku and Te Rūnanga support that referral application provided the referral application is on the same basis as the application made to the EPA for the Southland Wind Farm Project. We will continue to work closely with Contact throughout the Fast-track Approvals Act process'*.

At a substantive level, Contact has a long history of engagement with Te Rūnanga o Ngāi Tahu and Papatipu Rūnaka ki Murihiku on the Southland Wind Farm Project throughout the consenting process under the Covid Fast-track Act. This engagement has informed the Project, including the proposed management of effects and consent conditions.

In addition, this engagement resulted in agreement between Te Rūnanga o Ngāi Tahu and Papatipu Rūnaka ki Murihiku and Contact, both in relation to consent conditions for the Project, and (via a confidential agreement) in relation to matters that cannot be mitigated by



way of consent conditions. Contact confirms it will continue to work closely with Te Rūnanga o Ngāi Tahu and Papatipu Rūnaka ki Murihiku throughout the FTAA process.

**Southland District Council (as a relevant local authority for the Southland District)**

Contact has consulted with Southland District Council, outlining the Project and its intention to submit a referral application to seek eligibility under the FTAA. The Southland District Council confirmed it was comfortable with the consultation that has been undertaken between Contact and the Southland District Council over the past two years, given there are no changes proposed to the Project. Consultation with the Southland District Council has helped shaped the Project, including the proposed effects management and conditions of consent. Contact will continue to engage with the Southland District Council prior to submitting the substantive application.

**Southland Regional Council (as a relevant local authority for the Southland Region)**

Contact has consulted with Southland Regional Council, outlining the Project and its intention to submit a referral application to seek eligibility under the FTAA. The Council has advised, on the basis that the new Project configuration is not substantially different from the configuration at the end of the previous consent process under the Covid Fast-track Act, that they are comfortable with the referral application proceeding to lodgement without further consultation at this time. However, they would welcome the opportunity for further consultation before lodgement of the substantive application – which is what Contact had proposed it would do.

**Gore District Council (as a relevant local authority Gore District)**

Contact has consulted with Gore District Council, outlining the Project and its intention to submit a referral application to seek eligibility under the FTAA. The Gore District Council confirmed it is comfortable with the engagement that had been undertaken between the Gore District Council and Contact to date, and had no further comments on the Project given no changes were proposed in relation to the activities in the Gore District. Consultation with the Gore District Council has assisted with shaping the Project, in particular, in helping identify an agreed route for the transport of over-weight and over-dimension loads to the Wind Farm Site. Contact will continue to consult with the Gore District Council throughout the FTAA process.

**Department of Conservation (as the administering agency for the Conservation Act and Wildlife Act 1953)**

Contact has consulted with DoC, outlining the Project and its intention to submit a referral application to seek eligibility under the FTAA. Contact has received a response from DoC,



outlining the extensive consultation that Contact has already undertaken with DoC in relation to the Project to date.

Contact has also completed and lodged the relevant DoC pre-lodgement consultation forms in relation to FTAA referral applications. It subsequently met with members of DoC's Fast-track Applications Team to discuss the Project, including the information Contact provided in the request for pre-lodgement consultation. Contact has undertaken to DoC that it will continue to consult with DoC in line with s29 of the FTAA.

Consultation with DoC to date has addressed:

- > The RMA authorisations required for the Project, including in the context of Contact's previous Covid Fast-track Act application for those RMA authorisations. Contact and DoC engaged closely through that Covid Fast-track Act process, with the end result being agreement between Contact and DoC (and its experts who participated in the process) on an appropriate form of conditions to address the ecological effects of the Project; and
- > The authorisations required for the Project where DoC is the administering agency under the FTAA. Under the FTAA scheme, that includes wildlife approvals, concessions and any complex freshwater fisheries activity approvals or dispensations that may be required. Contact has already engaged with DoC on the Wildlife Act authorisations and concessions needed for the Project. These include:
  - Wildlife Act:
    - Contact was advised by its consultant ecologists in the first instance on Wildlife Act authorisations that would be required in light of the management measures proposed for the relevant species.
    - The approach, and Wildlife Act requirements, were then discussed with DoC at a pre-application meeting in March 2024, Contact then submitted its application and that is currently being processed under reference 118060-FAU.
    - In addition to this, Contact also obtained Wildlife Act Authority 114864-FAU on 9th May 2024 for pre-construction Helms' Stag Beetle surveys associated with this Project.
  - Concessions:
    - DoC provided advice on concession approvals required early in the Project, and Contact subsequently had a pre-application meeting with DoC in May 2024 to inform its application. Concession 117770-OTH was approved by DoC on 25 February 2025, however, Contact decided to withdraw the application after



clarifying some matters with DoC and intend to refine its easement requirements with the subsequent FTAA application

DoC's input through that consultation and engagement to date has been particularly helpful in shaping the management of effects on indigenous flora and fauna, as well as the offset and compensation package, and proposed consent conditions for the Project, non-RMA approvals needed, and now the Fast-Track Approvals referral application.

Contact is committed to ongoing consultation with DoC, consistent with its approach to date including prior to and after submitting this referral application. Contact values and will continue to welcome input from DoC, including as it works towards submitting a substantive application under the FTAA.

**Heritage New Zealand Pouhere Taonga (as the administering agency for the Heritage New Zealand Pouhere Taonga Act 2014)**

Contact has consulted with Heritage New Zealand Pouhere Taonga (HNZPT), outlining the Project and its intention to submit a referral application to seek eligibility under the FTAA. Contact has received a response from HNZPT, and this confirmed HNZPT is comfortable with Contact seeking referral under the FTAA and will continue to consult with Contact on the Project before Contact lodges its substantive application.

**Ministry for the Environment (as the administering agency for the RMA)**

Contact has consulted with the Ministry for the Environment, outlining the Project and its intention to submit a referral application to seek eligibility under the FTAA. Contact received a letter from the Ministry for the Environment which helpfully confirmed the relevant national policy statements and national environmental standards that Contact will carefully revisit and reconsider in its substantive application.

**3.6.3 Treaty settlements that apply to the project area and a summary of the relevant principles and provisions in those settlements**

Ngāi Tahu are the iwi that, under Te Rūnanga o Ngāi Tahu Act 1996 and Ngāi Tahu Claims Settlement Act 1998 and in the Ngāi Tahu WAI 27 claim under Te Tiriti o Waitangi, hold ultimate authority over the broader takiwa.

Ngāi Tahu ki Murihiku is the collective of the four representatives papatipu rūnaka of Murihiku, namely Te Rūnaka o Waihōpai, Te Rūnaka o Awarua, Te Rūnaka o Oraka / Aparima and Te Rūnaka o Hokonui. They are recognised as mana whenua under Te Rūnanga o Ngāi Tahu Act 1996, Ngāi Tahu Claims Settlement Act 1998 and in the Ngāi Tahu WAI 27 claim under Te Tiriti o Waitangi.



Ngāi Tahu and the Crown signed a Deed of Settlement on 21 November 1997. The Ngāi Tahu Claims Settlement Act 1998 gives effect to the Deed of Settlement.

The Ngāi Tahu settlement includes:

- > An apology from the Crown;
- > Redress in respect of Aoraki/Mount Cook;
- > Cultural redress;
- > Commercial/economic redress; and
- > Non-tribal redress.

The Crown apology recognised Ngāi Tahu as "the tāngata whenua of, and as holding rangatiratanga within, the Takiwā of Ngāi Tahu Whānui."

The most relevant principles and provisions in the settlement in respect of the project include:

- > Cultural redress concerning conservation management strategies, taonga species, recognition of mana, management input and nohoanga entitlements; and
- > Commercial redress in respect of the Slopedown Forest, which has since been transferred out of Ngāi Tahu ownership and forms part of the Project site (now owned by Matariki Forests, Lot 1 DP 12509).

### **Conservation Management Strategies**

The Treaty settlement provides redress to Ngāi Tahu relevant to conservation management strategies and plans. The Southland Murihiku Conservation Management Strategy ("CMS") was prepared in consultation with Ngāi Tahu. This redress is not directly relevant to the Project as:

- > Te Rūnanga o Ngāi Tahu is a statutory adviser to the Minister of Conservation in respect of specific sites. As a statutory adviser, Te Rūnanga o Ngāi Tahu may provide advice directly to the Minister of Conservation when they are considering any draft conservation management plan or conservation management strategy under the Conservation Act 1987 in respect of a specific site. The Minister of Conservation must have particular regard to the advice given by Te Rūnanga o Ngāi Tahu. The Project does not involve any sites for which Te Rūnanga o Ngāi Tahu has a role as a statutory advisor.



- > The Director-General of Conservation must consult with, and have particular regard to the views of, Te Rūnanga o Ngāi Tahu in respect of the preparation of every conservation management strategy or conservation management plan that affects any of the leaseback conservation areas or the gift areas. The Project does not involve any of the leaseback conservation areas or the gift areas.

### **Taonga Species**

In the Treaty settlement the Crown acknowledges the cultural, spiritual, historic and/or traditional association of Ngāi Tahu with each of the taonga species, and taonga fish species. Some of the species identified within the Project Site are taonga species or taonga fish species under the settlement. Contact has worked closely with Te Rūnanga o Ngāi Tahu and Papatipu Rūnaka ki Murihiku to ensure any effects on taonga species and taonga fish species are appropriately addressed.

Overall, the views of Te Rūnanga o Ngāi Tahu and Papatipu Rūnaka ki Murihiku in respect of taonga species are directly relevant to the FTAA process. The settlement provides Te Rūnanga o Ngāi Tahu with a voice concerning the management of taonga species and taonga fish species:

- > The Minister of Conservation is required to consult with, and have particular regard to, the views of Te Rūnanga when making policy decisions concerning the protection, management or conservation of that taonga species;
- > Te Rūnanga o Ngāi Tahu is appointed as an advisory committee to provide advice to the Minister of Conservation on all matters concerning the management and conservation by the Department of Conservation of freshwater fisheries within the Ngāi Tahu Claim Area; and
- > In all matters concerning the management and conservation by the Department of Conservation of taonga fish species within the Ngāi Tahu Claim Area, the Minister of Conservation must consult with, and have particular regard to, the advice of that advisory committee.

### **Recognition of Mana**

Ngāi Tahu's mana is recognised in the Treaty settlement through statutory acknowledgements, deeds of recognition, Tōpuni and place names.

A statutory acknowledgement is an acknowledgement by the Crown of Te Rūnanga o Ngāi Tahu's particular cultural, spiritual, historical, and traditional association with a site or area. Statutory acknowledgements recognise the mana of Ngāi Tahu over a range of sites and areas in the takiwā and have implications for processes under the RMA and the Heritage





New Zealand Pouhere Taonga Act. There are no statutory acknowledgements within the project area. However, there is a statutory acknowledgement for the Maitai River, to the east of the project, which has been highlighted during discussions about the Project Contact has had with Te Ao Marama Inc on behalf of Papatipu Rūnaka ki Murihiku.

The Crown agency responsible for the management of a site or area subject to a statutory acknowledgment was required to enter into a deed of recognition, providing for agreed input by Te Rūnanga o Ngāi Tahu into management processes. The settlement includes a deed of recognition for the Maitai River.

Tōpuni provide an overlay of the cultural, spiritual, historic, and traditional association of Te Rūnanga o Ngāi Tahu, on certain areas of land managed by the Department of Conservation. The Ngāi Tahu values of the Tōpuni are a mandatory consideration in approving management policies, plans and strategies under the Conservation Act. Te Rūnanga o Ngāi Tahu must also be consulted in the preparation of those documents. There are no Tōpuni within the Project Site.

The settlement also amended the place name of various locations in the takiwā. No names within the Project Site were amended.

### **Management Input**

Te Rūnanga o Ngāi Tahu has the right to nominate persons to dedicated seats on the following statutory bodies:

- > One seat on the New Zealand Conservation Authority; and
- > Two seats on each Conservation Board wholly within the Ngāi Tahu Takiwā.

The New Zealand Conservation Authority and relevant Conservation Boards must be invited to provide written comments.

There are a range of protocols that have been developed with the Department of Conservation, setting out:

- > The ways in which the Department of Conservation will exercise its functions, powers and duties in relation to specified matters within the Ngāi Tahu Claim Area; and
- > How the Department of Conservation will, on a continuing basis, interact with Te Rūnanga o Ngāi Tahu and provide for Te Rūnanga o Ngāi Tahu's input into its decision-making process, including in respect of freshwater fisheries and RMA involvement.

The protocols are required to be noted in conservation management strategies, conservation management plans and national park management plans affecting the Ngāi



Tahu Claim Area. The CMS refers to the Department of Conservation and Ngāi Tahu protocols, including at pages 28 and 306–314.

### **Nohoanga**

The Treaty settlement provides nohoanga entitlements for the purpose of permitting members of Ngāi Tahu Whanui to temporarily occupy land close to the waterways on a non-commercial basis, so as to have access to the waterways for lawful fishing and gathering of other natural resources. There are no nohoanga entitlements within the Project Site.

### **Commercial redress in respect of the Slopedown Forest.**

The Slopedown Forest, including land now owned by Matariki Forests (Lot 1 DP 12509) was formerly Crown forest licensed land that was transferred to Te Rūnanga o Ngāi Tahu as commercial redress in its Treaty settlement.

#### **3.6.4 Any principles or provisions in the Ngā Rohe Moana o Ngā Hapū o Ngāti Porou Act 2019 that would be invoked by the project**

Not relevant to the Project.

#### **3.6.5 Treaty Settlement Land**

The Project will not be located on land returned under a Treaty settlement (as opposed to the commercial redress land noted above, now owned by Matariki Forests).

#### **3.6.6 Public Works Act 1981**

No processes have been undertaken under the Public Works Act 1981 in relation to the Project.

#### **3.6.7 Māori Land, Marae, or Identified Wāhi Tapu within the Project Area**

As mentioned above, of relevance to the proposed Wind Farm Site, the Maitara River is a Statutory Acknowledgement Area. The Mimiha Stream, which runs east to west along the northern boundary of the Wind Farm Site, with tributaries of the stream running through the Site, is a tributary of the Maitara River. In addition, there are some minor tributaries to the Mokoreta River, located to the south of the site, and the Redan Stream which drain part of the site. These also discharge into the Maitara River. The engagement Contact has undertaken with mana whenua has informed the management of effects on this tributary to ensure that the cultural values associated with the Maitara River, including the Mimiha Stream and other tributaries, are protected.



There are no parcels of Māori land, marae or other identified wāhi tapu within the Project Site.

### **3.7 LEGAL INTERESTS**

Contact has entered into investigation and development agreements with the relevant landowners of the properties subject to the Wind Farm Site (i.e. Jedburgh Station, Matariki Forests and Glencoe Station) to provide Contact with the property rights to allow the construction and operation of the wind farm on these properties.

Contact also owns 90ha of land near the Wind Farm Site that will be essential to allow access to the site, and providing areas that could be used as a lay down area during construction or to store equipment, as well as for compensation of effects through wetland restoration and enhancement.

Contact may also need an airspace easement for the transmission line that may cross over a privately owned property, depending on the final constructed route, and will discuss this directly with the landowner as required.

### **3.8 OTHER MATTERS**

#### **3.8.1 Details of the application**

The Project, as described in the Project description, is the same as the project that Contact sought resource consents for under the Covid Fast-track Act on 21 December 2023 (as it was refined through that process). For completeness, the other statutory authorisations sought in this FTAA application were not subject to the Covid Fast-track Act application.

#### **3.8.2 Outcome of the decision and the reasons for it**

On 18 March 2025 the expert consenting panel (**Panel**) declined to grant the application for resource consents.

The Panel considered that there was insufficient baseline information in respect of a number of ecology-related matters to grant consent, and that:

- > Effects on wetlands and the wider 'Jedburgh plateau' will be significant and cannot appropriately be offset or compensated; and
- > There would be significant adverse effects on natural landscape and features, natural character and visual amenity that could not be adequately mitigated or remedied by conditions.



The Panel concluded that the section 104D RMA 'gateway' test – which non-complying activities must pass under a standard RMA or Covid Fast-track Act process – could not be met because the Project was:

- > Contrary to objectives and policies of the Southland District Plan (in particular relating to ecosystem and indigenous biodiversity and natural features and landscapes), the proposed Southland Water and Land Plan, and the Southland Regional Policy Statement; and
- > Inconsistent with the NPS-FM.

Contact strongly disagrees with the Panel's conclusions, which were based on erroneous interpretations of the relevant planning instruments, incorrect application of section 104D(1)(b), and various other flaws. It has appealed the decision to the High Court on numerous grounds (although it understands it will need to withdraw that application if and when a substantive application is made under the Fast-track Approvals Act). It has full confidence in the extensive work undertaken by its expert advisors, and in the outcomes endorsed by the agreements reached with mana whenua and DoC (and separately by numerous environmental and planning experts), and considers that the Project should have been granted resource consents under the Covid Fast-track Act.

### **3.8.3 Climate Change and Natural Hazards**

The main risks to the Project from climate change and natural hazards are from seismic events. The site is not subject to any additional natural hazard overlays on the Environment Southland natural hazard database. The wind farm design and construction methodology will be informed by multiple engineering design reports to ensure the risks from natural hazards are managed to acceptable levels.

Contact will ensure any potential risks due to natural hazards are managed by:

- > Undertaking robust design and site management, including permitting, operational management, monitoring and reporting;
- > Conducting regular auditing of conformance with internal standards and consent requirements; and
- > Independent reviews by third-party independent experts.

Therefore, it is considered the Project is not subject to significant risks associated with climate change and natural hazards.



### 3.9 SPECIFIC PROPOSED APPROVALS

#### 3.9.1 Approvals under the Resource Management Act 1991

The Project is seeking consent for activities that would otherwise be applied for under the RMA. An assessment against any relevant national policy statement and national environmental standards is provided in the sections below.

##### 3.9.1.1 National Policy Statement for Renewable Electricity Generation (“NPS-REG”)

The sole objective of the NPS-REG is:

*“To recognise the national significance of renewable electricity generation activities by providing for the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities, such that the proportion of New Zealand’s electricity generated from renewable energy sources increases to a level that meets or exceeds the New Zealand Government’s national target for renewable electricity generation.”*

Policies A, B, C1 and C2 of the NPS-REG are considered most relevant to the proposed Southland Wind Farm as they seek to ensure decision makers:

- > Recognise the benefits of renewable electricity generation activities;
- > Acknowledge the practical implications of achieving an increase in the proportion of electricity generated from renewable resources;
- > Acknowledge the practical constraints associated with the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities; and
- > Have regard to offsetting measures or environmental compensation, including those which benefit the local environment and community affected, when considering any residual environmental effects of renewable electricity generation activities that cannot be avoided, remedied or mitigated.

The Southland Wind Farm Project is consistent with, and is strongly supported by, the NPS-REG as it will provide a significant source of renewable energy, noting the Government has set an aspirational goal of 100% renewable electricity by 2030, compared to the strategic target in the NPS-REG that 90% of electricity generated in New Zealand be derived from renewable energy sources by 2025 (based on delivered electricity in an average hydrological year). The Government is aiming to increase renewable electricity supply as a major part of meeting New Zealand’s greenhouse gas emission reductions and transitioning to a zero carbon economy. Meeting the Government’s target for an increase in the generation of



electricity from renewable resources will require significant development of renewable electricity generation activities, and therefore, the development of the Southland Wind Farm is of national significance.

Policy C1 of the NPS-REG recognises the practical implications and locational constraints associated with the development of renewable electricity generation activities. There are a number of factors that influence the identification of a site as being suitable for the development of a wind farm, not least being the quality or consistency of the wind resource and proximity to transmission infrastructure. Contact considers the proposed site to be suitably located in terms of these factors, having regard to its wind quality and accessibility to the transmission network. It also needs to be acknowledged that turbines need to be located where the wind resource exists, and due to the elevation often required to ensure consistent and quality wind speeds, they cannot always be placed in locations where they are not visible from any dwellings, for example, or where flying animals never forage or transit.

Policy C2 seeks to ensure that decision-makers have regard to any offsetting measures or environmental compensation when considering any residual environmental effects associated with the renewable electricity generation activities that cannot be avoided, remedied or mitigated. Contact is committed to managing the ecological effects associated with the Southland Wind Farm to at least a no-net loss level and making a positive contribution to the environment and Aotearoa's biodiversity.

The proposed Southland Wind Farm is therefore strongly consistent with the stated objective and policy directives of the NPS-REG.

### **3.9.1.2 National Policy Statement for Freshwater Management**

The NPS-FM is relevant to the Southland Wind Farm as the Project involves various activities that have the potential to impact on freshwater (and wetlands), including:

- > The discharge of contaminants to surface water bodies, namely sediment during construction;
- > The take and use of water from the Mimiha Stream;
- > The temporary diversion of water during the construction phase to construct bridges and culverts; and
- > Impacts on natural inland wetlands.



The objective of the NPS-FM is:

*‘...to ensure that natural and physical resources are managed in a way that prioritises:*

- (a) first, the health and well-being of water bodies and freshwater ecosystems*
- (b) second, the health needs of people (such as drinking water)*
- (c) third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.’*

The policies of the NPS-FM considered to be of most relevance to the proposal are as follows:

*Policy 1: Freshwater is managed in a way that gives effect to Te Mana o te Wai.*

*Policy 2: Tangata whenua are actively involved in freshwater management (including decision-making processes), and Māori freshwater values are identified and provided for.*

*Policy 3: Freshwater is managed in an integrated way that considers the effects of the use and development of land on a whole-of-catchment basis, including the effects on receiving environments.*

*Policy 4: Freshwater is managed as part of New Zealand’s integrated response to climate change.*

*Policy 5: Freshwater is managed (including through a National Objectives Framework) to ensure that the health and well-being of degraded water bodies and freshwater ecosystems is improved, and the health and well-being of all other water bodies and freshwater ecosystems is maintained and (if communities choose) improved.*

*Policy 6: There is no further loss of extent of natural inland wetlands, their values are protected, and their restoration is promoted.*

*Policy 7: The loss of river extent and values is avoided to the extent practicable.*

*Policy 9: The habitats of indigenous freshwater species are protected.*

*Policy 10: The habitat of trout and salmon is protected, insofar as this is consistent with Policy 9.*

*Policy 11: Freshwater is allocated and used efficiently, all existing over-allocation is phased out, and future over-allocation is avoided.*

*Policy 15: Communities are enabled to provide for their social, economic, and cultural well-being in a way that is consistent with this National Policy Statement.*



With respect to these policies, the following points are noted:

- > Contact has engaged with mana whenua in relation to the Southland Wind Farm Project and understands that maintaining the quality of the surrounding freshwater bodies and habitats and wetland environments is important to preserving the cultural association with these environments;
- > Recommendations from technical reports prepared for the Project will ensure there is a condition framework for the management of activities with the potential to impact freshwater environments, to ensure all actual and potential adverse effects are appropriately managed;
- > The Southland Wind Farm has gone through an iterative design process, applying the effects management hierarchy to manage the effects of the Project on wetlands and reduce the effects to the greatest extent practicable. Where adverse effects on wetlands cannot be practicably avoided, Contact will ensure these effects are minimised, remedied and where residual adverse effects remain, are appropriately offset and compensated for through the restoration or creation of similar habitats near the site. That approach is available and consistent with the NPS-FM for the purposes of clause 3.21 and 3.22 of the NPS-FM, because the wind farm meets the definition of 'specified infrastructure', will provide significant national and regional benefits and there is a functional need for the wind farm to be in this location;
- > The Project has the potential to generate adverse effects on water quality, aquatic ecology, water quantity and hydrological function. In accordance with the policy direction of the NPS-FM, the Southland Wind Farm has a functional need to be located in this location and Contact will adopt the effects management hierarchy to the management of the actual and potential effects identified. For the most part, the potential effects can be avoided through the implementation of best practice management measures which will be outlined in the ESCP. Where residual adverse effects remain following the implementation of these measures, Contact will offset and compensate for these effects;
- > The proposed construction management measures, including the implementation of an ESCP, will ensure the habitats of indigenous freshwater species are protected. In addition, Contact will avoid disposing of fill near streams to protect any potential habitats. Further, the proposed stream crossings have been designed to ensure fish passage is provided for;
- > The proposed water take is not located within a catchment that is defined as over allocated in the Proposed SWLP; and





- > Contact is seeking to undertake the Southland Wind Farm Project to provide a nationally significant source of renewable electricity and manage any potential or actual adverse effects in a manner which prioritises the health and wellbeing of waterbodies. The construction and operation of the Southland Wind Farm will also provide for the economic and social wellbeing of the Southland region and New Zealand more generally.

For the reasons detailed above, the Southland Wind Farm is consistent with the objectives and policies of the NPS-FM.

#### **3.9.1.3 National Policy Statement for Highly Productive Land**

The vast majority of the Southland Wind Farm will be located on land classified 4 or higher. Only approximately 4ha of the Project footprint will be on highly productive land (all of which is on Class 3 land). This includes the GIP (approx. 1.5ha), some minor areas associated with some of the transmission line pylons and approximately 2.5ha of land on the Contact Energy property which might be retained as a storage or laydown area following the construction of the wind farm. There is an operational and functional need for the infrastructure to traverse and be located on this land. The GIP location has a functional and operational requirement to be situated near the existing Transpower transmission line, allowing for the connection of the wind farm to the National Grid. The 2.5ha of land on the Contact Energy property which might be retained as a laydown or storage area post-construction cannot be in a different location as this is at the entrance to the Project Site and on land Contact owns and has control over.

As such, the Project is not an inappropriate use and development of the land pertaining to the Project Site, especially when the vast majority of the site is not classified as Highly Productive Land.

#### **3.9.1.4 National Policy Statement for Indigenous Biodiversity (“NPS-IB”)**

The proposed Southland Wind Farm is a renewable electricity generation asset and activity, and as such, the NPS-IB does not apply to any parts of this activity, including construction. Therefore, the objectives and policies of the NPS-IB do not apply to the Southland Wind Farm Project and the proposed activity does not need to be assessed against the provisions of the NPS-IB.

#### **3.9.1.5 National Environmental Standards for Freshwater (“NES-FW”)**

The NES-FW regulates activities that pose risks to the health of freshwater and freshwater ecosystems. Of particular relevance to the proposed wind farm are rules relating to activities that may affect natural wetlands and culverts. As outlined in Section 3.7 above,



resource consent will be required for activities relating to the construction and alteration of culverts and potentially for activities within, or within 100m of, natural wetlands.

The NES-FW specifies rules relating to the construction of specified infrastructure. This includes the requirement of the adoption of the effects management hierarchy. As outlined above, Contact has applied, and will continue to apply, the effects management hierarchy to the proposed activity. As wetlands are present on the site, where practicable, adverse effects on wetlands will be avoided. However, where effects cannot be avoided or mitigated, offsetting and compensation for these effects will be implemented. This will include the enhancement and restoration of existing copper tussock-rautahi marsh wetlands on the property owned by Contact at Davidson Road East, located near the entrance to the Port Blakely Forest. The extent of the wetlands will be increased through the conversion of grazed wetted pasture with hydric soils to natural wetlands through stock exclusion, planting, weed control and the blocking of artificial drains.

#### **3.9.1.6 National Environmental Standards for Electricity Transmission Activities**

The proposed activity includes the construction of a new transmission line to convey the electricity generated from the wind farm to the National Grid. The Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009 only apply to existing high voltage electricity transmission lines. Therefore, these standards do not apply to the proposed activity.

#### **3.9.1.7 National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (“NES-CS”)**

The NES-CS outlines the standards relating to the disturbance of soil at sites that are potentially contaminated. Contact commissioned a soil expert to confirm whether activities listed on the Hazardous Activities and Industries List (“**HAIL**”) have occurred on the Project Site. This confirmed that the Project Site has not been subject to any HAIL activities, and as such, the NES-CS does not apply to the Project.

#### **3.9.1.8 National Environmental Standards for Air Quality (NES-AQ”)**

The NES-AQ came into effect on 1 June 2011 and contains standards which set a guaranteed minimum level of health protection for people living in New Zealand, particularly in relation to discharges within urban airsheds. No resource consent for the Project is required under these Regulations, however, Contact will ensure that the management of dust and other discharges of airborne particulates associated with the construction of the wind farm are appropriately managed.



### **3.9.2 Approvals relating to complex Freshwater Fisheries activities**

#### **3.9.2.1 Whether an in-stream structure is proposed (including formal notification of any dam or diversion structure), and a description of the extent to which this may impede fish passage**

As noted above, the Project involves constructing culverts within streams. The freshwater ecology assessment has identified that, in certain watercourses within the Southland Wind Farm Site, it may be necessary to prevent trout from passing through in order to protect the threatened *Gollum galaxias* populations. At this stage, it is assumed that Contact will need to apply for approval for the proposed culverts under this regulation or seek an appropriate dispensation to provide for this activity.

