

Rārangi take o te Komiti Taiao
me ngā Whakawā Whanokē

Environment and Hearings Committee Agenda

Wednesday 5 June 2024, 4 pm
Council Chamber, Albion Street, Hāwera



Ngā Mema o te Komiti / Committee Members



Andy Beccard
Chairperson



Steffy Mackay
Deputy Chairperson



Leanne Horo
Councillor



Aaron Langton
Councillor



Diana Reid
Councillor



Robert Northcott
Deputy Mayor



Tane Houston
Iwi Representative

Apatono / Delegations

The primary role of the Environment and Hearings Committee is to oversee the Council's obligations under the Resource Management Act 1991. It also oversees a number of the Council's environment and regulatory activities. The committee comprises five Councillors.

The Committee is delegated the following decision making powers:

- To hear all resource consent applications with the power to make a final decision;
- To hear all Building Act dispensation applications with the power to make a final decision;
- To consider all matters of an environmental and regulatory nature relating to the Resource Management Act, Building Act, Health Act, Fencing of Swimming Pools Act, Dog Control Act and to make recommendations to the Council;
- To hear objections to all matters in accordance with the Dog Control Act 2006
- To receive reports on all matters approved under delegated authority by the Chairperson or Deputy Chairperson together with the Group Manager Environmental and those functions delegated to staff;
- Hear objections to menacing dog classifications and either uphold or rescind the classification (as per the Dog Control Act).
- To consider and make recommendations to the Council on environmental policy matters relating to the Resource Management Act and the District Plan;
- To hear all plan changes and make recommendations to the Council;
- Non-notified applications will be referred to the Environment and Hearings Committee for consideration in the following circumstances:
 - Where the Group Manager Environmental believes that there are potential community effects and/or policy implications in respect of the District Plan, and no other applications of this nature have been dealt with before by the Council to determine precedent;
 - Appeals relating to consent conditions approved under delegated authority; and
 - Applications for retrospective activities.

That aside, the Committee is only able to make recommendations to the full Council for it to consider and make a decision on.

Huinga Tāngata / Attendance Register

Date	01/02/23	22/03/23	26/04/23	15/05/23	07/06/23	19/07/23	25/10/23	08/11/23	22/11/23	13/03/24	24/04/24
Meeting	O	E	O	O	O	O	O	E	O	O	O
Andy Beccard	√	√	√	√	√	√	√	√	√	√	√
Leanne Horo	√	√	√	A	√	√	√	√	√	A	√
Aarun Langton	√	√	√	√	√	√	A	√	√	√	A
Steffy Mackay	√	√	√	√	√	√	√	√	A	A	√
Robert Northcott	√	√	√	√	√	√	√	√	√	√	√
Diana Reid	√	√	√	√	A	√	√	√	√	√	√
Tane Houston - Iwi Representative	-	-	-	-	√	√	√	√	A	√	A

Key

- √ Attended
- AO Attended Online
- Was not required to attend
- A Apology
- Y Attended but didn't have to attend
- X Did not attend - no apology given

Types of Meetings

- O Ordinary Council Meeting
- E Extraordinary Council Meeting

He Karere Haumarū / Health and Safety Message

In the event of an emergency, please follow the instructions of Council staff.
If there is an earthquake – drop, cover and hold where possible. Please remain where you are until further instruction is given.

He Pānga Whakararu / Conflicts of Interest

Members are reminded of the need to be vigilant to stand aside from decision making when a conflict arises between their role as an elected member and any private or other external interest they might have.



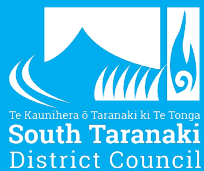
Rārangi Agenda

Environment and Hearings Committee

Wednesday 5 June 2024 at 4 pm

1. **Karakia**
2. **Matakore / Apologies**
3. **Tauākī Whakarika / Declarations of Interest**
4. **Whakatakoto Kaupapa Whānui, Whakaaturanga hoki / Open Forum and Presentations**
5. **Whakaaetia ngā Menīti / Confirmation of Minutes**
 - 5.1 [Environment and Hearings Committee held on 24 April 2024](#)..... Page 9
6. **Pūrongo / Report**
 - 6.1 [Submission on Harmony Energy Solar Farm - Ōpunakē](#) Page 18
7. **Pūrongo-Whakamārama / Information Report**
 - 7.1 [Environmental Services Activity Report](#)..... Page 158
8. **Whakataunga kia noho tūmatanui kore / Resolution to Exclude the Public**
 - 8.1 [Public Excluded Environment and Hearings Committee held on 24 April 2024](#)..... Page 168
9. **Karakia**

Next Meeting Date: Wednesday 17 July 2024 – Council Chamber, Albion Street, Hāwera
Elected Members’ Deadline: Wednesday 3 July 2024



Karakia

1. Karakia

Ruruku Timata – Opening Prayer

(Kia ururu mai ā-hauora,
ā-haukaha, ā-hau māia)

Ki runga

Ki raro

Ki roto

Ki waho

Rire rire hau

Paimārire

*(Fill me with vitality)
strength and bravery)*

Above

Below

Inwards

Outwards

The winds blow & bind us

Peace be with us.



Matakore Apologies

2. Matakore / Apologies

Leave of Absence: *The Board may grant a member leave of absence following an application from that member. Leave of absences will be held in the Public Excluded section of the meeting.*



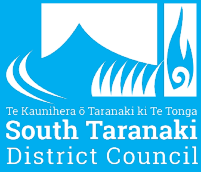
Ngā Whakaputanga Declarations of Interest

3. Tauākī Whakarika / Declarations of Interest

Notification from elected members of:

- a) Any interests that may create a conflict with their role as an elected member relating to the items of business for this meeting; and
- b) Any interests in items in which they have a direct or indirect pecuniary interest as provided for in the Local Authorities (Members' Interests) Act 1968.

Declarations of Interest: Notification from elected members of: Any interests that may create a conflict with their role as an elected member relating to the items of business for this meeting; and Any interests in items in which they have a direct or indirect pecuniary interest as provided for in the Local Authorities (Members' Interests) Act 1968



Whakatakoto Kaupapa Whānui, Whakaaturanga hoki Open Forum and Presentations

4

4. Whakatakoto Kaupapa Whānui Whakaaturanga hoki / Open Forum and Presentations

The Council has set aside time for members of the public to speak in the public forum at the commencement of each Council, Committee and Community Board meeting (up to 10 minutes per person/organisation) when these meetings are open to the public. Permission of the Mayor or Chairperson is required for any person wishing to speak at the public forum.



Ngā Menīti Komiti

Committee Minutes

To	Environment and Hearings Committee
Date	5 June 2024
Subject	Environment and Hearings Committee – 24 April 2024

(This report shall not be construed as policy until adopted by full Council)

Whakarāpopoto Kāhui Kahika / Executive Summary

1. The Environment and Hearings Committee met on 24 April 2024. The Environment and Hearings Committee is being asked to confirm their minutes from 24 April 2024 as a true and correct record.

Taunakitanga / Recommendation

THAT the Environment and Hearings Committee adopts the minutes from the Environment and Hearings Committee meeting held on 24 April 2024 as a true and correct record.



Menīti Minutes

5

Ngā Menīti take o te Komiti Taiao me ngā Whakawā

Environment and Hearings Committee

Held in the Council Chamber, Albion Street, Hāwera on Wednesday 24 April 2024 at 4 pm

Kanohi Kītea / Present: Councillors Andy Beccard (Chairperson), Leanne Horo, Steffy Mackay, Diana Reid and Deputy Mayor Robert Northcott.

Ngā Taenga-Ā-Tinana / In Attendance: Liam Dagg (Group Manager Environmental Services), Adam Bridgeman (Consultant Planner), Sophie Canute (Strategic Planner), Sarah Capper-Liddle (Planner), Sara Dymond (Governance and Support Team Leader), Reg Korau ((Iwi Liaison Manager – Acting Planning Team Leader), Caitlin Moseley (Planner), Jessica Sorensen (Planning and Development Manager) and eight members of the public.

Matakore / Apologies: Councillor Aaron Langton and Tane Houston.

RESOLUTION

(Deputy Mayor Northcott/Cr Mackay)

10/24 EH **THAT the apologies from Councillor Aaron Langton and Tane Houston be received.**

CARRIED

1. Whakaaetia ngā Menīti / Confirmation of Minutes

1.1 Environment and Hearings Committee on 13 March 2024.

RESOLUTION

(Deputy Mayor Northcott/Cr Reid)

11/24 EH **THAT the Environment and Hearings Committee adopts the minutes from the meeting held on 13 March 2024 as a true and correct record.**

CARRIED

2. Pūrongo / Report

2.1 Subdivision Application RMS23026

John and Enfys Soothill (the Applicant) was seeking subdivision and associated land use resource consent to develop the 13.4934 ha rural zoned property at 408 Ketemarae Road, Normanby (LOT 2 DP 313626) into five allotments. The application was before the Committee as it may have an impact on administration of the District Plan (DP), given the proposal may set a precedent, being the first development in the district to come forward

as a discretionary activity subdivision (with no avenue for the subdivision consent to be considered as controlled or restricted discretionary activity) as considered under the National Policy Statement (NPS) for Highly Productive Land (HPL).

Mr Bridgman provided an overview of why the application was being presented to the Committee. The application was before the Environment and Hearing Committee as it may have an impact on administration of the DP, given the proposal may set a precedent as it was the first subdivision application lodged as a discretionary activity as considered under the National Policy Statement (NPS) for Highly Productive Land (HPL).

Applicants – Environmental Planning Consultant Allan Chesswas, John Soothill, Enfy's Soothill and Bevan Soothill

Mr Chesswas introduced himself and the applicants and tabled an opening submission. The outstanding issues were around the proposal resulting in loss of productive land to residential development, relationship between minimum lot size controls and lot sizes able to be approved under the Plan and the RMA, relevance of NPS HPL where evidence of adverse effects was absent or ambiguous, obligation to consider and provide appropriate weight to the assessment of the NPS HPL in decision-making in relation to other matters requiring consideration under Section 104, matter of 'invalidity' incomplete coverage or uncertainty in the statutory planning documents and relevance of Part 2 of the RMA, the extent to which approving the application might set an undue precedent and whether the proposal is consistent with the objectives and policies of the Plan and with the RMA.

The party position was that the subject land would retain productive capacity in spite of the likelihood that part of the land could be used for residential development. The lot size controls identified in the DP were not intended to prohibit rural lifestyle allotments but to ensure potential adverse effects were addressed through a consent process where subdivision triggers those controls. The obligation and weight of the NPS HPL, in decision-making, in relation to other matters requiring consideration under Section 104 was only to have regard to not give effect. The DP has not been updated to reflect the provisions of the NPS HPL and there is uncertainty in the statutory planning documents. Of critical importance was the absence of a rural lifestyle zone in the District which was common to most other districts reflecting that smaller rural allotments were appropriate in a rural lifestyle zone. The proposal would not set a precedent due to the particularly suitable attributes of the site including location, commonality with trends in adjacent land use and presence of amenities and also because of the timing of the application which was written pre NPS HPL planning framework. As the evidence demonstrated that productive capacity would be retained, was not uncertain and ambiguous, there being no evidence of adverse effects associated with pressure on or fragmentation of the subject it was considered that any potential adverse effects would be no more than minor and that effects may rather only be positive. The proposal was therefore consistent with the NPS HPL, the objectives and policies of the Plan and the RMA.

Mr John Soothill wished to subdivide their property as they would like to wind down their life to a smaller property. Both Mr and Mrs Soothill had lived in South Taranaki all their lives, paid rates from the age of 23 and worked for 54 years, 7 days a week in that time. The property was purchased in 2000, farming it for 24 years with factory cattle, subdivided the property for his son in 2002 and they built a house on the property where they currently lived in 2003. They established a productive orchid and vegetable garden so they were

familiar with the soil and climate of the property and wider area. There had been significant investment in the property, for example, the Soothills' subdivided the property and established many new paddocks, essential race, new water system, 16 new troughs, fencing off water ways, building new cattle yards, removing compromised and deteriorated trees on the boundary fence. They enjoyed living in the location and had been blessed to be close to his family. There is a demand for 1 hectare properties with high value homes and they would like to take this prudent opportunity to make smaller blocks to meet that demand.

Mr Bevan Soothill reiterated that their family had lived in the area for the last 20 years and they were a close-knit family. In the future and as his parents move into their advanced years, his wife and kids would like to be near his parents to assist them as they see this as their role. His father was a country man and living in the country was where his heart was. He supported the subdivision being approved so they could continue to be neighbours and support his parents.

Deputy Mayor Northcott noted that the Committee's concerns were around maintaining rural character and setting a precedent. He asked for Mr Chesswas's, if the Committee granted this application, how would these allotments compare with other similar properties outside this area. Mr Chesswas explained that in terms of the phase rural character there were two important elements to consider. The visual qualities and what people expected to experience in terms of amenity of the countryside there was a process to follow that if it was affecting the character in that area then those affected were considered. The applicant went through a process to obtain written approvals from four of the ideas except one who was not considered adversely affected. The rural character in regards to the NPS also talked about productive capacity and how they ensured this decision did not have a negative effect of capacity throughout the rest of the District. The NPS directed regional councils to prepare policies that identified productive land within three years. Through that process, they did not have to include parts of the HPL that were not part of a geographical cohesive block. The Regional Council has not yet completed the mapping required under the NPS HPL and this information is not available for this resource consent application. This property had a lot of characteristics that when considered together was unique compared to most HPL in the rural zone of South Taranaki for example there was a footpath, it's close to Hāwera, adjacent land was already fragmented the property itself was 12 hectares and there is a watermain running past the front gate. The only effect of precedent setting would only be towards other properties that had equal attributes which was particularly critical because no rural/residential zone in the South Taranaki DP.

Deputy Mayor Northcott noted that the neighbour who did not provide written approval wanted to put in an effluent pond, if this was granted how would that affect his position in putting that in. Mr Chesswas commented that the effluent pond was able to be located a distance from the boundary without any adverse effects.

Councillor Reid referred to commentary in the application where it stated that there was pressure on land for subdivision. She had noticed a number of subdivisions in the District that had not yet been built on and questioned how this subdivision was any different. Mr Chesswas understood that there was a much greater discussion about housing affordability in New Zealand than there was around loss of productive soil to residential activity. When there was a scarcity of land for homes then it lifted the prices of those properties hence why there were signs on fences. Mr Bevan Soothill noted that there were plenty of residential

subdivisions, however, from his observation there were not a lot of rural subdivisions. Mr Chesswas noted that there were issues with access to land farm in New Zealand

Councillor Mackay referred to proposed scheme plan noting that the proposed boundary line would go through an old existing building. She asked if this building was intended to be removed. Mr Bevan Soothill confirmed this. Councillor Mackay furthered asked what the plans were for the pump shed as it was also on the boundary line. Mr John Soothill explained that the pump shed was used to service the farm. Mr Chesswas confirmed that the pump shed was presently on the right of way.

Councillor Beccard queried whether 6,000^{m²} could still be considered HPL. Mr Chesswas confirmed that 6,000^{m²} could retain productive capacity and there was evidence that homesteading was considered productive. It retains a productive capacity because it could still be used to produce goods. In his opinion the driver of the NPS was preventing the small lot residential subdivision on the edge of town.

Consultant Planner – Adam Bridgeman

Mr Bridgeman highlighted that given the assessment that the land was Class 1 and 3 under the HPL and the site was not able to be rezoned or identified by the Council to be rezoned, the relevant Sections of the NPS HPL were 3.8, 3.9 and 3.10. Section 3.8 was a stringent section and that territorial authorities must avoid the subdivision of HPL unless measures were applied. Section 3.8.1(a) stated that the applicant demonstrated that the proposed lots would retain the overall productive capacity of the subject land over the long term. In his opinion it could not retain the overall productive capacity. It did not relate to the economic viability of the land.

Mr Bridgeman explained that Section 3.9 he found was not applicable in this case as it was related to the land use components. Section 3.10 could not fit through the exemptions it may allow HPL to be subdivided if not otherwise enabled under Section 3.8 and 3.9 if there was permanent or long-term constraints on the land and was not able to be economically viable for at least 30 years. Following consideration of the above that Section 3.8 and 3.9 of the NPS HPL had not enabled the proposed subdivision, the application must be assessed against the Section 3.10 exemptions. The productive capacity assessment (Greenbridge Report) refuted that it would be economically viable and showed multiple ways it could be. The size of the land holding was not by itself a deterrent of long term constraint. He could not see it getting through the NPS HPL and he had to have regard for that.

Mr Bridgeman commented on the effects of the proposed subdivision. The right side of Ketemarae Road heading towards the sea, there were the smaller lots that had been granted as a Controlled and Discretionary Activity. This subject site was caught because it was under 13.5 hectares. There was a minimum balance lot which was still a discretionary activity and triggered the consent pathway which was highlighted in Mr Chesswas evidence. The lot design was fairly consistent with those lots previously granted under the controlled activity resource consent applications.. Looking at reverse sensitivity, which was the reason why the neighbouring property was identified as an affected party, they did not provide any comment. The fragmentation of the land was particularly on the eastern side of Ketemarae Road, there were two dairy farms either side that created the character and amenity of that side of Ketemarae Road. He did not put much weight of this on his decision because it was arguable, but it would be fairly consistent with the area. The affects would be the loss of productive potential of the site.

Mr Bridgeman referred to the Councils objectives and policies and character and amenity. Objective 3.14 was to enable the efficient and effective functioning of farming and rural based activities and ensure that activities were not inhibited by adverse effects of new incompatible land uses. Objective 2.1.6 to manage large scale and more intensive subdivision to enhance its attributes that contribute to rural character and amenity values, including productive working landscape. It would be taking something that would be potentially viable in terms of leasing or grazing and taking that out of the rural zone making it unproductive. It could be surmised that the land would not be used in the capacity that had been suggested.

Mr Bridgeman considered that the proposal would result in a loss of productive land, would set a precedent in terms of rural residential development, may result in cumulative effects on rural character along Ketemarae Road, was inconsistent with the DP Objectives and Policies for the rural zone (Objectives 2.1.3 and 2.1.4, Policies 2.1.5, 2.1.6, 2.1.11 and 2.1.12), was inconsistent with the NPS HPL and overall was therefore contrary to promoting sustainable management of natural and physical resources in accordance with the purpose of the RMA. Taking this into account the recommended the application be declined.

Mrs Sorensen noted that this had been a complex situation. The NPS HPL came into stop particular things and fragmentation was one of them. The NPS did provide in the regions the ability to have discretion in their own decision making abilities. This application was being presented to the Committee as a decline because of the standing orders but there was also changes in policy direction and a precedence being set by the recommendation if it was overturned. She asked the Committee to be mindful when in deliberations to provide the Council in the decision making the powers and ability to identify what this precedence would do.

Deputy Mayor Northcott noted that the purpose of the rules was to stop subdivisions in a rural zone and asked what protection (if any), did the Committee have going forward to stop it accelerating out of control if this application was granted. Mrs Sorensen commented that between making the decision now and when the NPS directed the Council to put it in place there were stringent rules around the urban environment. She did not believe the Council had the ability to restrict or isolate particular circumstances when they would all be in the rural zone creating this lifestyle fragmentation. There was a risk between now and the time we change our rural zone rules that we could come up against multiple situations of fragmentation on LUC Land classes 1 - 3. Mr Chesswass had picked up, that there was a shred footpath and cycleway and water reticulation however this could be said around a large area of the Hāwera urban area had that same type of situation.

Councillor Ried noted that HPL meant that it had the potential to be used in a highly productive way. The Council could not put a restrictions on how people used their land, therefore there was capacity for them to put a house on and two sheep which was the reality of buying in a rural area. Mrs Sorensen confirmed, there were provision and instruments such as a consent notice which is an ongoing condition, however, these were more to mitigate effects identified at that time. Ms Wansbrough noted that the difficulty was looking at the permitted activities rules in the DP and what could be done on any lot as a permitted activity which allowed for residential uses.

Ms Wansbrough noted that the Committee needed to consider in Section 3.8 of the NPS HPL was had the applicant demonstrated that it would be retained overall as HPL.

Councillor Beccard asked for Mr Bridgeman's opinion on whether 6,000 m² could be used for HPL. Mr Bridgeman referred to Section 3.8.1(a) of the NPS HPL that the overall productive capacity was to be retained. In his opinion, with a house being on the site, there would be a loss of productive capacity of that area. Mr Chesswas had discussed the different scenarios of raising the economic viability of the site, however, through discussions the overall productive capacity would not be retained in that situation. Looking at the intent of the section it related to situations where there was a larger farm of 130 ha being split into 65 ha allotments to protect the productive capacity. In his opinion, this application did not meet Section 3.8.1(a) regardless of the overall productive capacity of the soil which the NPS related to could maintain.

Councillor Beccard asked if the NPS HPL was fully understood. Ms Wansbrough explained that in this context in subdivision the wording of the NPS was clear and directive. What the NPS meant and what it was used for depended on the context because the Council had different obligations depending on what decision making task it was doing at the time. When giving effect to the NPS, by way of plan making role under the RMA, it was clear what had to be done. When coming to decision making on a consent application its obligation was to have regard to it. It was one of many instruments that the Council had to have regard to. In her view, the wording of those provisions in Section 3.8 in the NPS was very clear in terms that there were some specific exemptions that allowed for subdivision. The area for argument was how that was taken into account in the decision making process because the Committee had discretion on how the different elements in Section 104 applied to your decision making. There was guidance in case law that could assist with understanding them.

Applicant right of reply

Mr Chesswas wanted to highlight matters around being consistent with the NPS HPL. There were comments made around the surrounding land uses and surrounding sites and that certain applications were allowed as a controlled activity because there was a large enough balance lot. Those properties were viable land, large enough for people to make some profit. The subject land was not in that category. It was 14 ha and it covered the viability capacity. He provided an analysis of viability in his assessment. He did not believe that the NPS was fully understood by anyone because it had to play out in this process and the decision needed to be made on how it was interpreted. The evidence provided by AgFirst took into account the interest to service buying the land and whether it would be economically viable land to use and it was found that it was not. In his matrix, provided he looked at the current interest rate, the capital needed to buy the land and to add it to their enterprise it would not be viable. It had the value it had because people valued it for residential living. It was viable to put a home on it and support that home through productive use of the soil and the land and this was why people for looking for these types of land. That was what he considered viability. He noted that the NPS did not direct Council to ensure productivity, it directed them to ensure productive capacity. Because of the incomplete coverage of the planning instruments, as a result of the recent coming in of the NPS, then they could recall to Part 2 and consider demand for residential and the diverse type of properties. He referred to the comment that the AgFirst report concluded that productive capacity would not be retained. He noted that it was a peer review, and he was unsure if that conclusion could be reached from a peer review report.

Mr John Soothill hoped that the Council would consider his livelihood when making their decision. Mr Bevan Soothill added that there was subdivision on the eastern side of Ketemarae Road with subdivisions currently being undertaken.

3. Pūrongo-Whakamārama / Information Report

3.1 Environmental Services Activity Report

The report provided an update on activities relating to the Environmental Services Group for the month February 2024.

RESOLUTION

(Cr Mackay/Deputy Mayor Northcott)

12/24 EH **THAT the Environment and Hearings Committee receives the Environmental Services Activity Report – February 2024.**

CARRIED

4. Nga Tōkeketanga kia noho tūmatanui kore / Resolution to Exclude the public

RESOLUTION

(Deputy Mayor Northcott/Cr Mackay)

13/24 EH **THAT the public be excluded from the following parts of the proceedings of this meeting, namely:**

The general subject of each matter to be considered while the public is excluded, the reason for passing this resolution in relation to each matter, and the specific grounds under section 48(1) of the Local Government Official Information and Meetings Act 1987 for the passing of this resolution are as follows:

General subject of each matter to be considered	Reason for passing this resolution in relation to each matter	Ground(s) under section 48(1) for the passing of this resolution
1. Report – Subdivision Application RMS23026	To Enable the Committee to.	That the exclusion of the public from the whole or the relevant part of the proceedings of the meeting is necessary to enable the Council/Committee to deliberate in private on its decision or recommendation in any proceedings where: ii) the local authority is required, by any enactment, to make a recommendation in respect of the matter that is the subject of those proceedings. Use (i) for the RMA hearings and (ii) for hearings under LGA such as objections to Development contributions or hearings under the Dog Control Act. s.48(1)(d)

CARRIED

5. Tuwhera anō te Hui / Resume to Open Meeting

RESOLUTION

(Deputy Mayor Northcott/Cr Mackay)

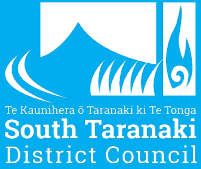
16/24 EH **THAT** the Environment and Hearings Committee resumes in open meeting and agrees that the decision be released to the public once the applicants have been notified of the decision.

CARRIED

The meeting concluded at 5.48 pm.

Dated this day of 2024.

.....
CHAIRPERSON



Pūrongo Report

6

To	Environment and Hearings Committee
From	Kaitātari Whakamahere Taiao / Planner, Caitlin Moseley
Date	5 June 2024
Subject	Submission on Harmony Energy Solar Farm – Ōpunakē

(This report shall not be construed as policy until adopted by full Council)

Whakarāpopoto Kāhui Kahika / Executive Summary

1. Harmony Energy NZ #4 Limited (the Applicant) has applied to the Environmental Protection Authority (EPA) for land use consent under Schedule 6 of the COVID-19 Recovery (Fast Track Consenting) Act 2020 (the Act). The Applicant seeks to construct and operate the Harmony Energy Solar Farm – Ōpunakē (the Project) on a site located at 915 Ihaia Road, Ōpunakē. The solar farm will have an approximate project area of 152 hectares (ha) with approximately 175,000 panels installed on the site.
2. As part of the consenting process the Council has been invited to provide feedback on the application. Although the Environment and Hearings Committee does not have a decision-making role under the Act, the purpose of this report is to provide the Committee with sufficient information on which it can provide effective input into the process, should it wish to exercise that option.

Taunakitanga / Recommendation(s)

THAT the Environment and Hearings Committee provides comment on the Harmony Energy Solar Farm – Opunake and identifies key points to be included in the feedback to the Ministry for the Environment (MFE), noting that the deadline is 12 June 2024 for feedback.

Kupu Whakamārama / Background

The site and surrounding area

3. The Applicant seeks land use consent under the Act to construct and operate the Harmony Energy Solar Farm – Ōpunakē on the subject site. The resource consent application from Harmony Energy NZ #4 Limited is attached as [Appendix 1](#).
4. The proposed site is located at 915 Ihaia Road, Ōpunakē with a combined total area of 152ha, comprised of two separate titles (Figure 1).

5. The site is currently used as part of a dairy farm unit, with existing dwellings, a dairy shed, associated farm buildings and effluent ponds. The surrounding environment is predominantly characterised by rural blocks in addition to smaller rural residential sites. The area is also the location of several large and small watercourses that flow from Mount Taranaki to the coastline. The site is located approximately 10km from Ōpunakē, whilst Mount Taranaki (edge of Egmont National Park) is located approximately 5km to the northeast.
6. The site is gently undulating, intersected by lahar mounds and contains numerous ecological features including waterbodies, wetland areas and terrestrial habitats. The Otahi Stream and unnamed tributaries flow through the site (Figure 2).
7. The site has a mixture of Land Use Capability (LUC) 3 and 6 (Figure 3) soils. Land with a LUC rating of 1, 2, and 3 is classified as Highly Productive under the National Policy Statement for Highly Productive Land (NPS-HPL). Therefore, consideration for the NPS-HPL is required in this instance.

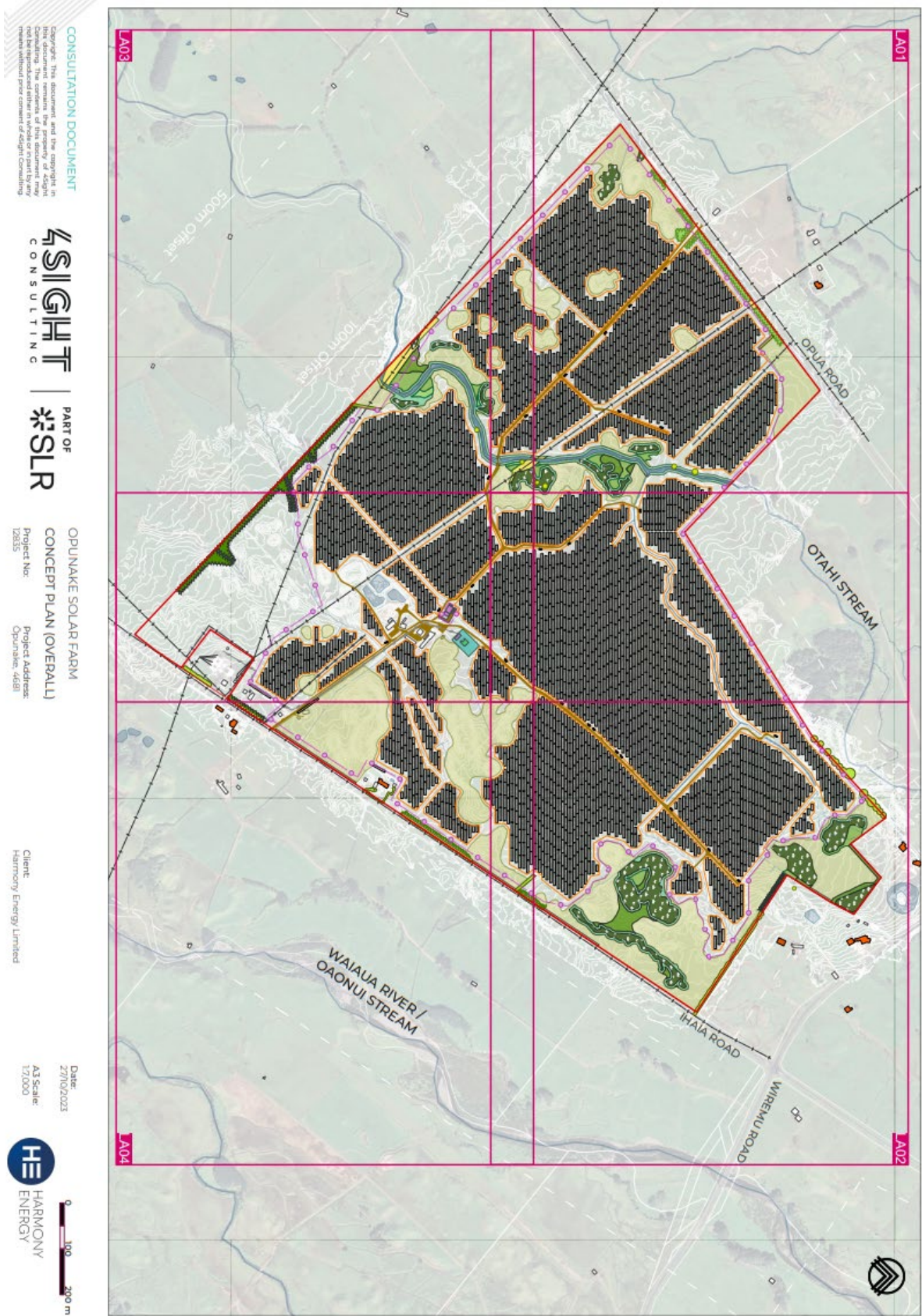


Figure 1: Solar farm site layout (Source: Beca)

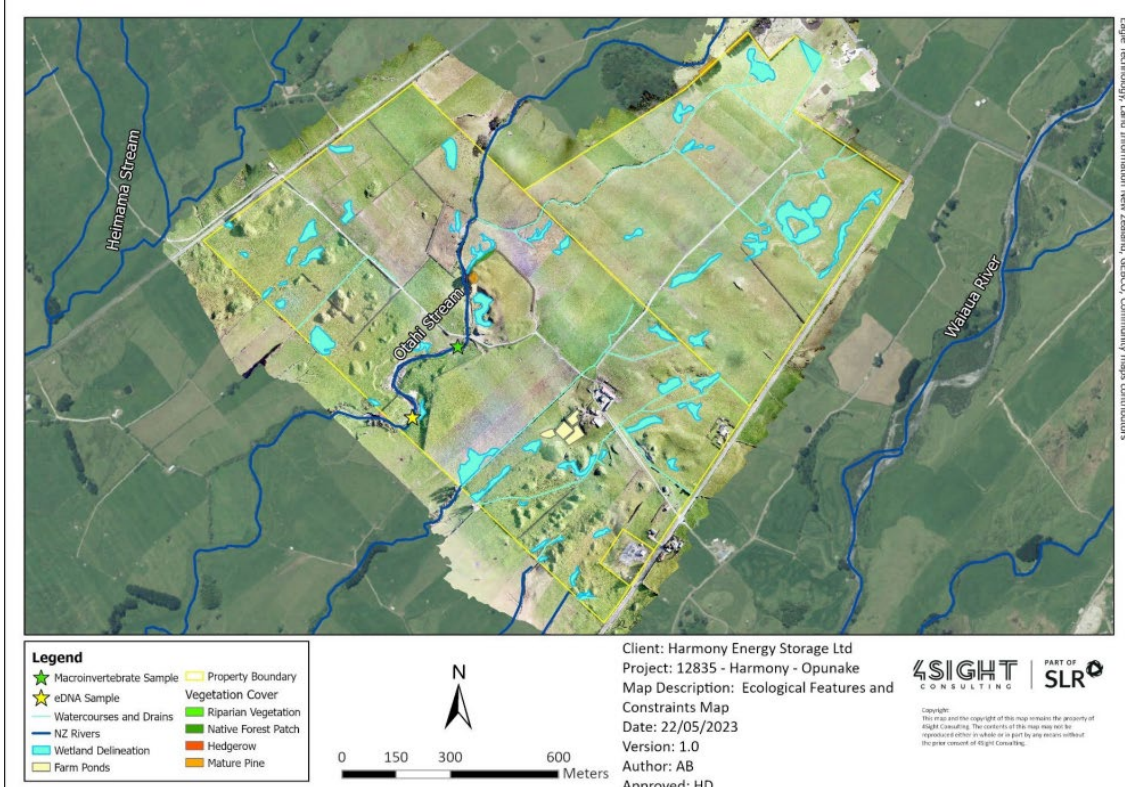


Figure 2: Ecological features within subject site (Source: 4Sight Consulting)

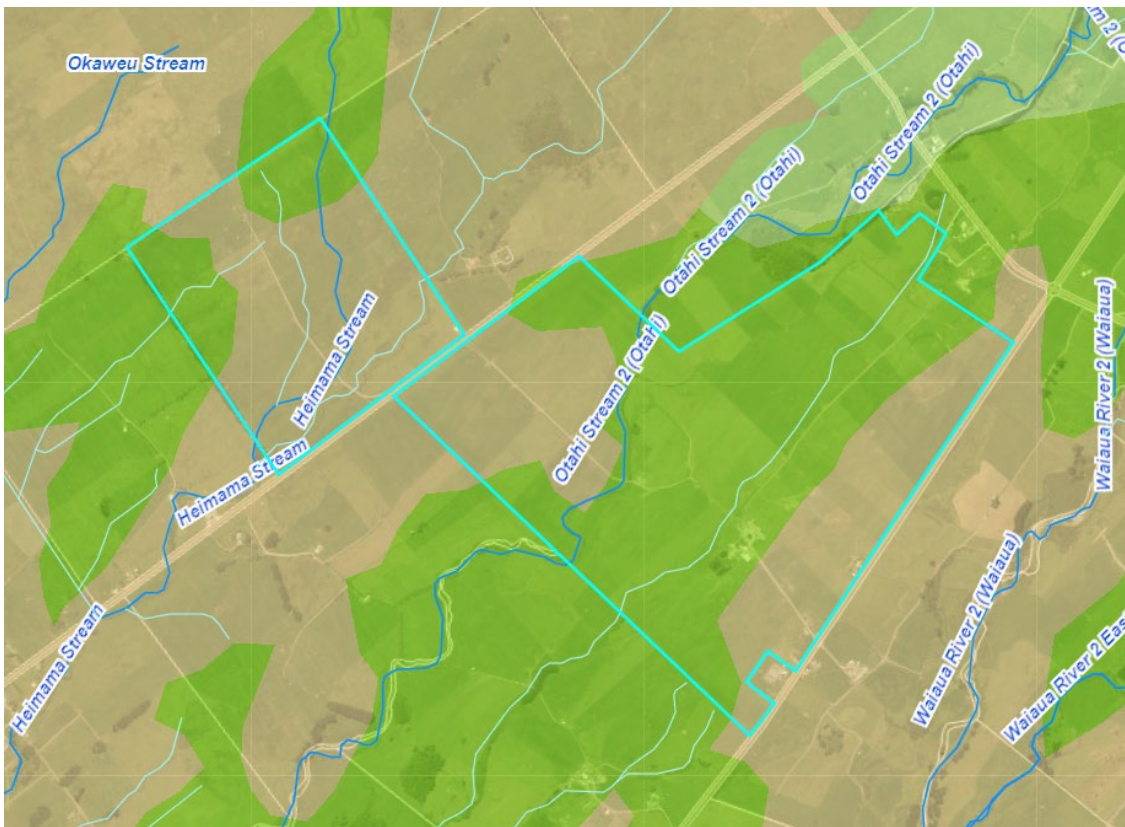


Figure 3: LUC soil classification (Source: Manaaki Landcare Research).

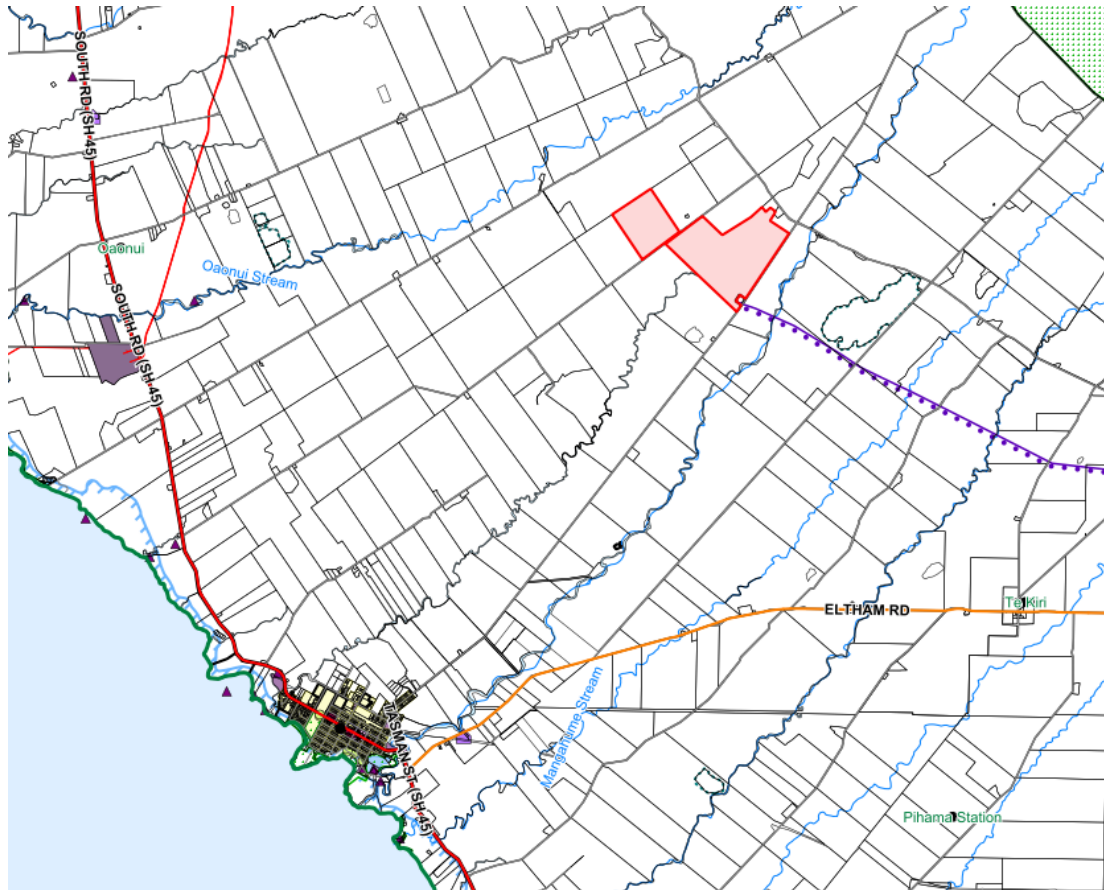


Figure 4: Subject site in relation to surrounding areas (Source: STDC IntraMaps)

Operational Details

- 8. The solar farm will have an approximate project area of 127 ha and a peak output of 80 – 110 megawatts. It will involve the erection of approximately 175,000 monocrystalline panels on mounting structures. These will connect to 25 medium voltage power stations. These power stations will connect to a substation, housing the 33 kV switchgear. The on-site substation will facilitate the interconnection of the solar farm into the national grid via Transpower’s Ōpunakē substation located on the adjacent property at 909 Ihaia Road.
- 9. Earthworks are required to establish internal access roads and platforms for the power stations, substation and other maintenance buildings. Significant trenching will also be undertaken to allow the laying of the cables that will connect the various aspects of the solar farm. A range of mitigation landscaping is proposed, along with a range of ecological protection and enhancement measures.
- 10. It is estimated that Phase 1: Engineering, Procurement, and Construction of the project will produce 557,264 labour hours, whilst Phase 2: Operation, Maintenance, and Asset Management will produce 10728 labour hours per year, for 34 years.

Previous comment provided on application

- 11. The Council previously provided comment on the project in March 2023, via the Fast Track Consenting Team at the Ministry for the Environment. The comment was formulated between the Mayor, the Environment and Hearings Committee Chairman, the Group

Manager of Environmental Services, the Planning and Development Manager, and the Planner. The full comment document can be found as Appendix 2.

12. The comment provided by the Council identified benefits, constraints and other considerations that the Council considered relevant to the project. The comment highlighted several issues and points of consideration that the Council deemed relevant and of particular regard to the project. These included:
 - a) Loss of productive farmland
 - b) Reverse sensitivity and visual impact on surrounding properties and the wider South Taranaki landscape
 - c) Impacts on the natural environment and ecological systems
 - d) Natural hazards
13. It was determined by the Council at this time that the project should be consented under the Covid-19 (Fast-track Consenting) Act 2020. The fast-tracking legislation provides a framework for the project to be considered, which by comparison, the District Plan does not.
14. Since this initial comment was provided, the EPA determined in October 2023 that the application complied with the requirements set out in clause 3, Schedule 6 of the Act and could be provided to the panel appointed to determine the application.

Whaiwhakaaro me ngā aromatawai / Considerations and Assessments

15. Included with the Application were several expert assessments and reports that support and provide guidance for the project and its overall design and operation. These expert reports are common with standard resource consents and offer assessments on opportunities and constraints that may be experienced within a project or development.
16. The reports and assessments that were provided as part of the application include:
 - a) Preliminary Site Investigation
 - b) Ecological Effects Assessment
 - c) Archaeological Assessment
 - d) Glint and Glare Assessment
 - e) Acoustic Assessment
 - f) Assessment of Landscape Effects
 - g) Geotechnical assessment
 - h) Work Phases and Job Creation Assessment
 - i) Transport Assessment

Consistency with South Taranaki District Council Operative District Plan

17. The Solar Farm, if it was consented under the Operative South Taranaki District Plan, would be classified as a Discretionary Activity overall, following the bundling principle
18. The objectives and policies of the District Plan recognise that the Rural Zone is predominantly a productive environment but allows for a mix of different design, scale and intensity. The District Plan is clear that any land use or development not typically considered a rural based activity must not inhibit the main uses of the zone.

19. Further, the objectives and policies of the energy section also provide for renewable energy in the District, with emphasis on uses that minimise effects on adjoining land based uses. They direct energy efficiency, and the use and development of renewable energy as matters that the Council must have particular regard to under Section 7 of the Resource Management Act. There is also national policy direction (National Policy Statement for Renewable Electricity Generation 2011 (NPSREG)) which requires that all district plans provide for, and recognise the benefits of, renewable electricity generation.

Key Matters for Consideration

20. The Expert Consenting Panel invites specified identified parties, including the relevant local authority, to provide comment on the application.
21. From the original comment that was provided by the Council in April 2023, and further review of information provided with the application there are four key matters of consideration that are applicable to the project:

The National Policy Statement for Highly Productive Land (NPS-HPL)

22. As identified earlier in the report, the site is comprised of LUC 3 and 6, with LUC 3 considered Highly Productive under the NPS-HPL. Therefore, the provisions of the NPS-HPL must be considered.
23. The proposed solar farm meets Section 1.3(1) of the definition of specified infrastructure as defined in the NPS-HPL. Specified infrastructure is defined as below:

Specified Infrastructure means any of the following:

- (a) *infrastructure that delivers a service operated by a lifeline utility;*
- (b) *infrastructure that is recognised as regionally or nationally significant in a National Policy Statement, New Zealand Coastal Policy Statement, regional policy statement or regional plan;*
- (c) *any public flood control, flood protection, or drainage works carried out:*
 - (i) *by or on behalf of a local authority, including works carried out for the purposes set out in section 133 of the Soil Conservation and Rivers Control Act 1941; or*
 - (ii) *for the purpose of drainage, by drainage districts under the Land Drainage Act 1908*

24. Section 3.9 of the NPS determines that the Council must avoid inappropriate use or development of highly productive land unless exemptions in 3.9(2) apply:

Section 3.9(2)(j)(i) states:

[the development is inappropriate except where] it is associated with one of the following, and there is a functional or operational need for the use or development to be on the highly productive land:

- (i) *the maintenance, operation, upgrade, or expansion of specified infrastructure:*

25. As such regard needs to be given to whether the project is considered exempt as per Section 3.9. Consideration should still be given for the potential loss of productive farmland if a dual occupancy arrangement of the site is not undertaken.

26. Section 6.4.1 of the Consent Application identifies that the solar farm will also be used as an active sheep farm to ensure that productive agricultural use of the land continues in conjunction with the solar farm.

Affected Parties

27. The application has identified those parcels of land that are adjacent to the subject site, as required under the Fast Track Consenting Act. However, aside from the landscape mitigation plan that was formulated as part of the Landscape Assessment, there is little to no mention of other parties that may be considered affected to this proposal.
28. Visual effects on surrounding properties have been considered as part of the Assessment of Landscape Effects Report, noting that the “application is considered appropriate in the receiving landscape setting, with an overall magnitude of moderate-low (minor) adverse landscape effects, reducing to a low (less than minor) level of adverse effects in the long term.”
29. Correspondence between the agent acting on behalf of Harmony Energy and Taranaki Iwi has been included as part of the application. Taranaki Iwi have provided consent conditions to avoid, remedy, mitigate, or offset adverse effects that may arise from the project.
30. Consideration, therefore, may be given to surrounding properties and the wider community for any affects that may arise as a result of the project.

Lack of Data

31. There is little to no data in regard to industry best practice for the end of life process for solar farms. This process includes the decommissioning of the project, site rehabilitation, and solar panel disposal.
32. Section 8.4.4 of the application does identify that the components used in the manufacture of solar energy can be recycled at the end of life.
33. The consent conditions that were provided by Taranaki Iwi also consider the end of life for the project, whether it includes decommissioning or re-powering of the site.
34. However, the application seems to lack any clear direction for the end of life process for the project.

Cumulative Effects

35. South Taranaki has seen a recent increase for large-scale solar farms, with at least three consents being granted in 2023.
36. Additionally, the Council has also been invited to comment on a second solar farm project that has been applied for by Energy Farms Limited under the COVID-19 Recovery (Fast Track Consenting) Act, 2020. The solar farm is similar in size to this project and located on Upper Kina Road, Ōpunakē.
37. As with this application, the comment was officially provided to the Ministry of the Environment in early 2023 and formulated between the Mayor, the Environment and

Hearings Committee Chairman, the Group Manager Environmental Services, the Planning and Development Manager and the planner.

38. The application provides little to no comment on cumulative effects of large-scale solar farms on the wider environment.
39. It is noted that the Assessment of Landscape Effects was published in November of 2023, which may allow for some inconsistencies with the above statement.
40. Having noted the several large-scale solar farms that have been consented in 2023, the cumulative effects of solar farms and projects on the wider South Taranaki landscape should be considered.

Whakakapia / Conclusion

41. The Ministry for the Environment have identified South Taranaki District Council as being an affected party to the project, for Harmony Energy NZ #4 Limited to construct a solar farm at 915 Ihaia Road, Ōpunakē.
42. Subsequently, Ministry for the Environment have requested the Council provide feedback on the project. Feedback has to be received by MFE no later than 12 June 2024.



Caitlin Moseley
**Kaitātari Whakamahere Taiao /
Planner**



[Seen by]
Liam Dagg
**Kaiarataki Taiao /
Group Manager Environmental Services**

[Appendix 1: Application Forms and Assessment of Environmental Effects](#)

[Appendix 2: Initial South Taranaki District Council Written Comment on Application](#)



Ōpunake Solar Farm






Harmony Energy NZ #4 Limited

Application to Environmental Protection
Authority (EPA) – Covid 19 – Recovery (Fast-
Track Consenting) Act 2020
Assessment of Environmental Effects

December 2023

REPORT INFORMATION AND QUALITY CONTROL

Prepared for:	Pete Grogan Harmony Energy NZ #4 Limited	
Author:	Jarrold Dixon Senior Planner	
Reviewer:	Christina Walker Principal Planner	
Approved for Release:	Mark Ashby Sector Lead, Renewable Energy	
Document Name	12835_Ōpunake Solar Farm_AEE_V1.0	
Version History:	V1.0	13 December 2023



CONTENTS

Page

1	APPLICANT AND PROPERTY DETAILS	V
2	INTRODUCTION	1
3	EXECUTIVE SUMMARY	1
4	INFORMATION REQUIREMENTS	3
4.1	General	3
5	THE SITE & SURROUNDING ENVIRONMENT	3
5.1	Ownership and Easement Arrangements	3
5.2	Overseas Investment Office	4
5.3	Site Characteristics	5
5.4	Surrounding Environment	7
6	THE PROPOSAL	8
6.1	Proposal Overview.....	8
6.2	Construction Traffic	21
6.3	Operational Requirements	21
6.4	Educational Visits.....	21
6.5	Hazardous Substances.....	23
7	CONSULTATION	23
7.1	Consultation	23
7.2	Taranaki Regional Council	24
7.3	South Taranaki District Council	25
8	PURPOSE OF THE COVID-19 ACT.....	28
8.1	Employment and Economic Benefits (s.19(a) and (d)(i)).....	28
8.2	Social and Cultural Wellbeing (s.19(b))	29
8.3	Speed of Progression (s.19(c)).....	29
8.4	Public Benefit (s.19(d))	30
8.5	Sustainable Management of Natural and Physical Resources (s.19(e)).....	32
9	REASONS FOR THE APPLICATION	33
9.1	National Environmental Standards for Fresh Water (NES-FW).....	33
9.2	National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NES-CS).....	34
9.3	Regional Freshwater Plan for Taranaki.....	34
9.4	South Taranaki District Plan	34
9.5	Overall Status of the Application.....	36
10	SCHEDULE 6 – SECTION 9(4) – ASSESSMENT OF ENVIRONMENTAL EFFECTS.....	36
10.1	Introduction.....	36
10.2	Effects Associated with Contaminated Land	36
10.3	Construction Effects	37
10.4	Operational Traffic Effects.....	40
10.5	Glint and Glare.....	41
10.6	Landscape and Visual Effects.....	44
10.7	Ecological Effects	46
10.8	Cultural Effects	47
10.9	Archaeological Effects	48
10.10	Noise Effects – Operational	49



10.11 Rural Character and Amenity Effects	49
10.12 Natural Hazards – Geotechnical	51
10.13 Positive Effects	51
10.14 Summary of Effects Assessment	53
11 STATUTORY ASSESSMENT (SCHEDULE 6)	53
11.1 National Policy Statements	53
11.2 Regional Policy Statement for Taranaki	61
11.3 Regional Freshwater Plan for Taranaki.....	68
11.4 South Taranaki District Plan	69
11.5 Iwi Management Plans	79
11.6 Statutory Assessment Summary.....	81
12 OTHER RELEVANT MATTERS.....	81
12.1 Taranaki Iwi Claims Act 2016.....	81
12.2 Proposed National Policy Statement for Renewable Energy Generation [2023] – Draft for consultation	81
12.3 Advancing New Zealand’s Energy Transition.....	82
12.4 Measures for Transition to an Expanded and Highly Renewable Electricity System	82
12.5 Aotearoa New Zealand Energy Strategy.....	83
13 SECTION 104B	83
14 PART 2 ASSESSMENT.....	84
14.1 Section 8	84
14.2 Section 7	84
14.3 Section 6	85
14.4 Section 5	85
15 CONCLUSION	86

List of Tables

Table 1 – Abbreviations	iv
Table 2 – Legal Parcels Comprising the Site.....	4
Table 3 – Earthworks Volumes	17
Table 4 - Construction Staff Numbers - Months 1-12.....	20
Table 5 - Construction Staff Numbers – Months 13-24.....	20
Table 6 – Adjoining Properties.....	26
Table 7 - Estimated Job Creation (Source: Green Enco Report)	28
Table 8 - Costs Associated with Ecological Enhancement	28
Table 9 - Key Provisions - NES-FW	33
Table 10 – Key Provisions – Regional Freshwater Plan for Taranaki	34
Table 11 – Consent Triggers – South Taranaki District Plan	35
Table 12: Megamap Risk rating of roads (Source: TAR).....	39

List of Figures

Figure 1: Location Plan (Source: TRC Localmaps)	5
Figure 2: Wetlands and watercourses	7
Figure 3: Elevations for Panels and Mounting Structures	10
Figure 4: Power Station Elevations – Inverters, Switchgear and Transformers	11



Figure 5 – Example Elevation – Transformer 13
 Figure 6: Cable Trench Cross-Section..... 14
 Figure 7: Cross Section – Internal Rooding 18
 Figure 8: Adjoining properties 26
 Figure 9: Extract from LSSE Guideline (Source: Glint and Glare Assessment) 42
 Figure 10: 21 viewer locations (Source: Glint and Glare Assessment) 43
 Figure 11: LUC Map (Source: Manaaki Whenua Landcare Research, LRIS Portal) 59

List of Appendices

- Appendix A Application Form
- Appendix B Referral Decision
- Appendix C Project Plans
- Appendix D Infrastructure Specifications
- Appendix E Preliminary Site Investigation
- Appendix F Ecological Effects Assessment
- Appendix G Archaeological Assessment
- Appendix H Glint and Glare Assessment
- Appendix I Acoustic Assessment
- Appendix J Assessment of Landscape Effects
- Appendix K Geotechnical Assessments
- Appendix L GreenEnco – Work Phases and Job Creation
- Appendix M Rule Assessment
- Appendix N Transport Assessment Report
- Appendix O Draft Restoration Plan
- Appendix P Draft Construction Method Statement
- Appendix Q Draft Construction Management Plan
- Appendix R Draft Operational Management Plan
- Appendix S Iwi Recommended Conditions
- Appendix T TRC Correspondence
- Appendix U Consultation Pack
- Appendix V Record of Consultation – Adjoining Parties
- Appendix W Draft Erosion and Sediment Control Plan
- Appendix X Draft Conditions
- Appendix Y Legal Advice on NPS:HPL
- Appendix Z Framework Construction Traffic Management Plan
- Appendix AA Records of Title

Table 1 – Abbreviations

Abbreviation	Terminology
Covid-19 Act	COVID-19 Recovery (Fast-Track Consenting) Act 2020
RMA	Resource Management Act 1991
NES-CS	Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011
NES-FW	Resource Management (National Environmental Standards for Freshwater) Regulations 2020
NPS-FM	National Policy Statement for Freshwater Management 2020
Harmony	Harmony Energy NZ #4 Limited
AEE	Assessment of Environmental Effects
MW	Megawatts
AC	Alternating Current
DC	Direct Current
MVA	Megavolt Amperes
RPS	Taranaki Regional Policy Statement
RITS	Regional Infrastructure Technical Specification
STDC	South Taranaki District Council
STDP	South Taranaki District Plan
CIA	Cultural Impact Assessment
MOU	Memorandum of Understanding
ESCP	Erosion and Sediment Control Plan
DESCP	Draft Erosion and Sediment Control Plan
SMP – CS	Site Management Plan – Contaminated Soils
PSI	Preliminary Site Investigation (NES-CS)
ACM	Asbestos Containing Material
TAR	Transport Assessment Report
CTMP	Construction Traffic Management Plan
CMP	Construction Management Plan
OMP	Operational Management Plan
HCV	Heavy Commercial Vehicle/s
ALE	Assessment of Landscape Effects
ZTV	Zone of Theoretical Visibility
NZEECS	New Zealand Energy Efficiency and Conservation Strategy



1 APPLICANT AND PROPERTY DETAILS

Site Address:	915 Ihaia Road, Ōpunake
Applicant's Name	Harmony Energy NZ #4 Limited
Address for Service:	4Sight Consulting Ltd Attention: Christina Walker christinaw@4sight.co.nz
Address for Fees:	Harmony Energy NZ #4 Limited c/ - Pete Grogan pete.grogan@harmonyenergy.co.nz
Owner:	Paul Bernard Duffy, Brenda Anne Duffy and South Taranaki Trustees Limited
Owner Address for Service:	Paul and Brenda Duffy 206 Patiki Road RD 32 Ōpunake (Pihama) Taranaki
Legal Description:	Lots 8 and 21 DP 792 and Lot 2 DP 19301
Brief Description of Proposal:	Construct and operate a Solar Farm and install grid connection via the Ōpunake Substation.
Overall activity status of resource consent:	Discretionary



2 INTRODUCTION

Harmony Energy NZ #4 Limited (*Harmony*) is seeking consent to establish and operate a solar farm at 915 Ihaia Road, Ōpunake. The site is therefore known as the Ōpunake Solar Farm.

The application is made under the COVID-19 Recovery (Fast-Track Consenting) Act 2020 (Covid-19 Act) as a referred project. The application is now included in Schedule 19 of the COVID-19 Recovery (Fast-track Consenting) Referred Projects Order 2020.

This Assessment of Effects on the Environment (AEE) has been prepared in support of that application.

3 EXECUTIVE SUMMARY

Harmony is seeking consent for the development and operation of the Ōpunake Solar Farm, which will generate 75 Megawatts (MW) AC of power at peak times (installed power of 100MW DC).

The combined land parcels associated with this proposal are approximately 152ha, however, the area within the solar farm security fence will be approximately 127ha. There will be significant setbacks provided from the surrounding roads and extensive ecological restoration included within and outside of the security fence. The key elements of the project are as follows:

- The installation of approximately 175,000 monocrystalline solar panels with a total installed capacity of 100.095 MWp. The panels are 2465mm x 1134m x 30mm. The panels will be mounted on a combination of full length arrays (being 27.7m long) and half length arrays (being 13.9m long) on pile or screw driven mounting structures.
- Each row of panel arrays will be set back between 3m and 4.5m from the back edge of the row in front (i.e. to the north) and angled between 20 and 30 degrees, so that the lower end is at 800mm above ground level (to allow sheep to graze underneath them), and the upper end is between 2.7m and 3.25m in height. Cables will be mounted on the rear of the panels and trenched from the end of each row to the nearest onsite power station.
- The inclusion of ancillary infrastructure to convert electricity generated into a format compatible with Transpower's transmission system including:
 - 25 MV (medium voltage) 'power stations' which encompass a combination of inverters, transformers and switch gear. The power stations have an appearance similar to that of a container and measure approximately 6m (long) x 2.4m (wide) with a height of approximately 3m above existing ground level mounted on compacted soil and flagstone stone.
 - A substation building to house the 33kV switchgear, all the substation control panels and auxiliary equipment. This substation building would most likely be constructed using a prefabricated building with the following approximate dimensions, 15m (long) x 6m (wide) x 4m (height) located near the existing farm buildings.
 - One 80 MVA Transformer located in the switchyard near the existing farm buildings.
 - 1 container-like structure, being 6m (long) x 2.4m (wide), and 2.9m above ground level, housing spare parts.

- One operation and maintenance building, being similar in appearance to a farm shed; and approximately 15m x 30m (450m²), 7m in height and located near the existing farm buildings.
 - Deer-type security fencing with a height of approximately 2.1m around the perimeter of the solar farm and infra-red cameras and satellite dishes mounted on 3m high support poles (total height of 3.9m) located around the perimeter of the security fence.
 - A connection to the national grid via the existing Ōpunake substation located on the adjacent property at 909 Ihaia Road.
 - Provision for ongoing farming of the land around the solar panels, specifically, sheep grazing.
 - The restoration and planting of riparian areas of the Otahi Stream, enhancement of the high quality wetlands and boundary planting (approximately 9.7 ha in total).
 - Earthworks to form platforms for the power stations, substations, operation and maintenance building, transformer and spare parts container and construct / upgrade access roads and trenching for underground cables. Some minor recontouring of small mounds in certain areas of the site will be required to allow for installation of the solar panels. Significant site levelling will not be required as the support poles for the solar panels are driven or screwed into the ground and can be height adjusted. Earthworks are anticipated to be approximately 31,673m³ over an area of 32,245m².
 - Provision for occasional educational visits to the site from school children/students, iwi and community groups to learn about solar energy generation and ecological restoration.

The proposal is a Discretionary Activity under the National Environmental Standards for Freshwater (NES-FW), a Controlled Activity under the Taranaki Regional Freshwater Plan (RFP) and a Discretionary Activity under the South Taranaki District Plan.

The proposed development has been developed using a design led approach. This approach seeks to first identify the sites opportunities and constraints, arising primarily from consideration of ecological, landscape and iwi values, with areas of land effectively excluded from development. The technical solar farm design has then been carried out in a manner that ensures land is appropriately set aside for ecological enhancement and/or maintenance of amenity and/or is reflective of iwi values. In this instance, values expressed by iwi, including (but not limited to), provision of betterment (i.e. more than just avoiding or mitigating effects, the desire to see an improvement in the health and wellbeing of the wai and whenua) and the desire to maintain lahar mounds due to their linkage with the maunga, were harmonious with key ecological and landscape considerations and Harmony Energy's own values of providing more than just clean green energy. As a result, the proposal provides for extensive restoration and results in landscape effects that are minimal, while also providing significant energy benefits through the provision of renewable energy.

The proposal will result in some short-term adverse effects as a result of construction, however these can be appropriately managed and mitigated so as to be acceptable in nature. In the longer term, the proposal has been designed to ensure that adverse effects, particularly those associated with visual amenity and rural character are minimised, and positive ecological effects are realised through extensive ecological enhancement and the generation of utility scale renewable energy. Operational effects associated with the proposal will be very low and will be readily outweighed by the ongoing positive effects associated with energy generation, ecological enhancement and, to a lesser extent, educational opportunities.



The proposal aligns with the purpose of the Covid-19 Act, in that it provides for renewable energy, positive employment and economic outcomes through construction, resilience in energy supply, and will progress faster through this process than through traditional consenting pathways.

Further, given the acceptable nature of the anticipated adverse effects, the extent of positive effects and the support expressed by iwi, the proposal clearly aligns with the relevant local, regional, and national documents. Consequently, it is considered that the purpose of the Resource Management Act 1991 (RMA), as set out in Part 2, is best served through the grant of consent.

Overall, the proposal is consistent with the purpose of the Covid-19 Act and the RMA and represents sustainable management of natural and physical resources in a manner that avoids, remedies or mitigates adverse effects.

4 INFORMATION REQUIREMENTS

4.1 General

This application has been prepared in accordance with the requirements of Schedule 6 of the Covid-19 Act, including compliance with Schedule 6, Clause 3(1). Specifically,

- a) The proposal relates solely to the referred project;
- b) It does not breach clauses 2(3)(c) or (4); and
- c) It contains all the information required under clauses 9 to 13.

The proposal is not a prohibited activity under any relevant plan, proposed plan or regulation made under the RMA.

The required application form is attached as Appendix A.

The information requirements outlined in Appendix A of the Notice of Decision issued by the Minister for the Environment, are included throughout this AEE. A copy of the Notice of Decision is attached as Appendix B.

5 THE SITE & SURROUNDING ENVIRONMENT

5.1 Ownership and Easement Arrangements

The site is owned by [REDACTED], [REDACTED] and South Taranaki Trustees Limited and is utilised for dairy farming, with a sharemilker in residence. Harmony Energy NZ #4 Limited, being a wholly owned subsidiary of Harmony Energy Limited (Harmony), has a registered option over the land. It is free to exercise that option and will do so when consents are in place. The option is in respect of an Agreement over the land which contains all the land rights needed to construct and operate the solar farm for 34 years.

Due to the commercially sensitive nature of the option, a copy of the Agreement is not attached to this application but can be provided to the Expert Consenting Panel (the Panel) on a confidential basis if required.

The site comprises the legal parcels set out in Table 2, and illustrated in Figure 1 below.



Table 2 – Legal Parcels Comprising the Site

Legal Description	Area	Record of Title
Part Lot 8 DP 792	99.4436 ha	RT TNG1/1027
Lot 2 DP 19301	52.6351 ha	RT TNK3/549
Total Site Area	152.0787	

It is noted that Lot 21 DP 792 is also owned by the same landowners (located on northern side of Opua Road) but does not form part of the subject site. The Records of Title are attached as Appendix AA.

5.2 Overseas Investment Office

Harmony has already obtained an Overseas Investment Office (OIO) exemption from the “farmland advertising” requirements of the Overseas Investment Act (OIA), in respect of the interests held by Harmony under its Easement Agreement with the relevant landowner(s).

If resource consent is obtained, Harmony will promptly submit applications for OIO consent for the interests in “sensitive” land that will be held by Harmony and any key equity investors in the project who are “overseas persons” for the purposes of the OIA.

Harmony will prepare the applications for OIO consent in parallel with preparation for the expert consenting panel process and submit applications promptly to the OIO if resource consent is obtained. A staged approach is necessary because the benefits of the project (such as generation output) cannot be accurately described to, or assessed by, the OIO until the scale and design of the project is refined through the resource consent process.

The OIO’s guidelines for maximum processing periods for applications for OIO consent to interests in sensitive land are 100 days, but the OIO has indicated that applications relating to renewable energy projects are prioritised and processing times have materially reduced below the maximum. Harmony is confident that its standing as an experienced and reputable developer and the significant public benefits of the investment mean that it is highly likely that OIO consent will be given.

As such, it is very unlikely that the OIO process would cause delays in the construction start date for these projects.

Harmony is also aware that under the OIA the responsible Minister has the discretion to “call in” for review an overseas investment in a “strategically important business” if the total electricity generation across multiple projects is more than 250MW. If each of Harmony’s fast track referral applications were approved at anticipated generation outputs that, allowing for Harmony’s interests in the already consented 147 MW Tauhei solar facility, they would in aggregate see the 250MW threshold reached. If that occurs, then Harmony would at the same time as submitting applications for interest in “sensitive” land, also voluntarily notify the OIO of investment in a strategically important business. Again, Harmony is confident that its standing as an experienced and reputable developer, and the significant public benefits of the investment mean that it is highly likely that the responsible Minister would decline to exercise the discretion. Even if

the investments were “called in” by the Minister, the same factors would weigh strongly in favour of a direction order being issued by the Minister to allow the investment to proceed.

5.3 Site Characteristics

5.3.1 Topography and Features

The site is located on rural farmland and largely comprises gentle undulating topography intersected by lahar mounds and with a few natural watercourses, notably the Otahi Stream. As previously noted, the site is utilised for dairy farming and the existing built environment is reflective of this use. Specifically, the site includes the following built development:

- A dairy shed, calf raising sheds, oxidation ponds and ancillary buildings centrally located within the site.
- Three dwellings and ancillary buildings located near the southeastern site boundary adjacent to Ihaia Road.
- A bridge crossing over the Otahi Stream.
- Overhead powerlines and support towers entering the site from the western boundary and connecting into the existing Transpower substation on the adjacent property at 909 Ihaia Road.

An aerial photograph of the site is included in Figure 1 below.

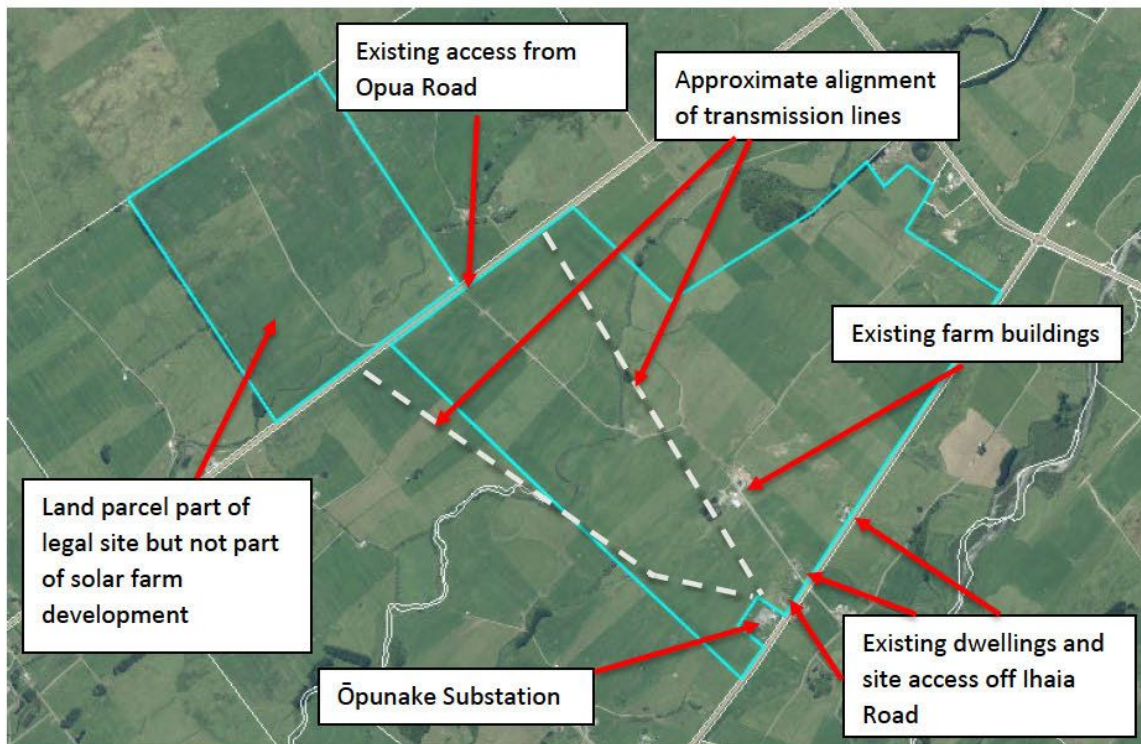


Figure 1: Location Plan (Source: TRC Localmaps)



5.3.2 Access

There are currently five access locations/vehicle crossings to the site. Four of these crossings are located near the southeastern corner of the site that service the existing dwellings and dairy sheds off Ihaia Road. The fifth access is located near the western boundary off Opua Road.

5.3.3 Vegetation and Ecological Features

An assessment of the site's existing vegetation and ecological features has been undertaken and included in the Ecological Effects Assessment attached in Appendix F.

Four primary vegetation types have been identified on site. Exotic pasture grass was the dominant landcover on site comprising predominantly rye grass in the paddock areas. The second vegetation type is the existing hedgerows which are present along the edges of certain paddocks and farm races. These hedgerows comprise predominantly exotic species such as barberry and boxthorn. The north-eastern extent of the site also has a line of mature pine trees.

The third type is riparian vegetation located along the Otahi Stream which includes a mixture of native and exotic species including tī kōuka, harakeke and willow species as well as common pasture grasses.

The fourth type includes a small area of native scrub located near the northern site boundary comprising predominantly native species including mahoe, porokaiwhiri, pukatea, kiekie, pōhuehue, puawhananga, puka and various ferns. A few weeds are also present in this scrub forest area which include climbing asparagus and blackberry.

The site contains multiple watercourses including the Otahi Stream which flows centrally through the site in a southwestern direction and artificial farm drains. Several wetlands are also scattered throughout the site. The location of the site's watercourses and wetlands are shown in Figure 2 below.

The site survey confirmed the presence (seen or heard) of several native and exotic Manu (bird) species (20 in total). An additional two species, namely, the Pīwakawaka and Kererū were identified through eDNA and a kārearea (New Zealand falcon) was observed hunting through the site on one occasion. The survey also indicated that Pekapeka-tou-roa (long-tailed bats) Mokonoko (skinks and geckos) are unlikely to be present in high densities due to the lack of suitable habitat.

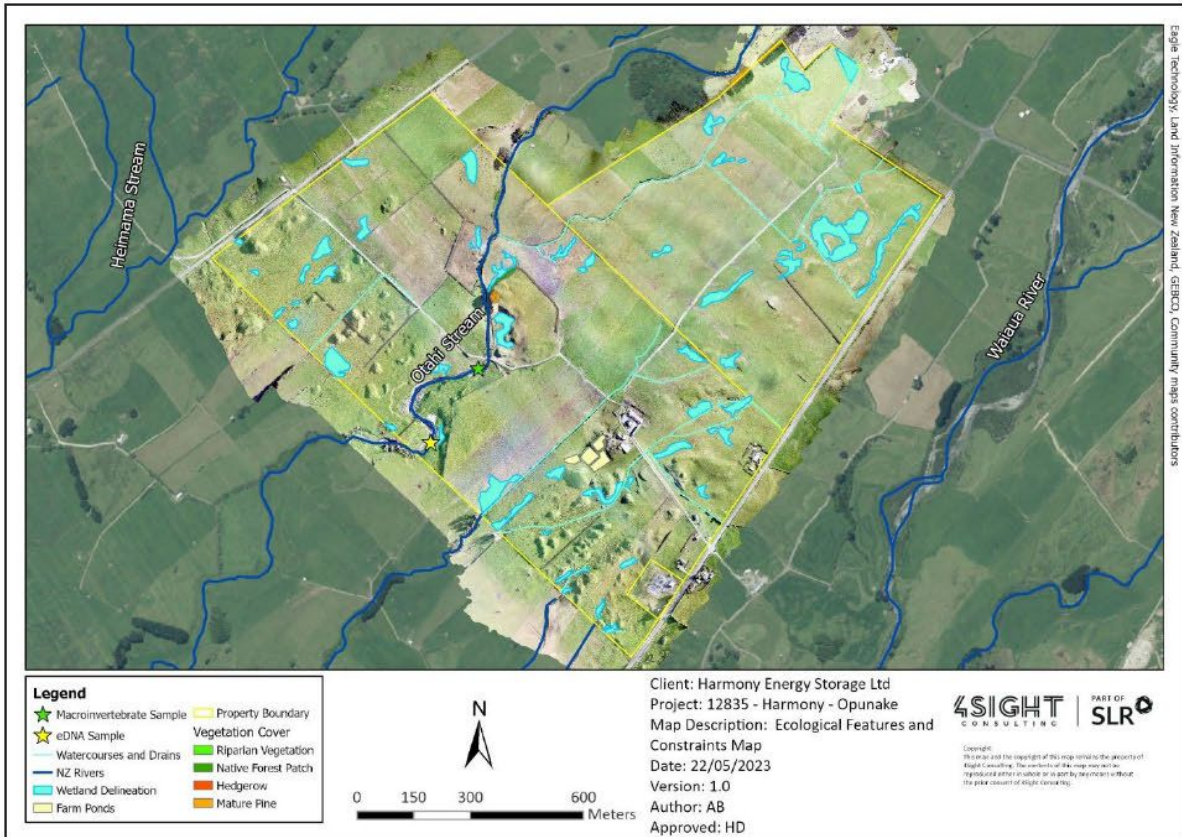


Figure 2: Wetlands and watercourses

5.3.4 Contamination

A Preliminary Site Investigation (PSI) has been undertaken and is attached as Appendix E. The PSI indicates that the area around the existing farm buildings and oxidation ponds have been subject to HAIL activities including the bulk storage of petroleum associated with the use of three existing fuel dispensers. The solar farm development, including all associated earthworks, will occur outside of these areas.

Superphosphate fertilisers have been historically applied to the site, however the landowner has advised there has been no bulk storage of these chemicals on the site due to its proximity to the Balance Agri-Nutrient facility.

No visual or olfactory evidence of contamination was identified during the walkover and inspection. There is no evidence of historic land fill activities such as uneven ground, hummocks or raised areas of ground above surrounding land.

5.4 Surrounding Environment

The surrounding environment is predominantly characterised by rural blocks in addition to smaller rural residential sites and quarries. The area is also the location of several large and small watercourses that flow in a southwestern direction from Mount Taranaki to the coastline, located approximately 10km from the site near the closest township, Ōpunake. Mount Taranaki (edge of Egmont National Park) is located approximately 5km to the northeast.



The Transpower Ōpunake substation is located on the adjacent property at 909 Ihaia Road.

6 THE PROPOSAL

6

Harmony proposes to construct and operate a solar farm with a peak output to the grid of 75MW AC. Because some power is lost between the panels and the grid, enough panels to supply up to 100MW (DC) will be installed. The solar farm will occupy approximately 127 hectares of the subject site and the property will be converted for sheep farming, both within and outside of the solar farm security fencing.

The proposed development has been developed using a design led approach. This approach seeks to first identify the sites opportunities and constraints, arising primarily from consideration of ecological, landscape and iwi values, with areas of land effectively excluded from development. The technical solar farm design has then been carried out in a manner that ensures land is appropriately set aside for ecological enhancement and/or maintenance of amenity and/or is reflective of iwi values. In this instance, values expressed by iwi, including (but not limited to), provision of betterment (i.e. more than just avoiding or mitigating effects, the desire to see an improvement in the health and wellbeing of the wai and whenua) and the desire to maintain lahar mounds due to their linkage with the maunga, were harmonious with key ecological and landscape considerations and Harmony Energy's own values of providing more than just clean green energy. As a result, the proposal incorporates extensive restoration and landscape enhancement alongside the solar farm itself, details of this are set out in the following sub-sections.

A full plan set is appended to this application as Appendix C and specifications for the relevant infrastructure are included in Appendix D. The following sections provide firstly, an overview of the project and secondly, a detailed description of the relevant infrastructure.

6.1 Proposal Overview

It is important to note that, due to the constant and fast paced nature of technological changes occurring within the industry along with the economics of supply and availability, final design elements (i.e. make/model of panel and electrical components) are subject to change during the final design and procurement process. As such, the proposal has been structured to allow for minor variations in the final design. The proposal includes the following elements:

- The installation of approximately 175,000 monocrystalline solar panels with a total installed capacity of 100.095 MWp. The panels are 2465mm x 1134mm x 30mm. The panels will be mounted on a combination of full length arrays (being 27.7m long) and half length arrays (being 13.9m long) on pole or screw driven mounting structures.
- Each row of panel arrays will be set back between 3m to 4.5m from the back edge of the row in front (i.e. to the north) and angled between 20 and 30 degrees, so that the lower end is at 800mm above ground level (to allow sheep to graze underneath them), and the upper end is between 2.7m and 3.25m in height. Cables will be mounted on the rear of the panels and trenched from the end of each row to the nearest power station.
- The inclusion of ancillary infrastructure to convert electricity generated into a format compatible with Transpower's transmission system including:
 - 25 MV (medium voltage) 'power stations' which encompass a combination of inverters, transformers and switch gear. The power stations have an appearance similar to that of a

container and measure approximately 6m (long) x 2.4m (wide) with a height of approximately 3m above existing ground level mounted on compacted soil and flagstone stone.

- A substation building to house the 33kV switchgear, all the substation control panels and auxiliary equipment. This substation building would most likely be constructed using a prefabricated building with the following approximate dimensions, 15m (long) x 6m (wide) x 4m (height) located near the existing farm buildings.
- One 80 MVA located in the switchyard near the existing farm buildings.
- 1 container-like structure, being 6m (long) x 2.4m (wide), and 2.9m above ground level, housing spare parts, to be located near the operation and maintenance building.
- One operation and maintenance building, being similar in appearance to a farm shed; and approximately 30m by 15m (450m²), 7m in height and located near the existing farm buildings.
- Deer-type security fencing with a height of approximately 2.1m around the perimeter of the solar farm and infra-red cameras and satellite dishes mounted on 3m high support poles (total height of 3.9m) located around the perimeter of the security fence.
- A connection to the national grid via the existing substation located on the adjacent property at 909 Ihaia Road.
- Provision for ongoing farming of the land around the solar panels, specifically, sheep grazing.
- The restoration and planting of riparian areas of the Otahi Stream, enhancement of the high quality wetlands and boundary planting (approximately 9.7 ha in total).
- Earthworks to form platforms for the power stations, substations, operation and maintenance building, transformer and spare parts container and construct / upgrade access roads and trenching for underground cables. Some minor recontouring of small mounds in certain areas of the site will be required to allow for installation of the solar panels. Significant site levelling will not be required as the support poles for the solar panels are driven or screwed into the ground and can be height adjusted. Earthworks are anticipated to be approximately 31,673m³ over an area of 32,245m².
- Provisions for occasional educational visits to the site from school children/students and community groups to learn about solar energy generation and ecological restoration.

6.1.1 Panels

Approximately 175,000 monocrystalline solar panels will be installed on mounting structures and either pole driven or screwed into the ground.

The panels will sit 800mm to 1m above relative ground at the lower end, with a maximum height of 3,250mm, and will have a pitch of between 20 and 30 degrees. It is noted that while a maximum height of 3,250mm is being applied for, this is to allow for a worst-case scenario (i.e. the largest possible panels and greatest degree of tilt) and it is highly likely that panels will sit at a lower height.

The panels will be mounted on a combination of full tables, being 27.7m long, and half-length arrays, being 13.9m long.

Rows of arrays will be between 3m and 4.5m apart to allow sheep to graze between them and to limit shadowing on the array behind.

Elevations are included in Figure 3 below.

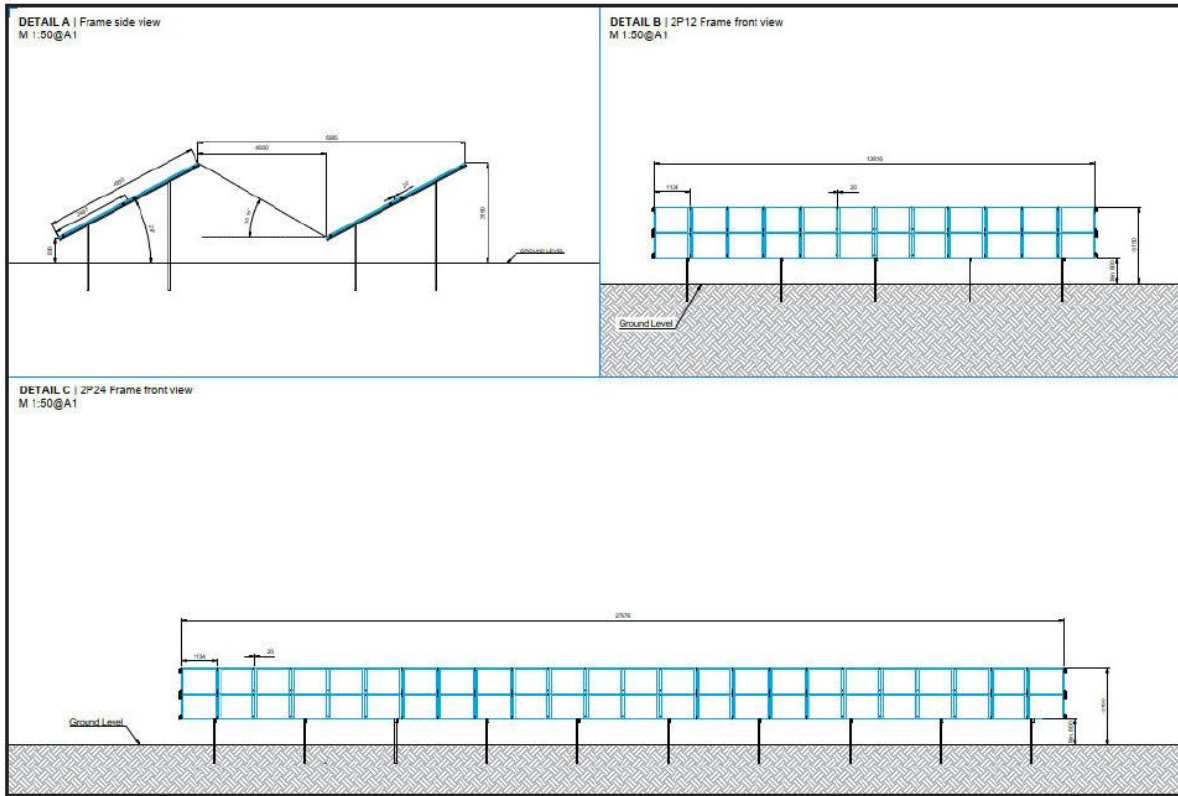


Figure 3: Elevations for Panels and Mounting Structures

6.1.2 Ancillary Infrastructure

The following ancillary infrastructure will be included within the solar farm.

6.1.2.1 Power Stations (Inverters, Transformers and Switchgear)

There will be 25 container like structures housing electrical equipment (inverter, transformer, switchgear) throughout the farm. These structures are collectively referred to as ‘power stations’ for the remainder of this report. The dimensions of each power station will be 2,886mm high x 6,058mm long x 2,438mm wide. The structures have an appearance similar to that of a container and will sit on piles approximately 100mm above ground level (max height of 2,998m above ground level).

The ground beneath the power stations will be engineered to comprise compacted soil and stone. Where appropriate, an oil tray will be provided to ensure that no accidentally spilled contaminants go to ground. Elevations are included in Figure 4.

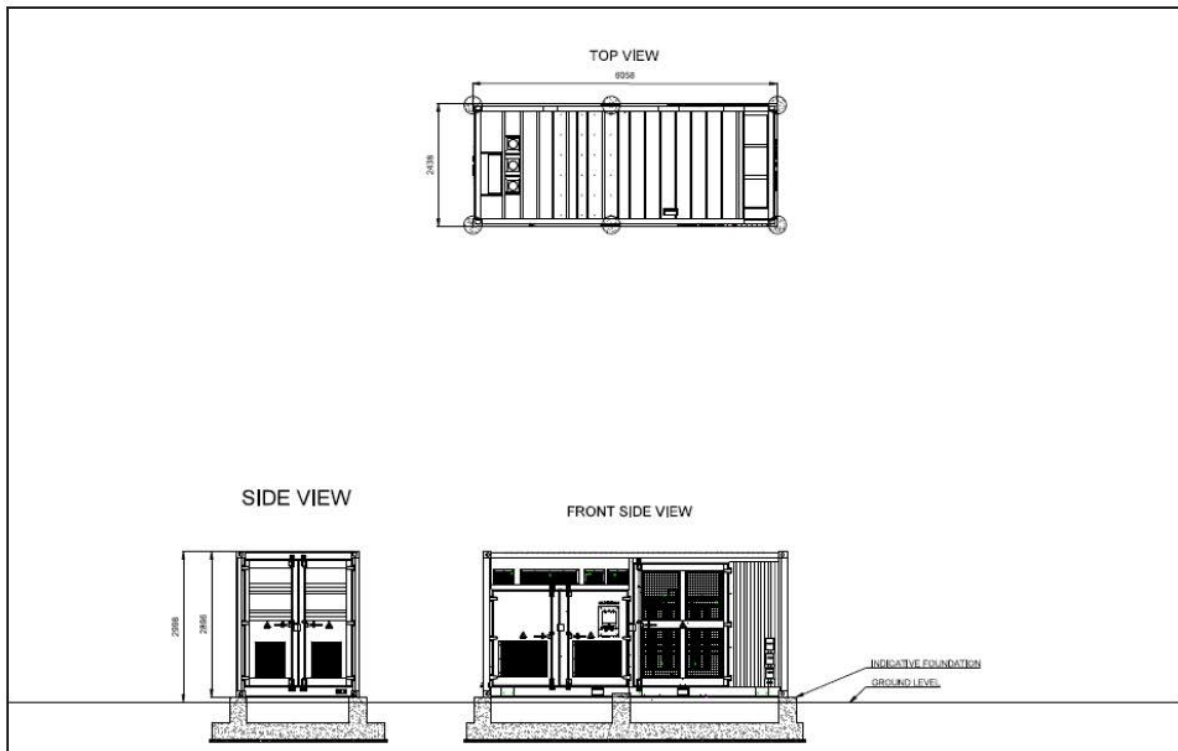


Figure 4: Power Station Elevations – Inverters, Switchgear and Transformers

6.1.2.2 Substation

The 25 power stations will feed into one customer substation that will be centrally located near the existing farm buildings and house the 33kV switchgear, all the substation control panels and auxiliary equipment. The substation dimensions will be approximately 15m (long) x 6m (wide) x 4m (height) and will sit on piles approximately 300mm above ground level, with the ground being engineered to comprise compacted soil and stone. The location of the substation is shown in plans in Appendix C.

6.1.2.3 Operation and Maintenance Building

One operation and maintenance building will be established near the existing farm buildings in the centre of the site. The building will have a similar appearance to a farm shed and measure approximately 30m by 15m (450m²) with a height of 7m. The building will comprise a small office space, general maintenance equipment and a workshop for minor repairs.

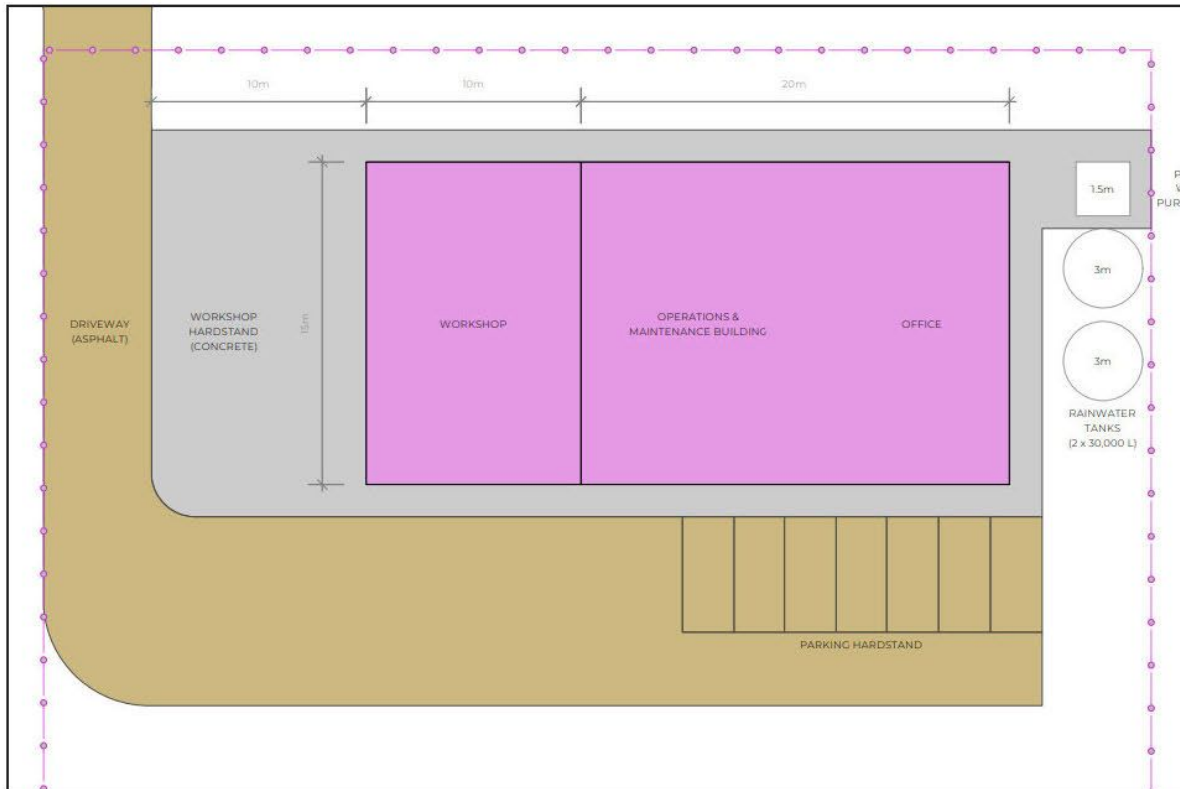


Figure 5 – Operation and Maintenance building layout

6.1.2.4 Transformer

A 80 MVA Transformer will be installed on site. Final design of the transformer will not occur until all grid studies and design details are complete. However, an example of what it is likely to look like is shown in Figure 6 below and in the infrastructure specifications in Appendix D.

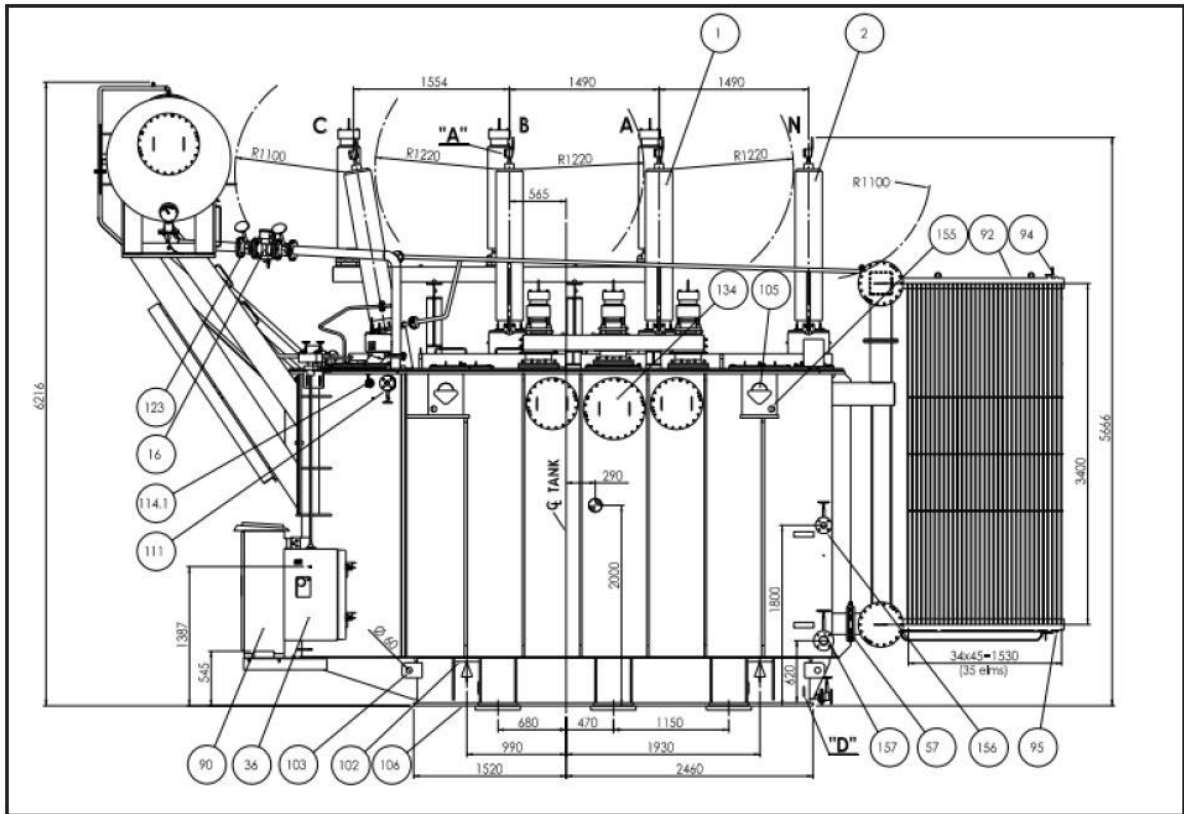


Figure 6 – Example Elevation – Transformer

6.1.2.5 Spare Parts Container

There will be one spare parts container located on the site, in proximity to the Operations and Maintenance Building. The dimensions of this container will be 2,600mm high x 6,060mm long x 2,440mm wide. The container will sit on piles approximately 300mm above ground level with a maximum height of 2,900mm.

6.1.2.6 Fencing

Normal farm fencing will continue to border the overall property, but the solar farm area – which is set back from the external property boundaries – will be separately fenced. It will be deer-type fencing, with a maximum height of 2,100mm.

6.1.2.7 Lighting, CCTV and Satellite Dishes

Infra-red security cameras and satellite dishes (mounted on 3m poles) will be located around the perimeter fencing. Low-level security lighting will be placed on the main buildings within the site and will be shielded from upward light spill and will not be obtrusively visible beyond the site.

CCTV will also be installed at the entrance gate and regularly throughout the site. The location of proposed cameras is included on the detailed plans in Appendix C.

6.1.3 Connections and Cabling

At the rear of the panels, string cabling will link sections of panels together. Trenched low voltage cables will then be required between each row of panels and the power stations on site (containing the switch gear, transformers and inverters). These cables will be trenched at a depth of between 450mm and 800mm as is illustrated in the first cross section in Figure 6 below.

Between the power stations and the transformer in the switchyard, 33kV cabling will be trenched at a depth of approximately 1m as is illustrated in the second cross section of Figure 6 below. There will be overhead 110kv cables supported by eight towers measuring up to a maximum height of 30m between the on-site transformer and the Ōpunake Substation (adjacent to the site). Note that the cross sections below provide a typical design, and some variation may be required in response to local conditions or other service lines. It is noted that Harmony has had extensive discussions with Transpower in relation to the connection at the Ōpunake Substation – a summary of those discussions is included in section 7.3.2 of this report.

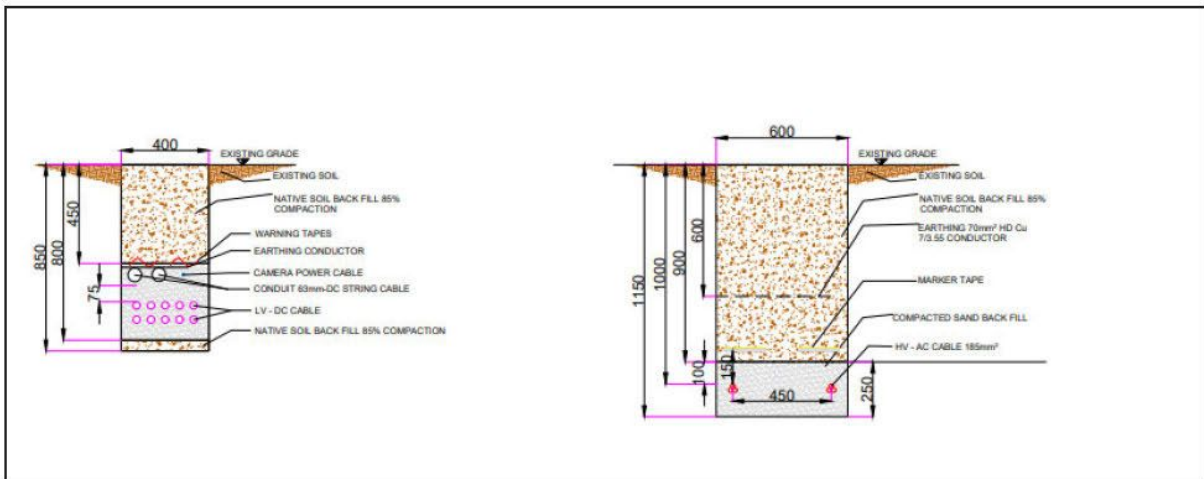


Figure 7: Cable Trench Cross-Section

6.1.4 Vehicle Access

The solar farm will utilise the two of the existing vehicle crossings, the main farm access off Ihaia Road and the other off Opua Road, and both of these will be utilised for construction and maintenance purposes. The other accessways serving the existing dwellings and Ōpunake substation will remain unchanged with no access provided to the solar farm.

The access from Ihaia Road will also be utilised for educational visits (discussed later in this report). The approximate locations of the entrance ways are shown in Figure 10 of the Transportation Assessment Report (TAR) attached as Appendix N.

6.1.5 Ecological Restoration

A comprehensive ecological restoration plan is proposed on the site. The plan includes riparian planting along the Otahi Stream, planting within and adjacent to high quality wetlands, and boundary plantings. These outcomes are detailed in the Draft Restoration Plan attached as Appendix O. The following provides a summary of the key restoration measures proposed:



6.1.5.1 Riparian margins

The riparian margins of the Otahi Stream and other smaller watercourses will be planted with eco-sourced native species that will restore the natural integrity of the landscape, provide habitat and food for native fauna and enhance the stability of the stream banks. The total area of riparian planting is proposed to be approximately 4.6ha.

6.1.5.2 Wetland

Approximately 3.1ha of planting is proposed within various wetlands located throughout the site. These areas will be fully planted with eco-sourced species that have been historically present in this area. The planting is proposed to restore the natural integrity of the landscape, provide nutrient filtration and localised flood attenuation benefits, as well as provide habitat and food sources for birds and insect life.

Different planting mixes are proposed to suit the landscape and height restrictions around the solar panels (i.e. low growing herbaceous wetland species and shrubs that will not generate shadow effects).

6.1.5.3 Stock-proof fencing

A stock-proof fence (7-wire post and batten) will be erected around the restoration areas to prevent stock access. Access gates will be provided in some areas for ongoing weed and pest control but will be properly secured when not in use. Some existing fencing may need to be upgraded to ensure livestock do not enter the restoration areas. The condition of all fencing and gates will be checked on a regular basis.

6.1.5.4 Maintenance and Monitoring

Ongoing maintenance is proposed to ensure plants establish and reach self-sustaining maturity. The frequency of maintenance will be determined by the planting contractor as necessary to achieve a 90% survival rate.

Plant maintenance will include the following:

- Watering of all trees and shrubs may be required in the event of a drought during the summer;
- Weeding of all planted areas up to 9 times annually following planting in the first year and reducing thereafter. Weed control by hand and/or chemical as required; and
- Replacement of dead or damaged plants, during planting season only, to ensure the required coverage is maintained.

In general, grass weeds and any other competing vegetation will be removed from around the planted natives at least 4 times annually until complete groundcover is achieved during the first 2-3 years, particularly in open pasture. It takes between 3-5 years before native plantings are well established and their certainty of survival is assured.

Monitoring will be undertaken bi-annually in summer to check for plant disease, and in March/April to assess the requirement for infill planting where plants may have died. Planted species that die, are damaged, or are suffering from disease during or before the end of the 5-year period, will be replaced every planting season (April – October). The replacement programme will continue for the 5-year maintenance period, with plants of the same species and grade as itemised in Section 2.9 of the Draft Restoration Plan, until a canopy cover of no less than 90% native plant species has been achieved.



6.1.6 Animal Pest and Weed Control

Animal pest and weed control is proposed as detailed in the attached Draft Restoration Plan in Appendix O. A summary of the key control measures is included below.

6.1.6.1 Weed Control

The site contains low numbers of weeds which are predominantly concentrated in the existing hedgerows and comprise barberry and boxthorn. These weed species, and proposed on-going control methods, are noted within the Draft Restoration Plan. However, in summary, control will entail cutting, digging or pulling rather than applying herbicides to the affected area. Any waste containing weeds will be appropriately disposed of to lower the risk of transferring plant material to other areas.

In addition, new plantings will be established in cleared areas as soon as possible following weed control. Mulching may also be used to cover cleared areas prior to planting, although not within regularly inundated areas.

Weed re-growth will be regularly monitored and addressed as required. All invasive pest plants will be controlled in accordance with the Section 3.4 of the Draft Restoration Plan which will be implemented for a minimum of five years or until exotic plant species have been excluded from the site.

6.1.6.2 Animal Pest Control

An animal pest control programme is proposed for the duration of the solar farm operation to ensure the long-term recovery and protection of indigenous flora and fauna within the site. The programme is aimed at keeping out key animal pest species such as possums, rabbits, rats and mustelids.

Possums will be controlled using Timms Traps (or similar) located along the margins of and throughout the site. Traps will be set in a pulsed manner (i.e. set out four times per year) for the first three years to obtain initial population reduction, reducing to twice a year following that.

Different poison baits or kill traps will be used to control mustelids. Bait stations or kill-traps such as DOC 200s or self-setting Goodnature A24 Rat and Stoat Traps will be used. The types of baits, trap maintenance and specific locations will be determined onsite by a pest management contractor. Mustelid control varies seasonally, with the best time to trap mustelids being during late spring and summer. Fortnightly trap checks from October to April, and monthly checks from May through to September, will deliver protection for all bird species.

Rats and other small rodents will be controlled using bait stations or kills traps such as Victor Traps, or self-setting Goodnature A24 Rat and Stoat traps. Rodent control will be undertaken across the entire area in a pulsed manner four times per year with each pulse being six consecutive weeks long. Traps will be checked every 1 - 3 days. Optimum starts for pulse trapping are August, November, February, and April (all 6-week trapping pulses).

Following the initial set-up of all animal pest controls by an experienced pest management contractor, these controls will be maintained by either contractors or landowners/site managers.

6.1.7 Signage

The proposal provides for permitted signage under the STDP, including:

- Required health and safety signage.
- Temporary construction and directional signage.
- A single sign, with a maximum size of 1.5m² stating the name and possibly contact details of the site.
- A sign, located adjacent to the bus parking area (near existing farm buildings) giving instructional/directional information and the name of the site. This sign will be a maximum of 2m².

Additional signage is proposed for the purpose of educational visits. This signage will be located internally (not visible from any public place), will be a maximum of 4m² in total (4x 1m² signs) and may include a combination of the following:

- Cultural interpretation/narratives.
- Educational information about the workings/function of the solar farm.
- Educational information about the wetland restoration, including:
 - Species information.
 - Importance of wetlands.
 - General information about wetlands in New Zealand.

6.1.8 Earthworks Requirement

Earthworks will be required for removing (i.e. flattening) mounds, trenching of cables, the establishment of bases for infrastructure and for internal roading. The extent of earthworks required is detailed in Table 3, below.

Table 3 – Earthworks Volumes

Description	Quantity	Footprint (m ²)	Earth Works (m ³)
MV Power station (Inverter – Transformer station)	24	14.77	355.2
Substation Yard	1	1,200	600
80 MVA Transformer (110kV)	1	34.06	34.06
Spare parts container	1	14.79	14.79
Operation and Maintenance Building	1	450	67.5
Input DC Trench 0.4m wide 0.85m deep	11,000m	4,400	3,740
High voltage AC Trench 0.6m wide 1.15m deep	7,000m	4,200	4,830

Description	Quantity	Footprint (m ²)	Earth Works (m ³)
Removing mounds	14	7,171	17,603.64
Internal Roding 4m wide 0.3 Deep	3690m	14,760	4,428
Total		32,244.62	31,673.19

Note that approximately 80% of the internal roading works will occur on existing farm tracks, so the total earthworks footprint for roading does not represent entirely 'new' works.

The project will take a balanced approach to cut and fill. All cut material will be re-used within the site, and primarily compacted within roadways or at the base of structures. In the event that any soil remains this will be spread thinly across the site. No import or export of fill (excluding aggregate) will be required.

A cross section for internal roading is included in Figure 7 below.

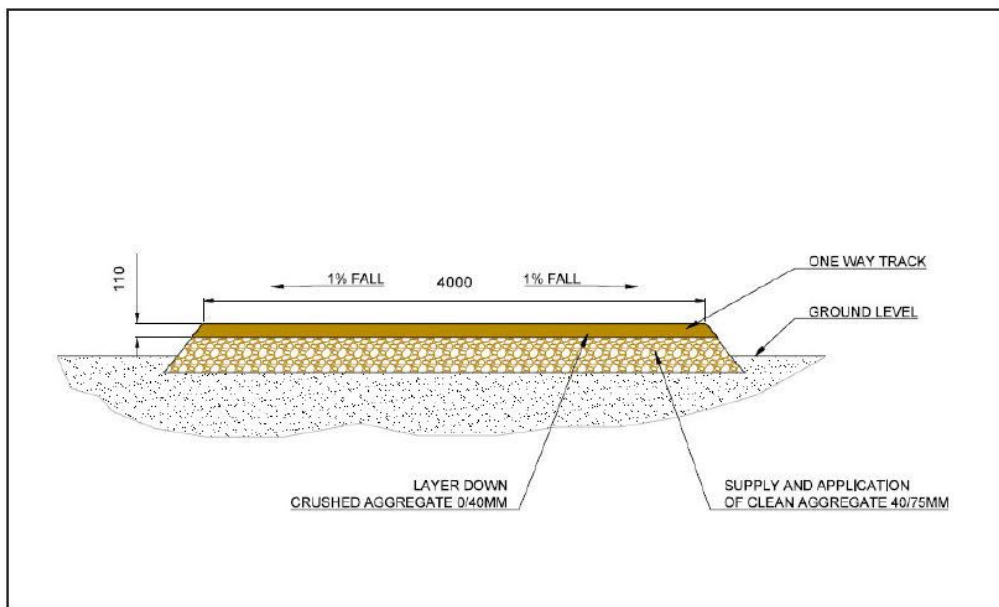


Figure 8: Cross Section – Internal Roding



6.1.9 Construction Methodology

Construction will occur over a period of 12 to 24 months and will generally follow the sequence summarised below and set out in detail in the Draft Construction Method Statement attached as Appendix P. It is noted that due to the size of the site, one phase of construction (e.g. installation of panels) will not need to be completed across the whole site prior to the next stage commencing. Rather, each sequential phase will start once the prior stage is suitably progressed.

6.1.9.1 Site Set Up

This will include the establishment of:

- Laydown areas.
- Perimeter fencing.
- Construction site offices, health and safety signage.
- Construction access tracks.

6.1.9.2 Mechanical and Module Work

This will include:

- Construction/establishment of all electrical components (inverters, substation, transformers etc).
- Driving or screwing of module poles and the fixing of panels.
- Trenching of cables.

6.1.9.3 Electrical Connections and Site Commissioning

This will include all internal and external connections and wiring required to enable the site to become operational, including the installation of lighting and cameras.

6.1.9.4 Planting, weed and pest control

Planting, weed and pest control in accordance with the approved restoration plan will be implemented.

6.1.9.5 Installation of Operational Signage and Site Clean-up

While site clean-up will occur throughout the construction period, this phase will provide for the removal of any remaining non-operational equipment and signage and the installation of any operational health and safety signage.

A Draft Construction Management Plan has been prepared and is attached as Appendix Q.

6.1.10 Construction Staff

The generally expected spread of staff numbers across the construction project is set out in Table 4 below. For the purposes of this table, it is assumed that the site is split into four blocks.



Table 4 - Construction Staff Numbers - Months 1-12

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
	Total Number											
Site Management	10	10	10	10	10	10	10	10	10	10	10	10
Access Track	20	20	10									
Fencing	20	20	10									
CCTV camera system	20	20	10									
Mechanical and module works				50	50	50	50	50	50	50	50	50
Electrical Works and Trenching					50	50	50	50	50			
Foundation Works							20	20	20	20	20	20
Testing and Commissioning Works												

Table 5 - Construction Staff Numbers – Months 13-24

	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24
	Total Number (number in each of the four blocks)											
Site Management												
Access Track												
Fencing												
CCTV camera system												
Mechanical and module works	40	40										
Electrical Works and Trenching	50	50	50	50	50	50	50	50				
Foundation Works	20	20										
Testing and Commissioning Works					30	30	30	30	30	30	30	30

It is anticipated that staff will be on site during typical working hours, six days a week (i.e. excluding Sunday), with the exception of Public Holidays.



6.2 Construction Traffic

An assessment of construction traffic is set out in the Transportation Assessment Report (TAR) attached as Appendix N. It has been conservatively assumed that each worker would drive themselves to and from the site and drive out for lunch. This would result in up to 130 vehicle movements in the peak hour, and 520 movements over the course of the day. In practice, it is likely that some workers would car-pool, or the contractors would have vans set up to transport workers from accommodation sites which would notably reduce overall traffic movements.

In addition to staff movements, there will be equipment and material deliveries to the site via heavy vehicles. These are detailed in the TAR and will vary from month to month with a total estimated number of 672 deliveries over the life of the project. During a 24-work day month, this equates to two trucks (four movements) to and from site per day during the busiest months (months 11-17).

All construction traffic will utilise the two existing site entrances off Ihaia Road and Opua Road. The vehicle crossing to Opua Road will be sealed prior to trucks using this access for construction and this is proposed as a condition of consent. Details of specific construction management measures will be included in a Construction Traffic Management Plan (CTMP), once delivery and construction details have been refined.

The large transformer will also be delivered to the site via the Ihaia Road access to be located in the switchyard near the existing farm buildings.

6.3 Operational Requirements

The electrical components of the site are subject to continuous remote monitoring, which will alert the operator if there is a need for any urgent maintenance (which rarely occurs). Remote monitoring will help to minimise general operational and maintenance (O&M) requirements associated with the solar farm. Solar farm O&M activity will largely be restricted to fortnightly visits to inspect equipment and/or undertake routine maintenance. In addition, regular visits to undertake weed and pest control, pruning (where required) and additional planting will be undertaken. All operational visits will occur in light vehicles and will primarily be via the Ihaia Road access point. However, where it is more practical (due to the location of work), other access points to the site may be utilised.

A Draft Operational Management Plan is attached as Appendix R.

6.4 Educational Visits

The consent holder will allow educational visits to the site for either school or community groups. It is envisioned that educational visits will have dual themes, covering not only the renewable generation activities but also the wetland restoration and ecological outcomes. Such visits will occur a maximum of ten times a year, predominantly during the warmer months.

Travel by educational visitors to the site is likely to be via bus and from the main access off Ihaia Road. These buses will park near the existing farm buildings and the new Operations and Maintenance Building where there is ample space within the existing tanker track to manoeuvre and turn around to leave the site in a forward direction. Visits are likely to be short in duration, however ablutions facilities will be available within the Operations and Maintenance building and supported by a permitted wastewater system, if required.



6.4.1 Farming Activities

The site will be retired from dairy cattle farming and repurposed for sheep farming.

Sheep farming and solar farming are complementary activities, in that the solar panels provide shade for sheep, do not disrupt pasture growth and are set high enough above the ground to avoid interference by stock. Sheep also provide control of pasture and avoid the need for mowing/spraying around and between solar panels. The same is not true of cattle, which can damage panels by rubbing on them, or of goats, which tend to jump on and chew at the panels.

For completeness it is noted that sheep farming is a permitted activity and any resource or building consent requirements required to enable this conversion (e.g. shed conversions) sit outside the scope of the Ōpunake Solar Farm project.

6.4.2 Conditions of consent

A full set of draft consent conditions is provided in Appendix X.

6.4.3 Other Activities (Clause 9(1)(e))

All proposed activities are captured within this fast-track application with no other activities proposed. Any works required to the Transpower substation (exact extent of works unknown) will be undertaken separate to this project.

6.4.4 Additional Approvals/Consents (Clause (9)(1)(f))

Any required building consents for the installation of equipment will be sought. As above, any approval needed for works to the substation or within the designation will be obtained. No other resource consents are required.

6.4.5 Permitted Activities

The following permitted activities are proposed:

- Restoration of a wetland.
- Outdoor lighting.
- Ongoing use of existing farm sheds and dwellings on the site.
- Use of the site for sheep farming.
- Upgraded vehicle crossing.
- Signage, including:
 - temporary construction signage;
 - health and safety signage;
 - directional signage;
 - 1x 2m² educational sign; and
 - 1x 1.5m² name sign.

An assessment of the rules relevant to the above activities is included in the rule assessment in Appendix M.

6.5 Hazardous Installations and Substances

'Hazardous substance' is defined by the Hazardous Substances and New Organisms Act 1996¹, as

"..any substance –

- (a) With 1 or more of the following intrinsic properties:
- (i) Explosiveness
 - (ii) Flammability
 - (iii) A capacity to oxidise
 - (iv) Corrosiveness
 - (v) Toxicity (including chronic toxicity)
 - (vi) Ecotoxicity, with or without bioaccumulation; or
- (b) Which on contact with air or water (other than air or water where the temperature or pressure has been artificially increased or decreased) generates a substance with any 1 or more of the properties specified in paragraph (a)"

With the exception of the insulating oil associated with the use the power stations and transformer, the proposal does not include the storage or use of any other hazardous substances or installations. These hazardous substances will be managed as required by the HSNO Act to ensure any risk or effects are appropriately managed.

7 CONSULTATION

7.1 Consultation

7.1.1 Consultation with Mana Whenua and Cultural Impact Assessments

Schedule 6, Section 9(5) of the Covid-19 Act requires that an application include:

- (a) a cultural impact assessment prepared on behalf of the relevant iwi authority; or
- (b) if a cultural impact assessment is not provided, a statement of any reasons given by the relevant iwi authority for not providing that assessment.

7.1.1.1 Relevant Iwi Authority

Te Kāhui o Taranaki Trust is the relevant iwi authority and Treaty Settlement Entity for this project. Consultation with Te Kāhui o Taranaki Trust commenced in September of 2022 and has been on-going since that time.

Consultation has included the following key milestones:

- Introductory email and initial correspondence (September-October 2022)
- On-line Introductory hui (November 2022)

¹ Section 2(1)



- On site Hui (December 2022)
- Various informal correspondences/kōrero regarding progress and formulation of approach (February- August 2023)
- Sharing of technical reports (August – October 2023)
- On-line hui with Te Kāhui o Taranaki Trust and Geoff Otene. Geoff Otene is a descendent of Ngati Tara, Ngati Kahumate and Ngati Tamarongo Hapu and a Trustee of the Orimupiko Marae (October 2023). Hui largely to introduce the project to Mr Otene and to discuss next steps.
- Another online hui to discuss Te Kāhui o Taranaki Trust's '*He Whakamārama*' which represents an impact assessment of the proposal and contains recommended conditions (December 2023).

Te Kāhui o Taranaki Trust have extensive experience with the energy sector (oil and gas) and have expressed, 'in principle' support for a transition to cleaner forms of energy production, including solar. The project team have benefited from open and collaborative engagement with Te Kāhui o Taranaki Trust and Harmony are committed to continuing the relationship with both Te Kāhui o Taranaki Trust and hapū, throughout the life of the project. This includes (but is not limited to), opportunities for employment in the establishment and maintenance of the project.

The key values expressed by iwi throughout the project development have largely (but not exclusively) focused on the desire to ensure that outcomes represent a betterment to the land, rather than just avoidance/mitigation of adverse effects. This includes the maintenance of key landscape features (lahars), improvements in the quality of wai and more general ecological enhancement. On that basis, the landscape design has been undertaken with a focus on ensuring the larger lahar mounds are maintained and accentuated within the landscape. Views to and from the Maunga have also been a focus of the landscape assessment. Likewise, extensive riparian and wetland restoration has been proposed to assist in improving the water quality of the Otahi Stream and the restoration of historical habitat and native planting has been included throughout the site, particularly along boundaries.

The conditions of consent (Appendix X) have been formulated with input by, and collaboration with, Te Kāhui o Taranaki Trust. An online hui was held to discuss their recommended conditions in the He Whakamārama (Appendix S). The final condition set was sent to Te Kāhui o Taranaki Trust who are satisfied with updated conditions (Appendix S).

7.2 Taranaki Regional Council

A pre-application meeting was held with the following members of the Taranaki Regional Council (TRC) on 9 November 2022:

- Jonti Owen – Team Leader, Resource Consents.
- Kim Giles – Principal Planner, Resource Consents.

The meeting included discussion on regional rule triggers and the applicability of the NES: FW and NPS: HPL. In terms of the NPS: HPL, it was agreed that there is an appropriate pathway in the policy framework, given that livestock grazing will still be undertaken on the site.

TRC was contacted on 21 September 2023 and were invited to provide feedback on the draft regional rule assessment and proposed consent conditions. Kim Giles (Principal Planner) provided feedback on the rule

assessment in her email dated 16 October 2023 and some suggested conditions in a further email dated 26th October 2023 (attached as Appendix T). These comments have been incorporated as appropriate.

7.3 South Taranaki District Council

A pre-application meeting was held with South Taranaki District Council (STDC) on 10 November 2022 with the following staff:

- Jessica Sorenson – Team Leader, Resource Consents.
- Adam Bridgeman – Consultant Planner
- Scott Wilson – Council’s Business Development Manager.

The meeting mainly included discussion on district rule triggers under the STDP. Council staff advised the applicant to ensure statutory acknowledgments are checked (particularly in relation to the Otahi Stream), ensure Mt Taranaki is appropriately considered in the landscape design and assessment, and suggested local Iwi have input into naming the solar farm.

As with TRC, STDC was contacted on 21 September 2023 and were invited to provide feedback on the draft district rule assessment and proposed consent conditions. No response has been received by STDC.

7.4 Adjoining Properties

The properties identified below in Figure 8 are considered to be ‘adjoining’. The properties are also listed in Table 6.

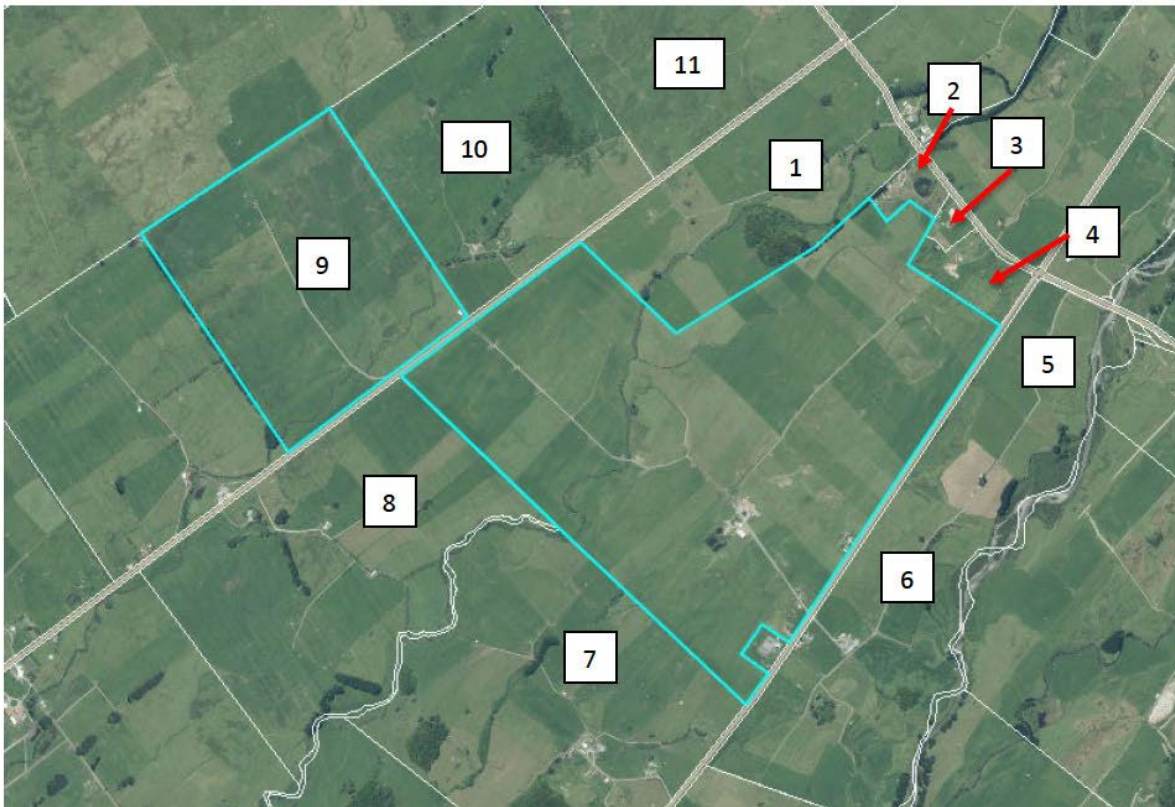


Figure 9: Adjoining properties

Table 6 – Adjoining Properties

Map Ref:	Street Address	Legal Description	Record of Title	Registered Owner (17/08/2023)
<i>Rural Property Map</i>				
1	907 Wiremu Road	Lot 1 DP 5835	TN145/157	Mu Cao Limited
2	881 Wiremu Road	Lot 3 DPS 19301	TNK3/550	[REDACTED]
3	859 Wiremu Road	Lot 1 DP 18387	TNK1/566	[REDACTED]
4	839 Wiremu Road	Lot 3 DP 352357	626526	[REDACTED]
5	(no street address)	Lot 1 DP 17130	TNJ1/956	[REDACTED] and LW Nominees Ltd
6	920 Ihaia Road	Lot 1 DP 3928, Lots 1 and 2 DP 17130 SECS 21 24 BLK VIII Ōpunake SD	TNB4/448	[REDACTED] and LW Nominees Ltd
7	849 Ihaia Road	Pt Lot 12 DP 794 VII Ōpunake SD	TNK4/746	[REDACTED]
8	842/852 Opua Road	Lot 1 DP 794	TNC2/1069	[REDACTED], South Taranaki Trustees Limited
9 ²	(no street address)	Lot 21 DP 792	TN165/163	[REDACTED] and South Taranaki Trustees Limited
10	955 Opua Road	Lot 2 DP 478864	666155	Opua Dairies Limited
11	945 Wiremu Road	Lot 25 DP 792	TNJ1/1073	Her Majesty the Queen

A consultation pack was sent to the above parties on the 17th August 2023; a copy of that consultation pack is attached as Appendix U. A consultation pack was also sent to the occupiers of 951 Ihaia Road and 926 Ihaia Road, being dwellings owned by [REDACTED]. It is noted that the dwelling located at 915 Ihaia Road is currently vacant.

² This property shares the same owners as the subject site but does not form part of the solar farm project.



The known contact details, details of mailing addresses used, and a record of contact with adjoining parties is attached as Appendix V. Where the occupiers are different to the owners, this has been stated.

No party has expressed any direct opposition to the proposal and no written approvals have been provided.

7.4.1 Transpower

The Applicant has been engaged in discussions with Transpower since March 2022. The Applicant has carried out detailed grid connection and wider network assessments and has appointed PSC Consulting as its adviser. The Applicant has shared its findings with Transpower and Transpower has provided feedback. Transpower has accepted a grid connection application from the Applicant and is currently conducting a detailed network Investigation to assess the exact impact of the project at the Opunake substation and the wider network. Transpower is aware of the Applicant's delivery programme (and critical path) and is able to accommodate the Applicant's time scales. It is suggested that correspondence from the EPA to Transpower be sent Max Rethschulte, Investigation Project Manager – Grid Works Delivery, max.rethschulte@transpower.co.nz, as he is the primary contact for this project."

7.4.2 Adjacent Parties Assessment

The assessment of effects included in Section 10 of this report, also addresses effects on adjacent parties, particularly in relation to:

- Construction Noise.
- Construction Traffic.
- Glint and Glare.
- Landscape and Visual Effects.
- Rural Character and Amenity.

In summary, it is considered that while there will be some temporary adverse effects associated with construction, particularly in relation to traffic and noise, appropriate mitigation measures are proposed to ensure that adverse effects will be acceptable. Specifically, the proposed condition set includes, in relation to construction management:

- Restricted hours of operation.
- Compliance with construction noise and vibration standards.
- Requirements to manage dust so as not to cause a nuisance or adverse effect, at or beyond the boundary of the site.
- A Construction Management Plan and Construction Traffic Management Plan.

Landscape and visual amenity effects will initially be low-moderate and reducing to low-very low as the landscape planting develops. Operational effects for adjoining parties are considered to be very low and will be largely indiscernible.

Overall, effects on adjoining parties are considered to be greatest during construction, but appropriately mitigated so as to be acceptable.

8 PURPOSE OF THE COVID-19 ACT

Section 4 of the Covid-19 Act states that:

'The purpose of this Act is to urgently promote employment to support New Zealand's recovery from the economic and social impacts of COVID-19 and to support the certainty of ongoing investment across New Zealand, while continuing to promote the sustainable management of natural and physical resources.'

Section 19 of the Covid-19 Act sets out the matters that are considered when determining whether a project may meet the purpose stated in Section 4. The key areas of alignment between the purpose of the Covid-19 Act and the project are included below. A discussion regarding the adverse effects of the proposal is included in Section 10 of this report.

8.1 Employment and Economic Benefits (s.19(a) and (d)(i))

Green Enco has provided a report entitled *'Opunake Farm Solar Project – Work Phases and Job Creation'* which sets out the number of labour hours that will be required during the commissioning and operational phases of the project. A copy of this report is attached as Appendix L.

The job creation figures included in the Green Enco report for design and engineering, construction/installation and management and operational requirements, provide useful data about the economic and employment benefits associated with the project. Key elements are summarised in Table 7.

Table 7 - Estimated Job Creation (Source: Green Enco Report)

Activity	Approximate Timeframe	Labour hours over timeframe
System Design and Engineering	16 weeks	2,280
Construction Project Personnel	12 months	25,688
Installation	13 months	528,000
Testing, commissioning and technical	2 months	1,296
Operation, maintenance and asset management ³	34 years	10,728/year

In addition to the information provided above, the economic benefits associated with the ecological restoration planting and maintenance are set out in Table 8 below. For a lack of a local Taranaki example, the figures provided are based on the calculations outlined in the Waikato and Waipa River Restoration Strategy (Waikato Regional Council Technical Report 2018/08) and can be generally applied to restoration planting and initial maintenance (approximately 5 release events) and pest control throughout New Zealand. As these figures were determined in 2018, it is anticipated that these costs will have increased. We note that between Q3 2018 and Q3 2023, the Reserve Bank states that there has been a 22% increase in the general consumer price index.

Table 8 - Costs Associated with Ecological Enhancement

Environment	Cost per unit	Approx. units	Approx. Cost
-------------	---------------	---------------	--------------

³ excludes sheep farming, planting and weed control



Wetland	\$117,550/ha	4.6 ha	\$540,730
Riparian	\$37,552/ha	3.1 ha	\$116,411
Boundary Planting	\$37,552/ha	2ha	\$75,104
Pest Control	\$200 (per year)	129ha (fenced area)	\$25,800 per year \$877,200 (34 years)

The figures provided above are approximate, but clearly indicate that there will be substantial economic benefits associated with the ecological restoration and ongoing pest control activities.

8.2 Social and Cultural Wellbeing (s.19(b))

The economic benefits of the employment opportunities outlined in Table 7 will contribute to the overall wellbeing of the wider area, assisting in reducing the rates of poverty.

Currently New Zealand risks increased electricity scarcity and rising costs, which disproportionately impacts lower socio-economic communities. The project will assist in addressing this issue through an increase in both electricity supply and security.

In regard to cultural wellbeing, the Applicant has been actively engaging with iwi to ensure their values and aspirations are reflected in the proposal. As a result, the project has been supported by Te Kāhui o Taranaki Trust. The restoration and enhancement of some ecological functions has a direct connection cultural wellbeing, given the holistic and interconnected whakapapa and mātauranga relationships of tangata whenua with the natural world.

All members of the community, but especially those who could be described as ‘climate conscious’, will benefit from knowing that the project will make a valuable contribution to growth in NZ’s renewable energy output.

Lastly, there are ancillary social benefits that will arise by opening the site to schools and community groups for educational purposes.

8.3 Speed of Progression (s.19(c))

The proposal represents a significant solar farm project and for this reason, under a traditional consenting route, the application would likely be subject to the doubling of timeframes due to the scale of the project and unfamiliarity with large scale solar facilities within the Taranaki region. In addition, there is the potential for public notification of the proposal under ‘special circumstances’, which would result in delays to the project.

Lastly, given the relative ‘newness’ of large-scale solar technology in New Zealand, there is a risk that a lack of expertise and experience both within local government and the community could result in unnecessary delays through the traditional consenting pathways.

As such, the consenting timeframe (assuming no requirements for s.92 stoppages) under a standard Part 6 RMA pathway could take 200 working days. If appealed this could easily extend timeframes by another 12 months. As such, the fast-track process is considered much more likely to deliver an outcome in a shorter timeframe.

8.4 Public Benefit (s.19(d))

In its report⁴ to the government, the Climate Change Commission noted that:

1. Energy is a necessity in the modern world, as a critical input into every good and service. In 2019, energy use in Aotearoa resulted in 34 mega tonnes of carbon dioxide emissions, with 30% of total energy consumption renewable and the remaining 70% from oil, fossil gas and coal. This energy is used across the economy in transport, electricity, for heating and by industry.
2. To meet the 2050 target of net zero long-lived gases Aotearoa needs to transition away from fossil fuels. Instead, the country will need to rely more heavily on renewable electricity.
3. We anticipate a steep increase in demand for electricity as the number of electric vehicles (EVs) on the country's roads grows, and industrial demand electrifies. The industry will need to rapidly build more renewable generation to meet this need.
4. To ensure the fast-paced and sustained build of low-emissions electricity, Resource Management Act (RMA) processes, other national and local government instruments, and settings for transmission and distribution investment decisions need to uphold Te Tiriti o Waitangi/The Treaty of Waitangi and [must] be aligned with the required pace for build.

The Ōpunake Solar Farm project will contribute to New Zealand's identified need for substantial growth in renewable electricity by generating enough power to meet the requirements of over 15,000 homes each year.

It will have additional public benefits, including the:

- Creation of employment opportunities in the local area.
- Provision of opportunities for on-site education in relation to solar energy generation and biodiversity.

A detailed discussion of each of the relevant subclauses of Section 19(d) are included in the following subsections.

8.4.1 Contributing to Well-Functioning Urban Environments (s.19(d)(iii))

Well-functioning urban environments are noted in the National Policy Statement – Urban Development⁵ as being urban environments that:

- (c) *Have or enable a variety of homes that*
 - (i) *Meet the needs, in terms of type, price, and location, of different households; and*
 - (ii) *Enable Māori to express their cultural traditions and norms; and*
- (d) *Have or enable a variety of sites that are suitable for different business sectors in terms of location and site size; and*
- (e) *have good accessibility for all people between housing, jobs, community services, natural spaces, and open spaces, including by way of public or active transport; and*
- (f) *support, and limit as much as possible adverse impacts on, the competitive operation of land and development markets; and*

⁴ *Ināia tonu nei: a low emissions future for Aotearoa*, Climate Change Commission, 31 May 2021

⁵ Policy 1



- (g) support reductions in greenhouse gas emissions; and
 (h) are resilient to the likely current and future effects of climate change

While the proposal is located rurally and does not involve either the construction of homes or an urban business, it will directly contribute to the successful functioning of urban environments.

Specifically, it is noted that, currently, New Zealand has an energy shortage and is importing coal to generate energy. Therefore, the establishment of a large-scale renewable energy project will assist in both diversification and security of supply, both of which are necessary for the ongoing function of urban environments. Additionally, the proposal will support a reduction in greenhouse gas emissions in a manner that is consistent with subclause (e), above.

8.4.2 Provision of Infrastructure (s.19(d)(iv))

A secure supply of electricity sufficient to meet the demands of the population is essential to ensuring economic success and productivity. New Zealand's energy demand has been growing steadily and growth is forecast to continue. The Electricity Authority notes (February 2023) that committed new renewable generation is enough to meet projected demand growth. However, it is unlikely sufficient to displace all fossil-fuelled generation. This shortfall in renewable investment is likely to keep fossil-fuelled generation in the market, to avoid electricity shortages.⁶

As such, the proposed solar farm (and others like it) is crucial to the efficient delivery of clean energy over the next 30 years. Further, the proposal will contribute to the strategic target that 90 per cent of electricity generated in New Zealand should be derived from renewable energy sources by 2025.

8.4.3 Improving Environmental Outcomes (s.19(d)(v))

The proposal provides for environmental enhancement in two key areas. Firstly, the retirement of the land from dairy cattle farming will reduce adverse environmental outcomes, such as nutrient run off, water use and production of greenhouse gases (including methane and nitrous oxide).

Secondly, the proposal includes extensive re-vegetation, including riparian planting, biodiversity corridors and the restoration of a large wetland. Complementing this re-vegetation are proposals for both animal and plant pest control. As is detailed in Appendix O of this report, this will result in an increase in indigenous vegetation, resulting in improved habitat for native flora and fauna and improved water quality outcomes.

8.4.4 Mitigating Climate Change (s.19(d)(vii))

New Zealand must confront two major energy challenges as it meets growing energy demand. The first is to respond to the risks of climate change by reducing greenhouse gas emissions caused by the production and use of energy. The second is to deliver clean, secure, affordable energy while treating the environment responsibly.

Solar farming has the lowest emissions of CO₂ of any energy generation method on a per kilowatt of energy basis, with only 6 grams of CO₂ produced per kilowatt of energy. By comparison, onshore wind produces 10

⁶ <https://www.ea.govt.nz/news/eye-on-electricity/new-zealands-electricity-future-generation-and-future-prices/>



grams, hydro power 97 grams, and coal 109 grams⁷. Further, the components used in the manufacture of solar energy (e.g. steel, glass, copper, cobalt) can be recycled at the end of life⁸.

As such, an increase in solar energy infrastructure and resulting decrease in reliance on coal or new hydro will directly result in the lowering of New Zealand's carbon emissions relative to kilowatts of energy produced.

The proposed solar farm will address this second challenge by contributing to central government's strategic target that 90 per cent of electricity generated in New Zealand should be derived from renewable energy sources by 2025⁹.

8.4.5 Strengthening Environmental, Economic and Social Resilience in terms of Management of Risk from Climate Change (s.19(d)(ix))

Solar farms, as part of the 'NZ Inc.' suite of available electricity generation technologies, contribute to overall resilience of the national system. Solar, wind and hydro are each reliant on different natural variations such as day/night/cloud (solar); calm/gale (wind); and drought (hydro). This variability occurs across different time periods from hours to years, and also varies by different geographic location. Increased variety (technology and location) in the national system inherently contributes to an overall lessening and distribution of risk.

Solar farms can be located away from high-risk areas for natural hazards (such as the coast). With solar panels sitting approximately 800mm to 1m above the ground (on the low edge) and all containers and ancillary equipment being mounted on compacted soil and flagstone, solar is also resilient to flood impacts. Solar farms provide resilience through diversification of land uses, as they allow for dual use of land. Sheep can be grazed, or crops grown without compromising the generation of clean electricity.

Additionally, solar farms are not permanent and can be dismantled easily with very little impact on the land, therefore allowing for flexibility in the site for the future.

8.5 Sustainable Management of Natural and Physical Resources (s.19(e))

As is set out in Section 10 of this application, the proposal will not result in any significant adverse effects, rather it will provide for a reduction in emissions relating to climate change, and will provide for enhanced environmental, economic and social resilience.

As such, the proposal is considered to be consistent with sustainable management principles.

⁷ 2017. Arvesen, Humpenoder, Pepp et.al

⁸ Currently 100% of metal, 95% of glass and 85% of silicon is re used.

⁹ In 2022, 87% of electricity was generated from renewable sources but this was driven by high hydro inflows and was not a 'normal' hydrological year



9 REASONS FOR THE APPLICATION

An assessment of the proposal against the relevant statutory documents has been undertaken and the following reasons for consent are identified. A detailed analysis of the rules is provided in tabular form in Appendix M.

9.1 National Environmental Standards for Fresh Water (NES-FW)

These regulations came into force 3 September 2020 and apply when a person wants to undertake any works within or adjacent to a wetland.

In this instance, the project involves vegetation clearance, earthworks and the diversion of water within and adjacent to natural inland wetlands for the purpose of constructing specified infrastructure under Regulation 45 of the NES-FW.

Specified infrastructure is defined in the National Policy Statement for Freshwater Management as being:

"...(a) infrastructure that delivers a service operated by a lifeline utility (as defined in the Civil Defence Emergency Management Act 2002).."

Schedule 1, Part B of the Civil Defence Emergency Management Act, includes *"An entity that generates electricity for distribution through a network."*

Accordingly, the project is considered to be specified infrastructure.

A full assessment of the relevant provisions of the Nes-FW is included in Appendix M, a summary of the key consent triggers is included in Table 9, below.

Table 9 - Key Provisions - NES-FW

Clause	Description	Activity Status
45(1)	Vegetation clearance within, or within a 10 m setback from, a natural inland wetland is a discretionary activity if it is for the purpose of constructing specified infrastructure.	Discretionary
45(2)	Earthworks or land disturbance within, or within a 10 m setback from, a natural inland wetland is a discretionary activity if it is for the purpose of constructing specified infrastructure.	Discretionary
45(3)	Earthworks or land disturbance outside a 10 m, but within a 100 m, setback from a natural inland wetland is a discretionary activity if it— a) is for the purpose of constructing specified infrastructure; and b) results, or is likely to result, in the complete or partial drainage of all or part of the natural inland wetland	Discretionary
45(4)	The taking, use, damming, or diversion of water within, or within a 100 m setback from, a natural inland wetland is a discretionary activity if— a) the activity is for the purpose of constructing or upgrading specified infrastructure; and	Discretionary



	b) there is a hydrological connection between the taking, use, damming, or diversion and the wetland; and c) the taking, use, damming, or diversion will change, or is likely to change, the water level range or hydrological function of the wetland.	
--	--	--

The proposal is a **discretionary activity** under the NES-FW, as is detailed in the rule assessment in Appendix M.

9.2 National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NES-CS)

These regulations came into force on 1 January 2012 and apply when a person wants to undertake an activity described in Regulations 5(2) to 5(6) on a piece of land described in Regulations 5(7) or 5(8).

In this case, a Preliminary Site Investigation (DSI) was completed and is attached as Appendix E. The PSI found that the area around the existing farm buildings and oxidation ponds have been subject to HAIL activities including the bulk storage of petroleum associated with the use of three existing fuel dispensers. The solar farm development, including all associated earthworks, will occur outside of these areas.

Superphosphate fertilisers have been historically applied to the site but the concentrations of cadmium within the soil are below the NES-CS Soil Contaminant Standards (SCS).

On this basis, the proposed solar farm will not take place on a 'piece of land' in accordance with Regulation 5(7) of the NES-CS and the provisions of the NES-CS are therefore **not applicable** to this proposal.

9.3 Regional Freshwater Plan for Taranaki

The Regional Freshwater Plan for Taranaki (RFP) implements the Regional Policy Statement and applies to activities that have the potential freshwater resources in the Taranaki region.

A full assessment of the relevant provisions of the RFP is included in Appendix M. A summary of the key provisions is included in Table 10, below.

Table 10 – Key Provisions – Regional Freshwater Plan for Taranaki

Rule #	Description	Activity Status
27	Discharge of stormwater and sediment into surface water or onto land from soil disturbance activities over an area greater than 8ha	Controlled

Overall, the application is a **Discretionary Activity** under the provisions of the RFP.

9.4 South Taranaki District Plan

An assessment of the relevant provisions of the South Taranaki District Plan (STDP) are included in Appendix M. A summary of the consent triggers is included in Table 11, below.



Table 11 – Consent Triggers – South Taranaki District Plan

Rule #	Description	Activity Status
3.1.4 (n)	The proposal involves the establishment and operation of a large-scale renewable energy activity ¹⁰ (i.e. solar farm) which is not listed as a permitted, controlled, restricted discretionary, non-complying or prohibited activity and is therefore a discretionary activity. The activity complies with all relevant performance standards in the Rural Zone.	Discretionary Activity
13.1.4 (a) (iii)	The proposal involves a large-scale renewable electricity generation activity that is not located in an area of Outstanding Natural Character listed in Schedule 8B or Outstanding Natural Features and Landscapes listed in Schedule 8A.	Discretionary
14.1.3 (a)	The development or upgrading of electricity transmission lines and associated support structures including towers masts, poles that convey electricity above 110kV.	Restricted Discretionary
14.1.3(c)	Unless listed elsewhere in the District Plan, any permitted activity listed in Section 14.1.1 which does not meet one or more of the performance standards in Section 14.2.	Restricted Discretionary
18.1.3(b)	Unless listed elsewhere in the District Plan, any permitted activity listed in Section 18.1.1, which does not meet one or more of the performance standards in Section 18.2.	Restricted Discretionary

Overall, the application is a **Discretionary Activity** under the provisions of the STDP.

9.5 Clause 2(4) of Schedule 6 of the Act

The proposal does not involve any activities classified as a prohibited activity under any statutory framework nor does it involve any activities in the customary marine title area.

¹⁰ **Large Scale Renewable Electricity Generation Activities** - means electricity generation activities utilising renewable energy sources with a capacity of 20kW or greater for the purpose of exporting electricity directly into the distribution network or National Grid. Includes all ancillary components and activities such as substations, climate/environmental monitoring equipment, earthworks, roading, maintenance buildings, temporary concrete batching plants, internal transmission and fibre networks, vegetation clearance, and site rehabilitation works.

9.6 Overall Status of the Application

In this instance it is considered appropriate to bundle consents due to the interrelated and overlapping nature of works and consent requirements.

Overall, resource consent is required for a **Discretionary Activity** under the NES: FW, RFP and STDP.

10 SCHEDULE 6 – SECTION 9(4) – ASSESSMENT OF ENVIRONMENTAL EFFECTS

10.1 Introduction

Having reviewed the relevant plan provisions, visited the site and taking into account the matters that must be addressed by an assessment of environmental effects in accordance with Clause 9(4) of Schedule 6 of the Act, the following environmental effects warrant consideration as part of this application.

- Effects associated with Contaminated Land.
- Construction Effects.
- Operational Traffic Effects.
- Glint and Glare.
- Landscape and Visual Effects.
- Acoustic Effects.
- Ecological Effects.
- Cultural Effects.
- Archaeological Effects.
- Rural Character and Amenity.
- Natural Hazards – Geotechnical.
- Positive Effects.

These matters are addressed in turn below, including an assessment of all actual and potential effects on people and the environment.

10.2 Effects Associated with Contaminated Land

As detailed in Section 5.3.4 of this report and in the appended PSI (Appendix E), petroleum storage has occurred near the existing milking sheds associated with the use of the three fuel dispensers. Although the milking shed area is considered a ‘piece of land’ under the NES:CS, the proposed solar farm development will occur outside of this area. No soil disturbance is proposed within the milking shed area.

It is evident that the site has been subject to low-level contamination from the application of superphosphate fertilisers as a result of the historical and existing rural production activities. However, reported concentrations were below the adopted NES-CS SCS assessment criteria for the protection of human health (commercial/industrial land use) and, therefore, the wider site is not considered to be a ‘piece of land’.



Site observations of the existing buildings and structures at the site indicated that they were constructed from steel and wood. No asbestos or asbestos containing materials (ACM) were observed in or on the structures. While a full asbestos management survey was not undertaken, the lack of visible ACM suggests that ACM is unlikely to be present in a deteriorated condition. Therefore, this HAIL activity is considered highly unlikely to have occurred at the site.

Given the low level of contamination within the site, land disturbance and use of the site for the solar farm is not considered to adversely affect human health or the environment.

10.3 Construction Effects

10.3.1 Dust

There is the potential for dust to be generated by the exposure and/or stockpiling of soil, with possible effects on the surrounding environment. In particular, the exposure of soil surfaces and movement of construction machinery across these surfaces creates the potential for mobilisation of dust particles and subsequent air quality effects, especially during dry and windy conditions.

Methods will be employed to reduce this risk, such as:

- staging of works (to reduce the extent of soil exposed).
- use of a water tanker to dampen exposed surfaces during dry periods.
- covering of exposed soils and stockpiles.
- avoidance of work during adverse weather conditions.
- progressive stabilisation and reinstatement of exposed soil.

It is anticipated that a range of these measures will be incorporated into the CMP and/or Erosion and Sediment Control Plan (ESCP), with the site manager being responsible for monitoring and managing dust on site.

In addition, draft conditions of consent (Appendix X) proposed by the Applicant include:

- Approval of a finalised ESCP and CMP, which will include details of the proposed staging of works and measures to control dust; and
- Dust being managed so as not to cause a nuisance at or beyond the boundary of the site.

It is anticipated that these conditions, and the methods outlined above, will ensure that dust effects are appropriately managed. In addition, a condition requiring the consent holder to maintain a complaints register will ensure that, in the unlikely event of dust effects arising, these will be noted and addressed.

As such any potential adverse effects in relation to dust will be less than minor.

10.3.2 Erosion and Sediment

Earthworks within the site are proposed to form platforms for the ancillary equipment (e.g. power stations, transformers), upgrade and extend existing access tracks, minor footings for ancillary infrastructure and trenching of cables. Some minor recontouring of small mounds are also proposed in some areas to allow for the installation of solar panels.



A Draft Erosion and Sediment Control Plan (DESCP) has been completed and is included in Appendix W. The DESCP includes a number of measures to control sediment, including:

- Staging of works to limit exposed areas along with progressive rehabilitation.
- Undertaking works during favourable weather conditions.
- Stabilisation of entrance ways.
- Use of silt fences.

With the implementation and maintenance of the above measures, including regular inspections of any control measures, it is considered that adverse effects associated with erosion and sediment will be less than minor in nature.

10.3.3 Noise

An Acoustic Assessment for the project has been prepared by SLR and is dated 6 September 2023. A copy of the assessment is attached as Appendix I.

In summary, the assessment found that:

- The upper limits for construction noise are in accordance with NZS 6803, for long-term projects.
- Construction noise levels at sensitive receivers is likely to vary considerably over time, depending on the phase and location of construction.
- Construction noise, under the worst-case scenario (i.e. where multiple machines are working together near a neighbouring dwelling), will readily comply with the permitted standards.
- Construction noise will be always below the permitted baseline of 70dB L_{Aeq} .

A condition of consent requiring compliance with the construction noise standards is recommended; this has been included in the draft condition set attached as Appendix X.

10.3.4 Construction Traffic

A Transportation Assessment Report (TAR) has been prepared by CKL, dated 26 September 2023, a copy of the TAR is attached as Appendix N. The TAR provides: an assessment of the existing roading environment, including traffic flows and accident history; an estimate of construction traffic volumes; a statutory assessment of district plan requirements; and proposed conditions. The following paragraphs provide a summary of each of these matters.

Existing Roding Environment and Access Arrangements

The site has frontage and existing vehicle crossings onto Opuia Road along the northern boundary and Ihaia Road along the southern boundary.

Construction and operational traffic will access the site from both roads via the existing vehicle crossings which have a width of approximately 5m. A swept-path analysis has been carried out and confirmed that the existing vehicle crossings expected can practically accommodate a large rigid (11.5m) truck design vehicle which is largest truck expected to visit the site.

Ihaia Road and Opuia Road are classified as Local Roads under the STDP. The primary function of both roads is to “provide access to properties located along the road corridor” and both operate as two-way, two-lane



roads with a posted speed limit of 100km/h. Wiremu Road is classified as a secondary collector road under the STP with primary function to “link local areas of population and economic sites”, connects Ihaia and Opuia Road and also has a posted speed limit of 100km/h. A full description of the roads can be found in the TAR.

The annual average daily volume of vehicles each road is as follows (obtained via MobilRoads):

- Ihaia Road – 353 vehicles per day (vpd)
- Opuia Road – 65 vpd
- Wiremu Road – 646 vpd

In regard to traffic accidents in the vicinity of the site, seven crashes were reported from 2018 to 2023 comprising two serious crashes, one minor injury crash, and four non-injury crashes. The Waka Kotahi MegaMaps database has also been used to identify both the personal and collective road safety risk ratings for these roads. Collective risk is the measure of how likely a crash is to happen along a given stretch of road network. Personal risk relates to the chance that if a crash does occur that it involves a given individual. It is not unusual to see higher personal risks on a road, particularly when there are low traffic numbers.

Table 12: Megamap Risk rating of roads (Source: TAR)

Road	Collective Risk	Personal Risk
Ihaia Road	Low Medium	High
Wiremu Road	Low Medium	Medium High
Opuia Road	Low	Medium

Estimated Construction Traffic Flows

Over the approximate 24 months of construction, staff numbers will vary, with between 30 and 130 construction staff active on site at any one time. It has been conservatively assumed that each worker would drive themselves to and from the site and drive out for lunch. This would result in up to 130 vehicle movements in the peak hour, and 520 movements over the course of the day. In practice, it is likely that some workers would car-pool, or the contractors would have vans set up to transport workers from accommodation sites which would notably reduce overall traffic movements.

In addition, between 0 and 56 HCV deliveries are anticipated per month. During a 24-work day month, this equates to two trucks (four movements) to and from the site per day during the busiest months (months 9-16).

Management of Construction Traffic

Construction of the site will be staged, with different phases expected to have different traffic demands depending on the activities being undertaken. The anticipated traffic demands will be confirmed by the contractor as each stage of activity is progressed. A Framework (i.e. draft) Construction Traffic Management Plan (FCTMP) has been developed and is attached as Appendix Z. The FCTMP has been developed with the various objectives that will be pulled through into the final CTMP to be provided as a condition of consent. These objectives include:



- Maintain safe use of the road network affected by the site works for the public and for site workers such that:
- Construction vehicle traffic is safely accommodated within the existing road network;
- So far as is reasonable, congestion or traffic delays are avoided;
- Any traffic effects associated with construction are no more than minor;
- Ensure that access to and from the site is undertaken in accordance with the management protocols of the Framework and in accordance with the Detailed CTMP to be developed by the Contractor once appointed;
- Set the parameters for the final/detailed CTMP to meet the specific requirements for construction traffic management as may be required by a resource consent for the works and in accordance with the relevant By-Laws, Acts, Regulations and South Taranaki District Plan Rules, Objectives and Conditions pertaining to traffic, loading and parking;
- Set the parameters for the development of Temporary Traffic Management (TTM) to manage changes to normal operating conditions in accordance with Waka Kotahi's Code of Practice for Temporary Traffic Management (CoPTTM) as part of the Detailed CTMP;
- Undertake positive and constructive liaison with South Taranaki District Council (STDC) and other stakeholder groups as appropriate to understand and, where appropriate, reflect the needs of these parties;
- Adopt a flexible and proactive approach to TTM to respond to the construction activities being undertaken and the needs of other stakeholder groups, or temporary major events, as appropriate.

Effects Discussion

The TAR, concludes that, based on experience with construction planning and traffic management associated with similar developments, that construction activities can be managed to an acceptable level through the CTMP. Of note, the construction activities are temporary and with appropriate measures in place, it is considered that construction activities can be managed to ensure any generated traffic effects are appropriately mitigated. On this basis, it is considered that adverse effects associated with construction traffic will be less than minor.

10.4 Operational Traffic Effects

Operational traffic will comprise small vehicles, vans, and trailers visiting the site to check equipment, undertake weed and pest control and other vegetation management. These vehicles will utilise the Ihaia Road Opua Road vehicle crossings depending on location of the work to be undertaken within the site. It is likely that one gardener and one solar technician may attend the site at the same time. Therefore, up to two vehicles would be generated by the site during the peak hour (7am-9am, 3pm-6pm). The extent and scale of these visits means that no perceivable effect on the traffic network is anticipated.



10.5 Glint and Glare

An assessment of potential glint and glare effects from the proposed solar farm has been undertaken in the attached Glint and Glare Assessment prepared by SLR attached as Appendix H. For the purposes of this assessment, the definition of ‘glare’ is as follows (noting that glint is incorporated into the definition):

- **Glare** – refers to the reflections of the sun off any reflective surface, experienced as a source of excessive brightness relative to the surrounding diffused lighting. Glare covers reflections:
 - Which can be experienced by both stationary and moving observers (the latter referred to as “glint”).
 - Which are either specular or diffuse.

For the avoidance of doubt, the term ‘reflection’ is used to refer to both glint and glare. Solar panels are designed to capture (absorb) the maximum possible amount of light within the layers below the front (external) surface. Consequently, solar panels are designed to minimise reflections off the surface of each panel. Notwithstanding, reflections can occur depending on the number of panels, and the angle at which light strikes the panels. Reflection will also vary depending on their specific location, time of day and time of year. Climate and weather conditions can also influence the degree of reflections, noting for Ōpunake, that the sky is either overcast or mostly cloudy at least 34% of the time during the end of summer and into autumn and up to 49% of the time during winter and through the second half of the year¹¹. Obstructions such as terrain and vegetation can also influence the extent of reflections experienced at specific locations/receptors.

There is no existing planning guidance within New Zealand for the assessment of reflections from solar panels towards road users, residential dwellings or aviation activities. No airfields are nearby and therefore no analysis has been undertaken for potential glare effects on aviation activities. In terms of residential nuisance glare, the Glint and Glare Assessment notes the criteria available in the recently released New South Wales (NSW) Large Scale Solar Energy Guidelines (LSSE Guideline, 2022). LSSE provides assessment criteria for residential dwellings and classifies glare into “High”, “Moderate” and “Low” impact levels by minutes per day and hours per year. An extract from the guideline (“Table 2”) is shown in Figure 9 below summarising the three levels of glare and associated amenity impact.

Table 2: Impact rating and performance objectives for glare impacts to residential dwellings

High glare impact	Moderate glare impact	Low glare impact
> 30 minutes per day	< 30 minutes & > 10 minutes per day	< 10 minutes per day
> 30 hours per year	< 30 hours & > 10 hours per year	< 10 hours per year
Significant amount of glare that should be avoided.	Implement mitigation measures to reduce impacts as far as practicable.	No mitigation required.

¹¹ Section 3.4, Glint and Glare Assessment

Figure 10: Extract from LSSE Guideline (Source: Glint and Glare Assessment)

The LSSE Guideline criteria apply to residential nuisance glare with no criteria available for road and rail traffic disability glare. Accordingly, when considering motorists (in the case of the Ōpunake solar farm), the occurrence of any glare for any number of minutes per day or hours per year is considered as requiring mitigation. The only exception being unless the reflection condition occurs at a time of day when the difference in angle between an incoming solar ray and its associated reflection is less than around 10°, in which case a motorist’s view would be completely dominated by the radiance level from the sun.

The methodology used to assess potential glare effects involved splitting the solar farm into 12 smaller ‘sub-arrays’ that reflect the terrain of the site and which have been used to identify sources of potential glare effects on identified receptors. A full list of receptors and their locations can be found in the attached Glint and Glare assessment (Appendix H) and are summarised as follows:

- 21 ‘viewer location’ comprising residential dwellings on the site and surrounding area and certain viewpoints along Opuia Road, Wiremu Road and Ihaia Road (Figure 10). The observer height was set at 1.5m above the ground.
- A worst-case scenario of a large truck with a driver viewing height of 2.3m was used for Wiremu Road and Ihaia Road. Opuia Road is expected to carry smaller trucks and vans and was modelled with a driver viewing height of 1.8m.
- Two heights were used to model the panel arrays. A “low” version at 1.4 m above ground and a “high” version at 2.6 m above ground.

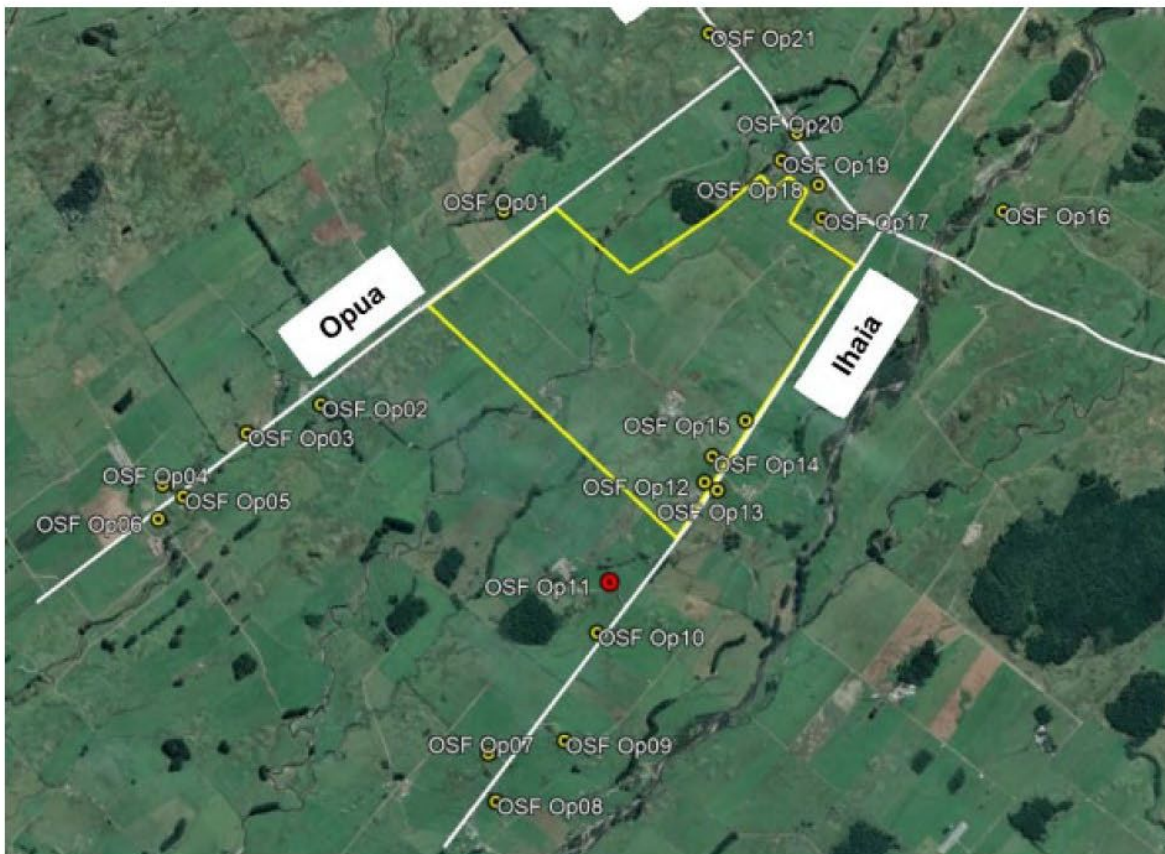




Figure 11: 21 viewer locations (Source: Glint and Glare Assessment)

'Baseline' modelling was used for the above locations which excludes the existing topography, vegetation, other obstructions and mitigation measures (e.g. planting) to provide an initial indication of potential reflections and associated effects prior to considering the need for mitigation. The results show that reflections would be experienced at all specified locations on Ihaia Road and most of those on Opuia and Wiremu Road. For the residential receptors, the results show that reflections would be experienced at the following:

- OP12 (915 Ihaia Road- subject site) – 3,420 minutes (57 hours) per year which equates to a 'HIGH' impact.
- OP14 (915 Ihaia Road- subject site) – 3,357 minutes (56 hours) per year which equates to a 'HIGH' impact.
- OP15 (951 Ihaia Road- subject site) – 3,847 minutes (64 hours) per year which equates to a 'HIGH' impact.
- OP16 (626 Wiremu Road) – 20 minutes per year which equates to a 'LOW' impact.
- OP17 (839 Wiremu Road) – 3,855 minutes (64 hours) per year which equates to a 'HIGH' impact.
- OP18 (869 Wiremu Road) – 771 minutes (13 hours) per year which equates to a 'MODERATE' impact'

The next stage of the modelling involved the addition of the proposed mitigation planting. The results show that residences OP12, OP14 and OP15 will experience a similar level of reflections with no other residences experiencing any reflections. As these residences are located on the subject site, any effects on them should be disregarded as their written approval is inherent in the application. Notwithstanding, additional on-site planting is proposed to provide screening to reduce potential reflections with the exact species, location, and size of planting to be discussed and agreed with the landowner outside of this consent process. The results also show that reflections would continue to be experienced at all three roads but at fewer locations and reduced overall durations.

The next stage of the analysis was a 'Viewshed Analysis' which essentially involves incorporating the topography of the site and surrounding environment to determine the actual extent of visibility of the solar farm to the receptors but with no mitigation in place. Taking into account both the viewshed analysis and the proposed mitigation planting, the analysis shows that potential reflections would only occur at the three residences located on the subject site. In addition, potential reflections at road receptors reduced significantly in terms of the number of locations and duration. Following this, further modelling was undertaken to design further mitigation measures to reduce the extent of potential glare effects at these residual receptors. The mitigation included additional lines of 4m high infill planting within the site. With mitigation in place, the analysis concludes that there will be 'ZERO' residential nuisance and motorist disability glare for all residential and road receptors.

An additional sensitivity analysis was undertaken in the event there was change in the proposed tilt angle of the panels and/or mounting height. The analysis indicates that a slight decrease in tilt angle (from 28° to 20°) would not generate any further glare effects beyond those conservatively modelled using a 28° tilt. In terms of increasing the back mounting height from approximately 3m to 3.8m, the analysis shows a slight increase in glare along Ihaia Road which would be sufficiently mitigated by increasing the height of planting along Ihaia Road from 4m to 5m. This has been included as a condition of consent in the unlikely event this is required.



Outdoor infrared security lighting will be operated during nighttime hours and will be directed 'downward' to avoid upward light spill. The lighting will be designed and located to ensure compliance with the STDP requirement of 10 lux (when measured at the notional boundary of any dwelling on a site in separate ownership in the rural zone). No other outdoor lighting or floodlighting is proposed.

Lastly, it is noted that the district plan permitted baseline would allow for the construction of a large building, such a calf raising shed, in any permitted location on the site. Such a building could be significantly closer to boundaries than the proposed panels, and much higher. Given that steel (typically used in farm building construction) is generally more reflective than solar panels, some glare would be likely from a permitted building and would form part of the permitted baseline. However, it is acknowledged that reflectivity from a permitted building would be more localised. By comparison, the extent of solar panels, in terms of land area covered, will increase the likelihood of temporary glint and glare effects for a wider audience.

Overall, taking into account the design and location of the solar farm and the existing topography, there will be minor and temporary adverse effects on some residencies and road users for approximately 3-5 years until the planting is established. After that time, full screening will be established via the landscape planting, and no discernible effect will occur.

10.6 Landscape and Visual Effects

An Assessment of Landscape Effects (ALE) has been prepared by 4Sight Consulting Ltd and is appended in Appendix J. The ALE notes that a design lead approach was taken to this project, enabling a place responsive approach to integrating the development into the environment.

A summary of the key findings is included below:

- At a broad level, the landscape is centred around Mount Taranaki (Taranaki Maunga) and the surrounding Egmont National Park which forms an almost perfect circle of native bush. Over 300 rivers and streams radiate out from Mount Taranaki over undulating rural landform to the coastline. The land cover, while largely in dairy farming, also contains native bush areas, exotic shelter belts and tree groups, and lahar mounds.
- The landscape setting does express a pristine level of natural character but exhibits a rural landscape character directly associated with its productive land use and modified by exotic pasture and tree species. The environment is also characterised by scattered and low levels of built development (e.g. dwellings and ancillary buildings) associated with rural activities. Non-agricultural activities are also interspersed throughout the surrounding area including the Ōpunake substation and quarries.
- The visual catchment of the site includes surrounding land, from which parts of the site will be visible, noting that the entirety of the site is not visible from any one location due to topography, existing built form and vegetation. This is evidenced by the Zone of Theoretical Visibility (ZTV) analysis, as assessed in the ALE, of various viewpoints towards the application site. The visibility of the site will reduce significantly once planting is established, so that views into the site are largely eliminated, with the exception of some viewpoints from Wiremu Road and the site access on Opua Road.

- Recognising the importance of the lahar mound landscape features, the overall design approach is to integrate the solar array around existing mounds, with a small number of minor mounds ‘smoothed down’, which will break up the development area and provide a level of ‘landform mitigation’. This mitigation will be reinforced by native planting that will be predominantly located between along the road boundary and wetland areas.
- Visual Amenity Effects are summarised as follows¹²:
 - From viewpoint 1 (view southwest from Wiremu Road). The immediate effects will be moderate (equating to more than minor effects), reducing to low-moderate (i.e. minor) effects incrementally as planting grows to soften the outlook and integrate the development into the landscape setting. Effects are therefore considered minor.
 - From viewpoint 2 (view southwest corner of Ihaia Road and Wiremu Road). The view will largely remain unchanged as the panels will be situated behind lahar mounds. Effects are considered to be negligible.
 - From viewpoint 3 (view west from Ihaia Road). Panels will be initially visible within the flat paddock area. The panels will be set back 25m and eventually completely screened by planting. Effects will initially be low-moderate (equating to minor) but reducing to low (less than minor) over time.
 - From viewpoint 4 (view north from Ihaia Road near main site access). Development areas will be set back beyond the existing workers accommodation and hedgerows with only partial views until they are completely screened by planting. Effects will therefore be less than minor reducing to negligible.
 - From viewpoint 5 (view north from Ihaia Road near Ōpunake substation). This view will be dominated by existing substation infrastructure and pasture that will be retained for sheep grazing purposes with only distant views of the development. Effects are considered less than minor.
 - From viewpoints 6 and 7 (view north further south along Ihaia Road – 380m and 830m respectively). The panels will be visible but seen as small-scale elements in the landscaping setting due to setback distances with their visual prominence progressively softened as the planting establishes. As such, effects will initially be low-moderate (minor) reducing to low-very low (less than minor).
 - From viewpoint 8 (view east from Opuā Road). The view will remain unchanged as both proposed planting and development areas will sit behind the lahar landforms. Effects are considered to be negligible.

¹² Note: translation to planning terms (minor, less than minor etc) is based on the given definitions and provided by myself rather than the author of the ALE

- From viewpoint 9 (view east near Opua Road site access). The panels will be visible but backdropped against lahar mounds and existing vegetation as to not appear visually obtrusive within the landscape setting. Overtime, planting will completely screen the panels along Opua Road with a slight opening provided for the Opua Road site access. As such, effects will initially be low-moderate to moderate (minor/more than minor) reducing to low (less than minor).
- From viewpoint 10 (view south from northern corner of site on Opua Road). The solar panels will be set back from this point and drivers will have oblique visibility of the panels as they continue west along Opua Road. Boundary planting will reduce this visibility from an initial low-moderate effect to a low and ultimately less than minor effect.
- Overall, the ALE considers the proposal to be appropriate in the receiving landscape setting with visual amenity effects considered to be low-moderate in the short term¹³ that will reduce to low (less than minor) in the long term¹⁴ once mitigation planting has established.

Based on the conclusions within the ALE and subject to appropriate implementation of conditions relating to planting and ecological restoration, it is considered that any adverse effects relating to landscape and visual amenity will range from negligible to more than minor in the immediate term reducing to less than minor in the long term.

10.7 Ecological Effects

An assessment of ecological effects has been undertaken in the attached Ecological Effects Assessment included in Appendix F. This assessment is informed by the Ecological Impact Assessment (EclA) guidelines of the Environment Institute of Australia and New Zealand (Roper-Lindsay et al. 2018) to determine ecological values, magnitude of effects, and overall level of effect associated with the proposed works at the site. A summary of the key matters is included below:

- The values assessment, informed by the criteria for significant indigenous biodiversity within the Taranaki Regional Policy Statement, concluded that the ecological values of the site are 'low' based on the highly modified nature of the site, comprising predominantly grazed pasture with predominantly exotic species. The ecological values of the riparian vegetation, native scrub and 'moderate' quality wetlands have been rated as 'moderate'.
- The sensitivity of the receiving environment has been characterised (as above) and, subject to adherence to appropriate erosion and sediment controls, the effects generated by the proposed earthworks (including any sediment laden discharges) on the surrounding environment will be low. There is nothing unique about the receiving environment or type and scale of earthworks that would suggest an alternative method of discharge or additional treatment is needed beyond

¹³ From implementation of panels to an estimated 3-5 years post construction when mitigation planting reaches approximately 3m in height

¹⁴ Time period beyond 'short term'

standard erosion and sediment control measures (noting that the site is not considered a 'piece of land' for the purposes of the NES:CS).

- As the solar panels themselves are built on steel frames and pasture remains in place below the panels, the soakage capacity of the land will not be significantly altered by the proposed development. Therefore, assuming adherence to best practice stormwater management, the effects of increased stormwater runoff is considered to be 'Low'.
- Minimal vegetation clearance (only exotic weeds) is required with minimal loss in suitable habitats for manu(birds), skinks and geckos. Native planting will provide additional habitats for these native fauna with any adverse effects considered 'very low'.
- The proposed solar panels are designed to absorb light and not to reflect it. Therefore, they pose little risk of glint or glare effects on local manu and are expected to be 'Negligible'.
- Solar panels will be 'noise-free' with only the inverters producing a slight hum. This noise would only be audible from within the site. The effect of potential noise associated with the solar farm on local fauna is considered to be 'Negligible'.
- The positive effects of the proposal include improved aquatic habitat and water quality from reduced grazing pressure and planting of riparian zones, proposed enhancement of biodiversity values through restoration plantings, and enhanced connectivity of natural areas in a landscape context through buffer and corridor plantings.

Overall, the assessed existing ecological value of the site is considered 'low, and the overall magnitude of effects associated with the proposed solar farm will be 'low'. As such, the overall ecological impact is considered to be 'low / very low'. The range of positive effects associated with the proposed regeneration measures will ensure that this proposal will result in a positive or 'Net Gain' in terms of overall ecological impact.

A Draft Restoration Plan, which details the methods and timings for re-vegetation and pest and weed control is also included in Appendix O. The draft condition set in Appendix X includes conditions that require the proposed restoration planting, and weed and pest control.

On the basis of the technical advice provided and with the implementation of the proposed consent conditions, the ecological effects of the proposal are considered to be positive.

10.8 Cultural Effects

As is detailed in Section 7.1, extensive consultation has been undertaken with the Te Kāhui o Taranaki Trust who have expressed support for the proposed solar farm development. Their values and views have been incorporated into the project design including the retention of key landscape features (lahars) and views to and from Taranaki Maunga and support the proposed riparian and wetland restoration works that will improve the water quality of the Otahi Stream and planting that will provide habitat for native fauna.

The He Whakamārama (Appendix S) provides conditions to ensure the proposed solar farm suitably avoids, remedies, mitigates or offsets effects on the environment which have incorporated into the recommended condition set in Appendix X. The He Whakamārama also states that the impact assessment undertaken by



the Te Kāhui o Taranaki Trust has found that the solar farm is able to find alignment with the provisions of Taiao, Taiora (Iwi Management plan for Taranaki Iwi). In addition:

- An archaeological assessment has been completed, which concludes that there is no reasonable cause to suspect that any archaeological material will be encountered during works due to the lack of historical Māori settlement in this area. Notwithstanding that conclusion, accidental discovery protocols will be employed to ensure any unexpected archaeological features are suitably protected and managed.
- Sampling has confirmed that the site is not subject to any contamination which has the potential to adversely impact on wai.
- Erosion and sediment control will be implemented to ensure that wai is not adversely impacted during construction. Further, no chemicals or cleaners other than water will be used on the panels.

Overall, the proposal involves the development of significant renewable energy project that will reduce the reliance on fossil fuels as well as provide for extensive ecological restoration that is consistent with the views expressed by the Te Kāhui o Taranaki Trust through consultation and as set out in Taiao, Taiora (refer Section 11.5.1) and the He Whakamārama . On this basis, it is understood that the proposal will not detract from the cultural values associated with the site.

10.9 Archaeological Effects

An Archaeological Risk Evaluation has been undertaken on the site by Archaeological Resource Management, a copy of the report, dated October 2022 is attached as Appendix G.

This assessment includes a review of the archaeological record; a review of archaeological and historic literature, including land plans and aerial photography; and a non-invasive pedestrian survey of the project area. No remote sensing or archaeological test excavations have been undertaken. The assessment concluded the following:

- The site has been significantly modified since European settlement, including the clearing of native bush, drainage of wetlands, and recontouring of lahars, to improve the property for dairy grazing. Prior to this, the site and surrounding area contained extensive wetland areas which would have been poorly suited for Māori horticulture and associated occupation.
- There are no sites of pre 1900 Māori or European occupation or land use, either on, or in the general vicinity of the project area.
- The site does not contain any archaeological sites listed in the STDP or the New Zealand Archaeological Site Recording Scheme (Archsite).
- No archaeological evidence was noted during the field inspection.

As such, the assessment concludes that there is no reasonable cause to suspect that any archaeological material will be encountered during works due to the lack of historical Māori settlement in this area. Notwithstanding that conclusion, accidental discovery protocols will be employed to ensure any unexpected archaeological features that may be discovered during the proposed works are suitably protected and managed.

10.10 Noise Effects – Operational

The Acoustic Assessment, prepared by SLR and included in Appendix I addresses the operational noise effects of the proposal. In summary the key findings are:

- The primary noise sources associated with the solar farm are the fixed plant items (substations, inverters and transformers). Solar panels do not generate any noise.
- The fixed plant items only operate during daylight hours when power is being generated and produce the maximum level of noise during peak power conditions (i.e. in clear, sunny conditions) usually between 10am and 1pm.
- Modelling has been carried out and demonstrates that the proposal will readily comply with the relevant STDP daytime noise limits of 55 dB L_{Aeq} , being between 13 dB and 25 dB lower than the 55 dB threshold at the notional boundary all identified sensitive receivers. The modelling also demonstrates that the noise levels will comply with the more stringent night-time limit of 45 dB L_{Aeq} , being between 3 dB and 15 dB lower at all identified sensitive receivers.
- At the notional boundary of the closest residence at 859 Wiremu Rd, the highest predicted daytime noise rating level (42 dB L_{Aeq}) is controlled by the power stations which operate predominantly during daylight hours. During the summer months, these power stations may operate only for one or two hours outside the daytime period but at a lower capacity and load, resulting in lower noise levels. The power stations are unlikely to operate outside the daytime period during the winter months.

The assessment includes recommended conditions of consent for operational noise, which have been included in the draft condition set in Appendix X.

Overall, and on the basis of the technical report provided, it is considered that adverse effects arising from operational noise will be de minimis under normal operational conditions and less than minor in a worst-case scenario.

10.11 Rural Character and Amenity Effects

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

In this instance, the site is located in the rural zone, which is described in the STDP¹⁵ as:

‘The predominant activity in the South Taranaki rural environment is dairy farming which extends across the fertile ring plain. Over time the nature of dairy farming has undergone changes, such as an increase in average farm area and stocking rate per hectare, coupled with an increase in the use of off-farm supplements... The present day rural environment supports a variety of other land based farming activities including dry stock farming, cropping, horticulture, exotic forestry, small niche

¹⁵ Section 2.1 Rural Zone

farming land uses, and rural service activities. The nature and distribution of farming activities is largely determined by natural patterns of landform, climate and soil type.

The above activities play a large role in the formation of a common rural character and amenity. Rural amenity values include landscape and scenic values, individual privacy, open rural outlook and open space, vegetation prevailing over built elements, openness, and ease of access, clean air, unique odours, overall quietness, water availability and the wellbeing of the community.'

In considering rural character and amenity, it is noted that the above description is intended to provide a summary of the key features of rural character and amenity, and that amenity will vary from place to place. Likewise, rural character cannot be considered in isolation or simply by considering each individual effect (i.e. noise, odour, visual amenity, traffic), rather it is a combination and accumulation of effects and intrinsic values and will vary from one area to another.

The character of the site and surrounds is outlined in the ALE, in Appendix J, a portion of that description is included below for ease of reference¹⁶:

"... the landscape setting does not express a pristine level of natural character, but exhibits a rural landscape character directly associated with its productive land use. It is a modified landscape, particularly with regards to land cover of exotic pasture and tree species. The rural landscape however, is still appreciated for its contrast to and as relief from more densely populated urban areas. The low level of existing built development is primarily associated with farming activity and dwellings. There is a cohesive nature to the rural landscape typically characterised by pastoral fields and their open character, with scattered dwellings, and ancillary buildings (along sometimes narrow local roads), and occasional layered tree rows or groups."

Large scale solar farming is relatively new to New Zealand's rural landscape and will have an initial discernible effect on surrounding rural character and amenity values that will begin to diminish once the mitigation planting starts to mature and the solar farm begins to form part of the landscape and character of the area.

The proposal has been designed, as far as possible, to mitigate these initial effects as well as complement the character of the existing area and the wider rural setting. Specifically, large setbacks from roads and landscape containment afforded by existing landform mounds and reinforced by proposed mitigation planting. In addition, the continued sheep farming of the site also ensures more traditional, pastoral uses remain associated with the site and the low profile of panels means that can be readily screened in a manner that does not obstruct views to key landscape features such as Mt Taranaki and coastal areas.

The proposed internal signage will have an educational function and will not be visible from the road, likewise educational visits will be pre-arranged and will not result in any noise or visual effects that are likely to detract from the character of the rural environment.

In regard to other amenity effects, and as outlined earlier, the proposal will result in a low level of ambient noise, a low level of operational traffic, minimal glint and glare in the immediate term and positive ecological effects.

¹⁶ 2022. ALE. p. 6



When considering the mitigating factors detailed above and taking a holistic view of individual amenity effects (noise, traffic, glint and glare), the proposal can be considered to have a minor adverse effect on rural character in the short term (until approximately three years post construction), after which effects will reduce to less than minor.

6

10.12 Natural Hazards – Geotechnical

An assessment of site stability and natural hazards has been undertaken in the Geotechnical Report prepared by CMW Geosciences attached as Appendix K. The following matters have been considered as part of this geotechnical assessment:

- Seismicity and Faulting;
- Liquefaction Potential;
- Lateral Spread;
- Slope Stability;
- Stream Erosion;
- Roading; and
- Foundation Design.

In terms of seismicity and faulting, the nearest known active fault is Ihaia Fault which runs through the centre of the site, almost directly along the existing farm track leading north-east from the existing milking shed. However, due to the long period between previous seismic events) which greatly exceeds the proposed design life, the risk of fault rupture is considered low.

The potential for liquefaction has been assessed by an analysis of the underlying soils which comprise generally stiff cohesive silts or medium dense sands. The deeper soils comprise gravels in a cemented silt/sand matrix in a very dense state. Therefore, the potential for liquefaction to develop in these soils is considered low and if liquefaction were to occur, it is likely to have a minor expression at the surface. The risk of significant liquefaction at this site is low, with only isolated and marginal liquefaction predicted at depth in some locations. The risk of lateral spreading is therefore also considered as low.

Due to the flat to very gently sloping site and surrounding properties, the risk of deep-seated land instability occurring is assessed to be low. Local instability and erosion was observed along the Otahi stream and drainage channels but will not be exacerbated due to sufficient setbacks of the panels and associated establishment works.

The investigations undertaken to date indicated that the subsoils encountered on the site are generally suitable for piles to support the proposed solar panels. Ancillary buildings (e.g. power stations) will be placed on compacted/flagstones to provide suitable stability. On this basis, the geotechnical conditions at this site are appropriate for the proposed development and will not give rise to any undue sub-surface effects.

10.13 Positive Effects

The positive effects of the proposal are largely set out in Section 8 of this report and throughout the preceding assessment of effects. However, by way of summary, the proposal will result in the following positive social, economic and cultural effects on the neighbourhood, wider community and New Zealand:

- Significant job creation over the construction period (24 months) that will provide an economic boost to surrounding Ōpunake and Taranaki businesses. There will also be ongoing employment opportunities and associated economic benefits for the ongoing operation, maintenance and management of the solar farm over 34 years.
- Economic benefits provided through the purchase and maintenance of 9.7ha of various plant species for the proposed wetland, riparian and boundary planting including job opportunities for ongoing weed and pest control.
- A significant contribution to New Zealand's target for renewable energy generation, through the provision of electricity for c. 15,000 homes.
- A decrease in the need for reliance on coal or new hydro generation, contributing to the lowering of New Zealand's carbon emissions relative to kilowatts of energy produced.
- An increase in the diversity in New Zealand's energy supply whilst also increasing resilience to climate effects. This is because:
 - Solar panels produce electricity from the photons in sunlight, but do not need direct sunlight. Panels function in ambient sunlight including on cloudy days, although sunny days will produce more energy than cloudy ones. The annual output of any solar farm can be ascertained to a high degree of accuracy and is highly predictable because the annual variance in solar irradiation anywhere in the world is between 1% and 3%.
 - Solar farming is a reliable source of energy and can be located away from high-risk areas. In particular, solar farms can tolerate flooding due to the mounting of panels and infrastructure above ground level.
 - The increase in diversity and resilience will also result in a greater security in electricity supply.
- Ecological enhancement including:
 - Restoration of the low-lying seepage area with wetland species, resulting in the restoration of a degraded wetland.
 - Riparian planting along the wetted drain, which will increase shading of the watercourse to the benefit of biota.
 - Replacement of existing exotic hedgerows with indigenous species, which will enhance connectivity and biodiversity throughout the site.
 - Boundary planting, which will increase the extent of native cover.
- The replacement of dairy cattle with sheep farming, which is expected to reduce environmental pressure on the land and impacts on downstream aquatic ecosystems and water quality through reduced runoff of nutrients.

- An increase in social wellbeing within the community and New Zealand knowing that the project will make a valuable contribution to New Zealand renewable energy output and reducing the reliance on fossil fuels.
- Retention and enhancement of cultural values through extensive ecological restoration, maintenance of key landscape values (lahars) including views to and from the Maunga, and improvements in the quality of wai.

10.14 Summary of Effects Assessment

Overall, the proposal will generate temporary adverse effects during the construction period that will be suitably managed through a suite of mitigation measures including various management plans. Minor visual and glare effects will be generated in the short term that will be sufficiently reduced over time as the mitigation planting establishes (approximately 3-5 years). Any ongoing operational effects will be minimal, and the proposed ecological enhancement will, over time, result in positive effects for the environment including an increase in water quality and biodiversity.

11 STATUTORY ASSESSMENT (SCHEDULE 6)

Schedule 6 - Section 9(1)(h) of the Covid-19 Act requires an assessment of the activity against the relevant provisions in any documents listed in subclause (2) being:

- *A national environmental standard.*
- *Other regulations made under the Resource Management Act 1991.*
- *A national policy statement.*
- *A New Zealand Coastal Policy Statement.*
- *A regional policy statement or proposed regional policy statement.*
- *A plan or proposed plan.*
- *A planning document recognised by a relevant iwi authority and lodged with a local authority.*

These documents are addressed below.

11.1 National Policy Statements

11.1.1 National Policy Statement for Renewable Electricity Generation (2011)

A discussion of the key objectives and policies of the National Policy Statement for Renewable Electricity Generation 2011 is included below.

Objective

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.

A. Recognising the benefits of renewable electricity generation activities

Decision-makers shall recognise and provide for the national significance of renewable electricity generation activities, including the national, regional and local benefits relevant to renewable electricity generation activities. These benefits include:, but are not limited to:

- a) maintaining or increasing electricity generation capacity while avoiding, reducing or displacing greenhouse gas emissions;*
- b) maintaining or increasing security of electricity supply at local, regional and national levels by diversifying the type and/or location of electricity generation;*
- c) using renewable natural resources rather than finite resources;*
- d) the reversibility of the adverse effects on the environment of some renewable electricity generation technologies;*
- e) avoiding reliance on imported fuels for the purposes of generating electricity*

Solar farms do not currently form a notable part of New Zealand's energy mix but the contribution is expected to grow. Transpower anticipates that around 9% of electricity delivered nationally by 2050 will be solar (a combination of rooftop and utility scale installations)¹⁷. The Ōpunake solar farm will contribute to the diversification of electricity generation in New Zealand and a reduction in greenhouse gas emissions.

B. Acknowledging the practical implications of achieving New Zealand's target for electricity generation from renewable resources

....

- c) meeting or exceeding the New Zealand Government's national target for the generation of electricity from renewable resources will require the significant development of renewable electricity generation activities.*

The proposal provides for a significant electricity generation activity that will generate enough energy to meet the annual electricity requirements of c. 15,000 typical households. This represents a significant contribution to New Zealand's national target for renewable energy.

¹⁷ *Whakamana i Te Mauri Hiko*, Transpower, March 2020

C. Acknowledging the practical constraints associated with the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities

Decision-makers shall have particular regard to the following matters:

- a) *the need to locate the renewable electricity generation activity where the renewable energy resource is available;*
- b) *logistical or technical practicalities associated with developing, upgrading, operating or maintaining the renewable electricity generation activity;*
- c) *the location of existing structures and infrastructure including, but not limited to, roads, navigation and telecommunication structures and facilities, the distribution network and the national grid in relation to the renewable electricity generation activity, and the need to connect renewable electricity generation activity to the national grid;*
- d) *designing measures which allow operational requirements to complement and provide for mitigation opportunities; and*
- e) *adaptive management measures.*

The subject site was identified and selected due to its proximity to Transpower's Ōpunake Substation, accommodating topography and the ability to utilise the site for sheep and solar farming in a complementary manner. A design led approach has been taken in the development of this project, resulting in large setbacks and extensive ecological restoration which will complement the rural environment in which it sits. The proposal is consistent with the direction of this objective.

Overall Assessment

Overall, the National Policy Statement for Renewable Electricity Generation 2011 requires decision makers to recognise the benefits of renewable energy and acknowledge the need for renewable energy to be located in a practical manner. The proposal will result in a number of benefits, as discussed throughout this report, including contributing to the New Zealand Government's national target for renewable energy. The proposal is consistent with the outcomes sought under the National Policy Statement for Renewable Electricity Generation 2011.

11.1.2 National Policy Statement for Freshwater Water Management (2020)

The National Policy Statement for Freshwater Management 2020 (NPS-FM) applies to all freshwater (including groundwater) and, to the extent they are affected by freshwater, to receiving environments (which may include estuaries and the wider coastal marine area). The NPS-FM came into force on 3 September 2020 and every local authority must give effect to this National Policy Statement as soon as reasonably practicable.

Part 2 of the NPS-FM contains a single overarching objective being –

The objective of this National Policy Statement is to ensure that natural and physical resources are managed in a way that prioritises:

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

The policies relevant to the proposal are included below:

- *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 6: There is no further loss of extent of natural inland wetlands, their values are protected, and their restoration is promoted.*
- *Policy 9: The habitats of indigenous freshwater species are protected.*
- *Policy 15: Communities are enabled to provide for their social, economic, and cultural wellbeing in a way that is consistent with this National Policy Statement.*

The Taranaki Regional Policy Statement has been updated to include policies and clauses (expressed as policies in the Regional Policy Statement) in accordance with the NPS-FW. A general assessment of the overarching policies is included below, and a specific assessment of directly relevant policies is included in section 11.3.

The proposal will not have any significant adverse effects on the health and wellbeing of freshwater ecosystems. Instead, it will significantly improve the health and wellbeing of the waterbodies within the site, due to the proposed restoration planting within riparian and wetland areas and a decrease in nutrient run off as a result of a switch from farming cattle dairy, to farming sheep.

Turning to the second stated priority, being the *'the health needs of people'* the proposal will not have any impact on any source of drinking water.

The third stated priority requires a wider consideration of the costs and benefits of a proposal. In this instance, the Ōpunake solar farm provides for the enhancement of the natural environment, through riparian and wetland restoration and the provision of indigenous planting within the site. The provision of renewable energy will also positively impact the environment through a reduced reliance on fossil fuels and diversity in electricity supply.

Policy 1 requires freshwater to be managed in a way that gives effect to Te Mana o te Wai. Te Mana o te Wai encompasses six principles, these are:

- a. *Mana whakahaere*: the power, authority and obligations of tangata whenua to make decisions that maintain, protect, and sustain the health and wellbeing of, and their relationship with, freshwater.

- b. *Kaitiakitanga*: the obligation of tangata whenua to preserve, restore, enhance, and sustainably use freshwater for the benefit of present and future generations.
- c. *Manaakitanga*: the process by which tangata whenua show respect, generosity, and care for freshwater and for others.
- d. *Governance*: the responsibility of those with authority for making decisions about freshwater to do so in a way that prioritises the health and well-being of freshwater now and into the future.
- e. *Stewardship*: the obligation of all New Zealanders to manage freshwater in a way that ensures it sustains present and future generations.
- f. *Care and respect*: the responsibility of all New Zealanders to care for freshwater in providing for the health of the nation.

As stated throughout this application, the applicant has undertaken extensive consultation with iwi. There has been no opposition to the proposal and recommendations arising from this consultation have been incorporated into proffered conditions of consent. The proposal includes significant ecological enhancement works and ongoing pest and weed control, which will enhance the wider ecological environment and outcomes for freshwater flora and fauna.

In regard to policies 6 and 9, solar arrays are proposed within wetland areas that are currently maintained in pasture and have been classified (in the Ecological Assessment in Appendix F) as 'low' quality. The nature of the solar farm activity is such that will not reduce the extent of these wetlands. Furthermore, the proposal involves the protection and restoration of various higher wetland areas (that are also currently maintained in pasture) that will ultimately enhance wetland values across the site as well as provided for habitat for indigenous species.

Lastly, the proposal is consistent with policy 15, in that it provides for the social, economic and cultural wellbeing of the community, as is discussed in sections 8 and 10.13 of this report.

Overall, the proposal is consistent with the NPS-FM in that it will not result in any loss of wetland or stream values; rather it provides for riparian and wetland enhancement.

11.1.3 National Policy Statement for Highly Productive Land

The National Policy Statement for Highly Productive Land (NPS-HPL) provides direction to improve the way highly productive land is managed under the RMA.

Key provisions of the NPS-HPL are set out below, followed by a discussion of their relevance to the site and project:

Objective

Highly productive land is protected for use in land-based primary production, both now and for future generations.

Policies

Policy 4: The use of highly productive land for land-based primary production is prioritised and supported.

Policy 8: Highly productive land is protected from inappropriate use and development.

Policy 9: Reverse sensitivity effects are managed so as not to constrain land-based primary production activities on highly productive land.

Implementation

3.9 Protecting highly productive land from inappropriate use and development

- (1) Territorial authorities must avoid the inappropriate use or development of highly productive land that is not land-based primary production.*
- (2) A use or development of highly productive land is inappropriate except where at least one of the following applies to the use or development, and the measures in subclause (3) are applied:

 - (e) it is for the purpose of protecting, maintaining, restoring, or enhancing indigenous biodiversity*
 - ...*
 - (j) it is associated with one of the following, and there is a functional or operational need for the use or development to be on the highly productive land:

 - (i) the maintenance, operation, upgrade, or expansion of specified infrastructure...***
- (3) Territorial authorities must take measures to ensure that any use or development on highly productive land:

 - (a) minimises or mitigates any actual loss or potential cumulative loss of the availability and productive capacity of highly productive land in their district; and*
 - (b) avoids if possible, or otherwise mitigates, any actual or potential reverse sensitivity effects on land-based primary production activities from the use or development.**

The NPS-HPL requires¹⁸ regional councils to identify and map highly productive land within their regions within 3 years of the release of the NPS-HPL. At the time of writing, Taranaki Regional Council has yet to undertake any such mapping, as such, the transitional provisions for identifying highly productive land, set out in clause 3.5(7) are relevant.

¹⁸ NPS-HPL, clause 3.5

In this instance, the site contains predominantly a mixture of LUC 3 and LUC 6 land (refer to Figure 11 below), is zoned Rural and has not been identified for future urban development or subject to a Council initiated or adopted plan change for re-zoning. As such, the site is considered to partially comprise highly productive land. It is therefore important to establish how the proposed solar farm activity fits within the NPS-HPL framework and whether the proposal is ‘inappropriate’ in the context of the NPS-HPL¹⁹.

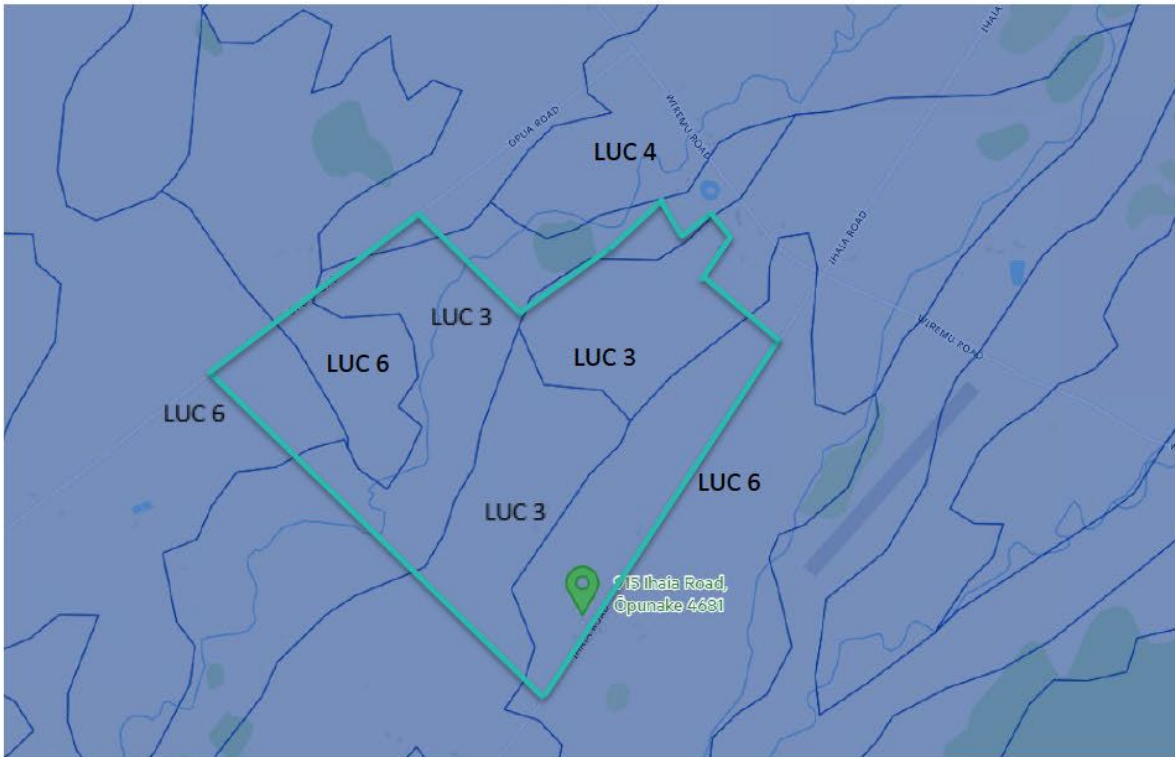


Figure 12: LUC Map (Source: Manaaki Whenua Landcare Research, LRIS Portal)

Clause 3.9(2) addresses the appropriate use of development of productive land and subsection (j)(i) provides a pathway for the maintenance, operation, upgrade, or expansion of specified infrastructure, on the basis that clause 3.9(3) is satisfied. It is understood that ‘new’ specified infrastructure is also captured by clause 3.9(2)(j)(i) on the basis of interpretation principles. Legal advice on this matter has been provided by Tompkins Wake and is attached at Appendix Y.

We also note references to specified infrastructure in the NPS-HPL Guide to Implementation²⁰. Table 2 of the Guide notes that “the key test is to demonstrate the use and development has a ‘functional need’ and ‘operational need’ to be on HPL”. As examples, Table 2 refers to “where a *new* road or transmission lines may need to traverse over an area of HPL” [emphasis added]. Table 2 goes on to note that “in many cases, the presence of specified infrastructure on HPL does not preclude the balance of the HPL being used by land-based primary production. For example, land surrounding structures used for infrastructure can often be used for animal grazing or some forms of horticulture”.

¹⁹ HPS-HPL, clause 3.9(2)

²⁰ National Policy Statement for Highly Productive Land, Guide to Implementation, March 2023



In this case, the proposed solar farm meets the definition of 'specified infrastructure' as electricity generation activities are 'infrastructure that delivers a service operated by a lifeline utility' (as defined in the Civil Defence Emergency Act 2002).

Regarding the consideration of operational or functional need, it is noted that solar farms are most practicably constructed in locations where:

- a) The topography is flat to gently sloping; and
- b) There is existing infrastructure (substations and/or high voltage lines) in close proximity where a connection to the national grid is able to be provided; and
- c) Where there is the appropriate number of daylight hours in an average year; and
- d) Soil is appropriate for the driving of piles; and
- e) Natural hazards are not incompatible with the activity; and
- f) Where there is a suitably sized land parcel(s) to accommodate the extent of infrastructure required; and
- g) Where the generator is able to obtain an agreement with a land owner or purchase the required land.

These factors have significantly impacted on site selection for this project and contribute to both functional and operational need, the standard definitions of which are reproduced below for ease of reference²¹:

Functional need means the need for a proposal or activity to traverse, locate or operate in a particular environment because the activity can only occur in that environment.

Operational need means the need for a proposal or activity to traverse, locate or operate in a particular environment because of technical, logistical or operational characteristics or constraints.

The NPS- HPL only requires that there is either "functional or operational need"²² (not both) for the specified infrastructure to locate in a particular environment. Nonetheless, there is inevitably some cross over between functional and operational need and the following assessment, while focused on operational need, also addresses some matters (such as potential alternative locations) associated with functional need.

In this instance, the site is located immediately adjacent to Transpower's Ōpunake substation, through which a connection to the national grid is available. The need for renewable energy generation to locate in proximity to existing infrastructure and connect to the grid is recognised by the NPS-REG²³ as a practical constraint that decision makers must have particular regard to. While it may technically be possible to locate a generation activity some distance from existing infrastructure and install a new transmission line, this would add significant additional costs to the project and result in energy losses that increase with

²¹ National Planning Standards

²² NPS-HPL clause 3.9(j)

²³ Policy C1 NPS:REG



distance. The NPS-REG recognises that this is not a practical approach. As such, there is clearly an operational need to locate the project near to existing infrastructure.

As noted above, solar is most practicably located on flat to gently sloping land to ensure maximum output. It is also noted that flatter land allows for more effective landscape screening. Due to the variable topography, the surrounding land comprises a mixture of LUC 6, LUC 4 and LUC 3 soils, distributed in a manner that means larger farming blocks (potentially suitable for solar development) generally contain a mixture of soil types. Therefore, high quality soils are not able to be readily avoided in this instance. A full alternatives assessment has not been undertaken (because doing so would be impractical), however, even in the event a site that did not contain any highly productive soils was located within reasonable proximity to the sub-station, a number of other factors, including the willingness of the land owner to enter into an agreement or other land features may render it unsuitable for other reasons.

Therefore, it is considered that there is an operational need for the proposal to be located within the environment (being an environment that partially comprises HPL).

In terms of clause 3.9(3) and as assessed previously, the solar panels will be pole driven into the ground allowing sufficient space underneath and around the panels to allow the site to continue to be effectively used for sheep farming. This dual use approach is known as agri-voltaics. Agri-voltaics provides benefits for livestock, particularly shade during summer and shelter from inclement weather during the winter. Likewise, the grazing of sheep ensures vegetation beneath the panels is maintained, avoiding the need for mowing. At the end-of-life solar panel life (approximately 25-35 years), the panels and associated infrastructure can be easily removed from the site to allow the land to be returned solely to productive use, if that is the desired outcome.

The loss of availability of land or productive capacity has been minimised through the location of larger buildings/infrastructure adjacent to the existing cow shed and existing ancillary farm buildings. The land could be fully reinstated to productive availability and capacity if required.

It is also noted that some productive land will be retired for the purposes of ecological restoration (wetland and riparian areas), which is consistent with the direction provided in clause 3.9(2)(e).

Lastly, there are no reverse sensitivity effects arising from solar farming within the rural zone. As previously noted, sheep and solar farming are complementary, and productive rural activities on adjoining properties will not impact on the solar farm.

The proposal is therefore not contrary to the NPS-HPL.

11.2 Regional Policy Statement for Taranaki

The Regional Policy Statement (RPS) for Taranaki provides an overview of the significant resource management issues of the Taranaki Region and puts in place objectives, policies and methods to achieve the integrated management of the natural and physical resources of the region.

The objectives and policies relate to the management of potential effects, such as erosion, water quality, air quality and amenity values. The RPS also provides specific direction to promote the use and development of renewable sources of energy and increase energy efficiency to support sustainable urban and rural development.



Many policies of the RPS are interrelated and overlapping. Therefore, the assessment below primarily groups objectives and, where relevant, policies, under topic headings which we consider most relevant to the District Council portion of the application.

Energy and The Built Environment (Providing for Regionally Significant Infrastructure)

The following objectives and policies are relevant to the proposal as they relate to energy (general and renewable) and infrastructure. As the proposal involves the generation of electricity that will be fed into the national grid, it is Infrastructure²⁴ as defined by the RMA, and Regionally Significant Infrastructure as recognised by the RPS²⁵.

14.1 Energy

ENE Objective 1

To promote the exploration, development, production, transmission and distribution of energy to meet the energy supply needs of the region and New Zealand in a manner that avoids, remedies or mitigates adverse effects on the environment.

ENE Objective 2

To promote the use and development of renewable sources of energy in a manner that avoids, remedies or mitigates adverse effects on the environment.

ENE Objective 3

To increase efficiency in the exploration, development, use and production, transmission and distribution of energy.

ENE Policy 1 (Energy Supply)

Provision will be made for the exploration, development, production, transmission and distribution of energy in Taranaki to enable people and communities access to an adequate supply of energy and thereby to provide for their economic and social wellbeing and for their health and safety.

ENE Policy 2 (Energy Efficiency)

Efficiency in the use, production and transmission of energy by users of natural and physical resources will be encouraged as far as is practicable and appropriate having particular regard to:

- a) energy requirements of urban form, subdivision patterns and site orientation;
- b) the design, location and operation of buildings and other structures;

²⁴ **Infrastructure** – means (d) facilities for the generation of electricity, lines used or intended to be used to convey electricity, and support structures for lines used or intended to be used to convey electricity, excluding facilities, lines, and support structures if a person–

- i. uses them in connection with the generation of electricity for the person’s use; and
- ii. does not use them to generate any electricity for supply to any other person;

²⁵ Section 15.2 of the Taranaki RPS

- c) transport modes and patterns;
- d) use of appropriate energy saving technologies in industrial, commercial and residential situations;
- e) waste management including the minimisation, recovery, reuse and recycling of solid wastes and other contaminants, provided that the energy required to carry out these measures is less than that required to produce new products or materials;
- f) research into, and development of, alternative energy sources and more energy efficient methods (both traditional and alternative) in the production and transmission of energy; and
- g) the respective roles, functions, and responsibilities of particular agencies.

ENE Policy 3 (Promotion of renewable energy)

The use and development of renewable energy resources will be promoted whilst avoiding, remedying or mitigating adverse effects on the environment as far as practicable.

15. The built environment

Providing for regionally significant infrastructure

INF Objective 1

To provide for the continued safe and efficient operation of the region’s network utilities and other infrastructure of regional significance (including where this is of national importance,) while avoiding, remedying or mitigating adverse effects on the environment.

INF Policy 1 (Provision for physical infrastructure of regional significance)

Provision will be made for the efficient and effective establishment, operation, maintenance and upgrading of network utilities and other physical infrastructure of regional significance (including where this is of national importance) and provision for any adverse effects of their establishment to be avoided, remedied or mitigated as far as is practicable.

The above objectives and policies recognise the importance and benefits of renewable energy and the locational practicalities associated with designing and operating a renewable energy project. The project is considered Regionally Significant Infrastructure and is consistent with the above provisions.

Freshwater

The following objectives and policies are relevant to the proposal, insofar as it impacts freshwater habitat.

6. Freshwater

WAL Objective 1

To sustainably manage the taking, use, damming or To sustainably manage the taking, use, damming or diversion of fresh water in the Taranaki region diversion of fresh water in the Taranaki region to enable people and communities to meet their needs enable people and communities to meet their needs for

water while safeguarding the life- for water while safeguarding the life-supporting capacity of water and related ecosystems and avoiding, remedying or mitigating any avoiding, remedying or mitigating any adverse effects adverse effects on the environment arising from that use

WAL Objective 2

To protect the natural character of water bodies from inappropriate subdivision, use and development.

WAL Policy 3 (Maintaining in-stream values and life-supporting capacity)

The in-stream values and life supporting capacity of water bodies will be maintained, and the natural character of rivers, streams, and lakes and their margins protected from inappropriate subdivision, use and development.

Matters to be considered in determining the quantities, levels or flow of water necessary to maintain instream values and life supporting capacity and to protect natural character will include:

- a) the natural character, ecological and amenity values associated with the water body and its margin, including indigenous biodiversity values, fishery values and the habitat of trout;
- b) the relationship of tangata whenua with the water body;
- c) the importance of the water body to meet existing or reasonably foreseeable needs for domestic and community water supplies, agricultural, industrial, hydroelectric power generation and other uses;
- d) the effects of proposed water levels and flows on water quality and the assimilative capacity of the waterbody;
- e) the hydrological characteristics of the catchment including flow variability, flow recession characteristics, the relationship to groundwater recharge, and the cumulative effects of land use and catchment development on stream hydrology;
- f) the significance of flows and groundwater recharge to the maintenance or enhancement of downstream flows;
- g) the ability to abstract from the lower reaches of catchments to safeguard instream values of upper reaches where this will not adversely affect the special value of estuaries;
- h) the significance of any historic heritage values associated with the water body; and
- i) the cumulative effects of existing takes;
- j) the extent to which any adverse effects of the taking, use, damming or diversion of water can be avoided, remedied or mitigate; and
- k) the regional and national benefits to be derived from the allocation of water resources.

The proposal is consistent with the above objectives and policies for the following reasons:

- Riparian and wetland planting is proposed, which will contribute to an improvement in water quality.



- Enhancement of biodiversity is proposed through extensive native planting as well as the restoration of degraded wetlands.
- It will provide for management of pest and weed species.
- It will reduce the extent of nutrient run-off through the conversion of the site from dairy cattle farming to the less intensive sheep farming.

Land and Soil

The following objectives and policies are relevant to the proposal, insofar as it impacts land and soil resources.

5. Land and Soil

AER Objective 1

To maintain and enhance the soil resource of the Taranaki region by avoiding, remedying or mitigating the adverse effects of accelerated erosion on soil resources.

AER Policy 1 (Sustainable land use and management practices)

Encourage land use and management practices that will promote the sustainable use and development of land and soil resources and minimise soil erosion by:

- a) avoiding, where practicable, practices that cause accelerated erosion; and
- b) remedying or mitigating the adverse effects of accelerated erosion where it occurs.

The proposed solar farm development will not generate any accelerated soil erosion and will have negligible effects on the soil resource, noting that the farm will be converted from dairy farming to less intensive sheep farming. Riparian planting will also help stabilise banks of water bodies where erosion has the potential to occur. As such, the proposal is consistent with these relevant objectives and policies.

Indigenous Biodiversity

The following objectives and policies are relevant to the proposal:

9. Indigenous Biodiversity

BIO Objective 1

To maintain and enhance the indigenous biodiversity of the Taranaki region, with a priority on ecosystems, habitats and areas that have significant indigenous biodiversity values.

BIO Policy 1 (Promotion of indigenous biodiversity)

The maintenance, enhancement and restoration of indigenous biodiversity will be promoted throughout the Taranaki region and at different scales within the region and will include ecological landscapes, ecosystems, and ecological processes, habitats, communities, species and populations.

BIO Policy 2 (Adverse effects on indigenous biodiversity)

Adverse effects on indigenous biodiversity in the Taranaki region arising from the use and development of natural and physical resources will be avoided, remedied or mitigated as far as is practicable.



BIO Policy 5 (Other ecosystems, habitats or areas with indigenous biodiversity values)

The maintenance, enhancement or restoration of indigenous biodiversity will be promoted in ecosystems, habitats and areas not covered by Policies 3 and 4 above, but still important for the continuing functioning of ecological processes, including those aspects important for the maintenance, enhancement or restoration of:

- a) connections within, or corridors between, habitats of indigenous flora and fauna;
- b) ecosystems, habitats and areas that provide buffering of habitats of indigenous flora and fauna;
- c) botanical, wildlife, fishery and amenity values;
- d) biological and genetic diversity;
- e) water quality, water levels and flows; and
- f) soils, substrate, minerals, nutrients or other physical factors or processes necessary for the survival of any indigenous flora or fauna species or community.

BIO Policy 7 (Appropriate use and development)

In the maintenance and enhancement of indigenous biodiversity in Taranaki consideration will be given to the social and economic benefits of appropriate use and development of resources.

As has been previously noted the proposal will result in the enhancement of biodiversity across the site through the:

- Enhancement of riparian margins.
- Indigenous boundary planting and the creation of biodiversity corridors.
- The restoration of degraded wetlands.

Consequently, the proposal consistent with the above objective and policies.

Natural features and landscapes, historic heritage and amenity value

The following objective and policy are relevant to the proposal:

10. Natural features and landscapes, historic heritage and amenity value

NFL Objective 1

To protect the outstanding natural features and landscapes of the Taranaki region from inappropriate subdivision, use and development, and to appropriately manage other natural areas, features appropriately manage other natural areas, features and landscapes of value to the region.

NFL Policy 2 (Other natural areas, features or landscapes of value)

Recognition shall be given to the appropriate management of other natural areas, features or landscapes not covered by Policy 1 above, but still of value to the region for one or more of the following reasons:

- a) the maintenance of water quality and quantity;
- b) soil conservation;

- c) the avoidance or mitigation of natural hazards;
- d) natural character amenity and heritage values and scientific and educational significance;
- e) geological and geomorphological, botanical, wildlife and fishery values;
- f) biodiversity and the functioning of ecosystems;
- g) 'sinks' or 'pools' for greenhouse gases; and
- h) cultural features of significance to tangata whenua

As is detailed in the ALE in Appendix J and in sections 10.6 and 10.11 of this report, the proposal has been designed to integrate into the rural environment. The low level, horizontal design pattern is consistent with the pattern of built form in the existing environment and allows for screening without any adverse screening of key landscape features. As such, the proposal is consistent with the above objective and policy.

16. Statement of resource management issues of significance to iwi authorities

(Treaty of Waitangi) TOW Objective 1

To take into account the principles of the Treaty of Waitangi in the exercise of functions and powers under the Resource Management Act. under the Resource Management Act.

TOW Policy 2

Management of natural and physical resources in the Taranaki region will be carried out in a manner that takes into account the principles of the Treaty of Waitangi, including the principles of kawanatanga, rangatiratanga, partnership, active participation, resource development and spiritual recognition.

Kaitiakitanga (KTA) Objective 1

To have particular regard to the concept of o have particular regard to the concept of kaitiakitanga in relation to managing the use, development and protection of natural and physical development and protection of natural and physical resources in the Taranaki region, in a way that accommodates the views of individual iwi and hapu. accommodates the views of individual iwi and hapu.

KTA Policy 1

Iwi and hapu will be consulted on an individual basis to determine how kaitiakitanga can be recognised and integrated in the management of the use, development and protection of natural and physical resources in the Taranaki region.

Relationship with Māori (REL) Objective 1

To recognise and provide for the cultural and o recognise and provide for the cultural and traditional relationship of Māori with their ancestral lands, water, air, coastal environment, wāhi tapu and lands, water, air, coastal environment, wāhi tapu and other sites and taonga wit other sites and taonga wittaonga wit taonga within the Taranaki region. hin the Taranaki region.

REL Policy 1

The development, use or protection of iwi and hapu land will be supported in a manner, which is consistent with the purpose of the Act.

REL Policy 3

Wāhi tapu and other sites or features of historical or cultural significance to iwi, and hapu and the cultural and spiritual values associated with ancestral lands, fresh water, air and the coast, will be protected from the adverse effects of activities, as far as is practicable and in a manner, which is consistent with the purpose of the Act.

REL Policy 4

The protection and enhancement of mahinga kai within the region's water bodies will be provided for and the restoration of degraded water bodies, which are of concern to iwi will be promoted.

REL Policy 7

The maintenance and enhancement of rivers, streams, lakes and other water bodies, which have special significance to iwi will be provided for in a manner respectful of tikanga Māori.

Harmony have undertaken extensive consultation with the Te Kāhui o Taranaki Trust whose values and views have been incorporated into the project design, including the retention of key landscape features (lahars) and the proposed ecological enhancement. Riparian and wetland restoration works that will improve the water quality of the Otahi Stream and planting that will provide habitat for native fauna. As such, the proposal is consistent with these objectives and policies.

11.2.1 Taranaki Regional Policy Statement Summary

In summary, the proposal is not considered contrary to any objectives and policies of the RPS, rather it provides for an outcome that is consistent with the overall direction of the RPS. Specifically, it provides for the development of renewable energy generation in a manner that avoids, mitigates or remedies adverse effects on the landscape, soil, freshwater, and biodiversity values.

11.3 Regional Freshwater Plan for Taranaki

The Regional Freshwater Plan for Taranaki (RFP) gives effect to the direction set by the RPS, including the identification of issues and associated objectives, policies and implementation methods.

Section 3 of the RFP addresses natural, ecological, amenity values and public access matters in the region and the need to protect these values from inappropriate use and development. As set out in the preceding sections of this assessment, the proposal has been specifically designed to minimise effects on natural and amenity values including the provision of riparian and boundary planting that will mitigate adverse visual effect as well as enhance ecological and biodiversity values. In addition, the proposal involves the restoration of natural wetlands and conversion to a less intensive rural land-use that will have positive effects on water quality. Appropriate erosion and sediment control measures will be in place throughout the earthworks period to minimise sediment and adverse effects on water quality during the construction period.



Section 4 deals with matters of significance to Māori and identifies the need for Tangata Whenua to be able to give effect to kaitiakitanga. As has been discussed throughout preceding sections of this assessment, extensive consultation with iwi has been completed and the proffered conditions of consent provide opportunity for the ongoing expression of kaitiakitanga.

Section 5A includes transitional objectives and policies that have been inserted to give effect to the NFS:FW. As set out in Section 11.1.2, the proposal is not contrary to the objectives and policies of the NFS:FW.

Section 6 addresses all other matters in the region including managing adverse effects on surface water and groundwater quality from certain activities, managing land drainage and adverse effects of land use activities on wetlands. As they relate to the Ōpunake solar farm, and as assessed previously, the proposal involves the restoration of wetlands and conversion to a less intensive rural land use that will have positive effects on water quality.

Overall, the proposal is considered to be consistent with the direction provided by the RFP.

11.4 South Taranaki District Plan

Outcome sought (objectives)	Solutions (policies)	Reasons
Section 2.1 Rural Zone		
<p><i>Objective 2.1.3</i></p> <p><i>To ensure that subdivision, land use and development in the rural environment is of a nature, scale, intensity and location that maintains and, where appropriate, enhances rural character and amenity values.</i></p>	<p><i>Policy 2.1.8</i></p> <p><i>Manage the adverse effects of noise, vibration, odour, dust, traffic, glare and other nuisances from land use activities and development through relevant performance standards and appropriate spatial buffers and setback requirements for specific activities.</i></p> <p><i>Policy 2.1.10</i></p> <p><i>Provide for the establishment and operation of farming activities which rely on a location in the rural environment, provided they avoid, remedy or mitigate adverse effects without unduly affecting landowner’s ability to use their land productively.</i></p> <p><i>Policy 2.1.13</i></p> <p><i>Reduce obtrusive built elements in the rural environment by integrating building location and design with the surrounding landform and landscape qualities,</i></p>	<p><i>The policies seek to provide for a range of farming and rural-industrial type activities in the rural environment, while maintaining rural amenity, open space, privacy, ease of access and landscape and scenic values associated with the rural environment that are enjoyed by the community. It is recognised that farming is the principal land use in the Rural Zone and the District Plan enables these activities (and commonly associated and ancillary activities) to occur. Rural land use activities which have the potential to generate adverse effects on the environment (e.g. rural subdivision, forestry, aggregate or soil extraction and processing, other rural industrial-type activities, and associated large utilitarian buildings) must be compatible with the character and qualities of the surrounding environment, and shall not generate adverse effects on surrounding properties (noise, dust, odour, or nuisance) or on the efficient and effective operation of existing farming activities, versatile land or transport networks. Notwithstanding this, residents living in the rural environment</i></p>

	<p><i>while recognising that the location and design of some buildings, and infrastructure is influenced by their function and/or resource constraints.</i></p> <p><i>Policy 2.1.14</i></p> <p><i>Avoid, remedy or mitigate adverse effects on rural privacy and rural character in the Rural Zone by maintaining road and site boundary setbacks for all buildings, while recognising that the degree of privacy and rural spaciousness is different in areas comprising existing smaller rural-residential lots.</i></p>	<p><i>need to recognise that farming activities can generate some external effects which are accepted (e.g. temporary noise associated with the use of farm machinery).</i></p> <p><i>Parts of the rural environment may also be suitable locations for infrastructure, including renewable electricity generation activities, due to the location of natural or physical resources and due to the low population density compared to other parts of the district. The District Plan establishes a framework for the management of the actual or potential effects of the activities and it recognises that these activities may be appropriate in the rural environment.</i></p>
<p><i>Objective 2.1.4</i></p> <p><i>To enable the efficient and effective functioning of farming and rural based activities, and ensure that activities are not inhibited by adverse effects of new incompatible land uses.</i></p>	<p><i>Policy 2.1.9</i></p> <p><i>Ensure that new land use activities are of a nature, scale, intensity and location consistent with maintaining the character and amenity of the rural environment, and avoids or mitigates potential reverse sensitivity effects.</i></p> <p><i>Policy 2.1.11</i></p> <p><i>Provide for the establishment and operation of new non-farming activities and the ongoing operation of existing lawfully established activities which are compatible and / or associated with farming activities in the rural environment, provided they avoid, remedy or mitigate adverse effects.</i></p> <p><i>Policy 2.1.12</i></p> <p><i>Minimise, and where possible, avoid subdivision, land use and development that has the potential to inhibit the efficient use and development of versatile land for farming purposes or other lawfully established rural activities or rural industrial activities in an adjoining Rural Industrial Zone.</i></p>	

	<p><i>Policy 2.1.15</i></p> <p><i>Manage potential reverse sensitivity conflict between farming, other rural activities and sensitive activities through appropriate separation distances or other measures, while giving priority to existing lawfully established activities.</i></p>	
<p><i>Comment: The proposal involves the development of a solar farm activity and associated built form elements that will be compatible with the surrounding landscape and rural land-uses and where adverse effects on rural character and amenity values have been minimised.</i></p>		
<p>Section 2.7 Tangata Whenua</p>		
<p><i>Objective 2.7.6</i></p> <p>To recognise and provide for the relationship of Tāngata Whenua and their culture and traditions (including mauri) with land, water, sites and areas of cultural and spiritual significance, wāhi tapu and other taonga.</p> <p><i>Objective 2.7.8</i></p> <p>To recognise and provide for development by Iwi and hapū that enhances their social, cultural and economic well-being in a way that achieves sustainable management of the environment.</p> <p><i>Objective 2.7.10</i></p> <p>To have particular regard to the concept of Kaitiakitanga as defined by Tāngata Whenua of the District in respect of the management of natural and physical resources.</p>	<p><i>Policy 2.7.11</i></p> <p><i>Establish formal and informal working relationships with Tāngata Whenua within which a partnership regarding resource management matters may be defined, addressed and decided.</i></p> <p><i>Policy 2.7.12</i></p> <p><i>To actively engage with Tāngata Whenua when addressing matters of concern to Iwi and hapū, including recognition of the relationship of Tāngata Whenua and their culture and traditions with land, water, sites and areas of cultural and spiritual significance, wāhi tapu and other taonga.</i></p> <p><i>Policy 2.7.15</i></p> <p><i>Avoid effects in the first instance, and if they cannot be avoided, then remedy or mitigate any adverse effects of activities that could destroy, degrade or damage the cultural values associated with a site or area of cultural or spiritual significance when assessing proposals for subdivision, use and development.</i></p>	<p><i>It is recognised that the relationship of Tāngata Whenua with their lands is typically a historic relationship. There is a desire by Tāngata Whenua to maintain and enhance this traditional relationship, both in terms of the current economic and social context and traditional setting. The Council will be largely dependent on Tāngata Whenua in identifying opportunities for how their traditional relationship can be maintained or enhanced.</i></p> <p><i>Some proposals may be of interest or concern to Tāngata Whenua where their relationship with, and culture and traditions relating to land, water, sites and areas of cultural and spiritual significance, wāhi tapu and other taonga, may be adversely affected. Actively engaging with Tāngata Whenua can assist with understanding the history of a site and, the effects of the proposal, and if effects are identified, how these effects can be avoided, remedied or mitigated.</i></p>
<p><i>Comment: Tangata Whenua have been consulted with through the conception and design of the proposal with their values reflected in the proffered conditions of consent.</i></p>		

Section 2.10 Energy		
<p><i>Objective 2.10.6</i></p> <p><i>To recognise the significant local, regional and national benefits from the use and development of renewable energy resources by providing for the investigation, development, operation, maintenance and upgrading of renewable energy activities, including electricity generation</i></p>	<p><i>Policy 2.10.10</i></p> <p><i>Ensure that the investigation, prospecting, exploration, development, use, production, and generation of energy resource activities, is managed in a way that recognises the national, regional and local benefits of the use and development of energy, while avoiding, remedying and mitigating adverse effects on the environment, including cumulative effects.</i></p> <p><i>Policy 2.10.19</i></p> <p><i>Recognise the locational, operational and technical constraints associated with developing, operating and maintaining large-scale renewable electricity generation activities and their requirements to connect to distribution networks and the National Grid.</i></p>	<p><i>The objectives and associated policies of this chapter seek to balance the wider benefits of energy resource activities against potential adverse effects, which are felt at the local level. The term ‘energy resource activities’ is used in this policy context to describe all activities which use natural and physical (renewable and non-renewable) resources to produce or generate energy, including fuel and electricity. This descriptor includes oil and gas energy activities and renewable electricity generation activities.</i></p> <p><i>Specifically concerning renewable energy generation activities, the objectives and policies of the District Plan reflect the requirement to have regard to the benefits of renewable energy in Section 7 of the RMA and give effect to the National Policy Statements on Electricity Transmission and Renewable Electricity Generation (NPSREG), as well as the Regional Policy Statement for Taranaki.</i></p> <p><i>In particular, the NPSREG requires that the District Plan’s objectives, policies and methods recognise the nature, extent and location of relevant developed and undeveloped renewable energy resources in a district. For existing renewable electricity generation activities this means providing for their maintenance and upgrade, and protecting facilities from reverse sensitivity effects that might result from new subdivision, land use, or development in their vicinity. Facilities of local, national and regional significance associated with oil and gas energy resources are also afforded similar provision in this section.</i></p>
<p><i>Objective 2.10.7</i></p> <p><i>To ensure the adverse effects of oil and gas and renewable energy activities are avoided, remedied or mitigated, particularly adverse amenity, landscape and traffic effects on the District’s infrastructure, sensitive environments, wāhi tapu sites/areas, sites of importance to Tāngata whenua, and nearby land uses and infrastructure, while recognising their technical, locational and operational constraints</i></p>	<p><i>Policy 2.10.11</i></p> <p><i>Ensure that investigation, prospecting, exploration, development, use, production, and generation of energy resource activities are appropriately located to:</i></p> <p><i>(a) avoid adverse effects of activities on the characteristics and qualities that contribute to:</i></p> <p><i>(i) natural character in areas of the coastal environment identified as having outstanding natural character; and</i></p> <p><i>(ii) the values of outstanding natural features and landscapes;</i></p> <p><i>(b) avoid significant adverse effects and avoid, remedy or mitigate adverse effects of activities on the</i></p>	<p><i>The objectives and associated policies of this chapter seek to balance the wider benefits of energy resource activities against potential adverse effects, which are felt at the local level. The term ‘energy resource activities’ is used in this policy context to describe all activities which use natural and physical (renewable and non-renewable) resources to produce or generate energy, including fuel and electricity. This descriptor includes oil and gas energy activities and renewable electricity generation activities.</i></p> <p><i>Specifically concerning renewable energy generation activities, the objectives and policies of the District Plan reflect the requirement to have regard to the benefits of renewable energy in Section 7 of the RMA and give effect to the National Policy Statements on Electricity Transmission and Renewable Electricity Generation (NPSREG), as well as the Regional Policy Statement for Taranaki.</i></p> <p><i>In particular, the NPSREG requires that the District Plan’s objectives, policies and methods recognise the nature, extent and location of relevant developed and undeveloped renewable energy resources in a district. For existing renewable electricity generation activities this means providing for their maintenance and upgrade, and protecting facilities from reverse sensitivity effects that might result from new subdivision, land use, or development in their vicinity. Facilities of local, national and regional significance associated with oil and gas energy resources are also afforded similar provision in this section.</i></p>



	<p><i>characteristics and qualities that contribute to natural character, or other natural features and landscapes, in all other areas of the coastal environment;</i></p> <p><i>(c) avoid, remedy or mitigate adverse effects of activities on:</i></p> <p><i>(i) the other special values and qualities of the coastal environment; and</i></p> <p><i>(ii) the character and amenity values of the urban environment</i></p>	
<p><i>Comment: The proposal represents the establishment of a significant renewable energy project that will provide for an array of positive effects while minimising effects on character and amenity values of the surrounding environment.</i></p>		
<p>Section 2.11 Network Utilities</p>		
<p>Objective 2.11.2</p> <p><i>To provide for the safe, efficient and sustainable development, operation, maintenance and upgrading of network utilities, in a manner which avoids, remedies or mitigates adverse effects on the environment, while recognising their technical, locational and operational constraints.</i></p>	<p>Policy 2.11.4</p> <p><i>Provide for the development, operation, maintenance and upgrading of network utilities in a manner which avoids, remedies, or mitigates adverse effects on the environment, while recognising their operational, technical and locational requirements.</i></p> <p>Policy 2.11.5</p> <p><i>Manage the location, scale and design of the development or upgrading of network utilities (including in relation to the National Grid), and consider the extent to which any adverse effects have been avoided, remedied or mitigated by the route, site and method selection process.</i></p> <p>Policy 2.11.6</p> <p><i>Consider the locational, technical and operational requirements of network utilities and the contribution they make to the functioning and wellbeing of the community in assessing their location, design and appearance.</i></p>	<p><i>The District’s network utilities include the urban water, wastewater, stormwater and sewerage systems, electricity lines (including the National Grid), telecommunication and radiocommunication facilities, the roading network, railways, navigational aids and meteorological operations and associated support structures. These utilities contribute to the overall social wellbeing and economic vitality of the South Taranaki District and beyond. It is therefore important that the safe and efficient development, operation, maintenance and upgrading of these services be effectively provided for, and that the local, regional and national benefits that derive from them are adequately recognised.</i></p> <p><i>The development, operation, maintenance and upgrading of network utilities can adversely affect the environmental quality of the District, such as from noise and visual effects on amenity values. For example, some network utilities are relatively large, visually prominent and capable of generating significant adverse effects on the environment. They may also have potential impacts on public health and safety. Adverse effects may only occur</i></p>

	<p><i>Policy 2.11.8</i></p> <p><i>Encourage, to the extent practicable, the more efficient use of existing network utilities, and co-siting and sharing of masts, facilities and utility corridors to reduce the need for new utilities elsewhere in the District.</i></p> <p><i>Policy 2.11.9</i></p> <p><i>Recognise the positive social, economic and environmental benefits that accrue nationally and regionally from the development, continued operation and upgrading of network utilities.</i></p>	<p><i>at the time of construction, but in some cases may continue throughout its operation or during maintenance and upgrading works. In addition, some locations can be more sensitive to these effects, such as residential or open space areas, or sites or areas with heritage or cultural value.</i></p>
<p><i>Objective 2.11.3</i></p> <p><i>Protection of network utilities from the actual or potential adverse effects of incompatible subdivision, land use or development.</i></p>	<p><i>Policy 2.11.10</i></p> <p><i>Ensure that the adverse effects, including reverse sensitivity effects of incompatible subdivision, land use or development on the safety, efficiency, operation, maintenance and upgrading of existing network utilities are avoided or mitigated.</i></p> <p><i>Policy 2.11.11</i></p> <p><i>Manage any adverse effects of subdivision, land use and development on the National Grid including substations by ensuring that:</i></p> <p><i>(a) Areas are identified in the Plan to establish buffer distances for managing subdivision, development and land use near the National Grid;</i></p> <p><i>(b) Sensitive activities and large-scale structures are restricted from establishing within the National Grid Yards and are appropriately managed around substations;</i></p> <p><i>Policy 2.11.12</i></p> <p><i>Promote the design of subdivisions and land use development or redevelopment in a manner that</i></p>	

	<p><i>enables the efficient use of land within the identified National Grid Yard, National Grid Subdivision Corridor and around substations without introducing sensitive activities or structures that would inhibit the operation, access, maintenance or upgrade of the National Grid infrastructure.</i></p>	
<p><i>Comment: The proposed solar farm has been specifically designed and located to maximise sunlight exposure and to be in close proximity to an existing sub-station to avoid the need for significant earthworks and structures that may adversely affect the surrounding environment. The proposed solar farm is also compatible with and will supplement the existing substation.</i></p>		
<p>2.16 Natural Features and Landscapes</p>		
<p><i>Objective 2.16.4.</i></p> <p><i>To recognise the qualities and values of other important natural features and landscapes and have regard to their values when undertaking new subdivision, use and development.</i></p>	<p><i>Policy 2.16.5</i></p> <p><i>Protect natural features and landscapes of the coastal environment from inappropriate subdivision, use and development by...</i></p> <p><i>(b) Avoid significant adverse effects and avoiding, remedying or mitigating other adverse effects of activities on the qualities and characteristics that contribute to the values of other natural features and natural landscapes in the coastal environment.</i></p> <p><i>Policy 2.16.11</i></p> <p><i>Consider potential adverse effects of subdivision, use and development on the qualities and characteristics that contribute to the values of the following important natural features and landscapes:</i></p> <p><i>(a) The collective contribution and geological significance of lahar mounds to South Taranaki’s rural landscape.</i></p> <p><i>Policy 2.16.13</i></p> <p><i>Recognise and provide for the positive effects associated with</i></p>	<p><i>The above policies seek to ensure the protection of the identified Outstanding Natural Features/Landscapes, and the maintenance of other important natural features and landscapes by managing the scale, location and extent of activities in relation to the qualities and characteristics that contribute to the values of these features and landscapes. Similar to activities in the coastal environment, the above policies do not preclude appropriate development, particularly high quality development that is sensitive to the qualities and characteristics that contribute to the values of an Outstanding Natural Feature/Landscape or other important natural features or landscapes.</i></p>



	<p><i>landscape and biodiversity restoration</i></p>	
<p><i>Comment: The ALE has comprehensively assessed the proposal within the context of the surrounding landscape and concluded that adverse effects have been appropriately mitigated. In addition, the proposal involves positive effects associated with landscape planting, riparian and wetland restoration that will enhance biodiversity values.</i></p>		



Section 2.17 Indigenous Biodiversity		
<p><i>Objective 2.17.3</i></p> <p><i>The maintenance and enhancement of indigenous biodiversity through the protection, enhancement and restoration of indigenous habitats and indigenous vegetation.</i></p>	<p><i>Policy 2.17.9</i></p> <p><i>Protect Significant Natural Areas, and maintain and enhance indigenous biodiversity values, having regard to the following matters:</i></p> <p><i>(a) Actual or potential impacts on the significance of the affected area and on ecological values (including habitat, vegetation and fauna), and cultural, intrinsic and/or amenity values.</i></p> <p><i>(b) The sustainability of the habitat or area of vegetation proposed to be modified or damaged or any adjoining habitat or area of vegetation to an area proposed to be affected.</i></p> <p><i>(c) The representativeness of the affected vegetation or habitat and impact on its interrelationship or continuity with other habitats or areas of indigenous vegetation.</i></p> <p><i>(d) Whether the affected area retains the presence of rare or distinctive, threatened or at risk, indigenous flora or fauna species.</i></p> <p><i>(e) The extent to which the proposal is the minimum necessary to protect significant indigenous vegetation and significant habitats of indigenous fauna.</i></p> <p><i>(f) Significant residual effects should be offset, or where 'no net loss' cannot reasonably be achieved, addressed by environmental compensation measures, proposed or agreed to by the applicant.</i></p>	<p><i>The continued existence of significant indigenous vegetation and significant habitats of indigenous fauna that are representative of native ecosystems, or rare or distinctive indigenous flora and fauna species is important for ecological, biodiversity and intrinsic purposes, but also for the legacy that is left for future generations. The preservation of the natural character of wetlands from inappropriate subdivision, land use and development, and the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna is a matter of national importance in the RMA. Significant indigenous vegetation and significant habitats of indigenous fauna are also valued for their amenity, aesthetic, natural character, cultural and heritage values.</i></p>
<p><i>Comment: The proposed development does not involve the destruction of any significant areas of indigenous vegetation or wetland areas. Conversely, the proposal involves planting and restoration works that will improve indigenous biodiversity.</i></p>		



Section 2.18 Waterbodies		
<p><i>Objective 2.18.4</i></p> <p><i>To preserve the natural character of the district’s lakes, rivers, streams, wetlands and other waterbodies and protect them from inappropriate subdivision, use and development.</i></p>	<p><i>Policy 2.18.9</i></p> <p><i>Avoid, remedy or mitigate the adverse effects of subdivision, use and development that would detract from or compromise the natural character, ecological, recreation, amenity, heritage and cultural values of lakes, rivers and other waterbodies.</i></p> <p><i>Policy 2.18.10</i></p> <p><i>Ensure that subdivision, use and development is of a scale, location, and design that protects the natural character of lakes, rivers and other waterbodies and maintains and enhances their values by having regard to the following matters in assessing proposals:</i></p> <p><i>(a) Extent to which natural processes, elements and patterns that determine the natural character of the water body are sustained, and/or restored and rehabilitated;</i></p> <p><i>(b) Degree of protection of vegetation cover and patterns, including use of a buffer or riparian margin;</i></p> <p><i>(c) Compatibility with existing level of modification to the environment;</i></p> <p><i>(d) Functional necessity to be located in or near the waterbody, and no reasonably practicable alternative locations exist;</i></p> <p><i>(e) Ability to mitigate any potential adverse effects of subdivision, use and development; and</i></p> <p><i>(f) Provision of public amenity and access to land acquired by Council for reserve purposes.</i></p> <p><i>Policy 2.18.13</i></p>	<p><i>Managing development, land use and subdivision close to lakes, rivers and other waterbodies is important to protect the high natural character and special values of these waterbodies, including conservation, recreation, amenity, heritage and cultural values. It is generally inappropriate to place structures within, and immediately adjoining, waterbodies, except for those that are required to be located in these areas by their nature, such as flood protection works, bridges, small recreational structures or structures for irrigation, water supply, or energy generation.</i></p> <p><i>If buildings, structures and activities are not effectively managed adjacent to or on the surface of waterbodies, they may create environmental effects such as adverse visual impacts, excessive noise, and loss of public access to riparian areas which affects the natural character and special values of these areas.</i></p> <p><i>An effective way to achieve protection of the natural character of waterbodies is to create a buffer between waterways and adjoining activities, through the creation of esplanade reserves and strips at the time of subdivision or development.</i></p>



	<i>Promote and encourage the development and maintenance of riparian fencing and planting along waterbody margins.</i>	
<i>Comment: The proposed solar panels and ancillary structures will be sufficiently set back from the Otahi Stream and appropriate erosion and sediment control measures will be implemented to protect the values of the stream and other watercourse during construction activities. In addition, the proposal involves riparian planting that will enhance the values of the watercourses and biodiversity values.</i>		
2.19 Natural Hazards		
<i>Objective 2.19.3 Subdivision, use and development do not create, worsen, displace or increase the severity of natural hazards.</i>	<i>Policy 2.19.8 Ensure that the use and development of land does not accelerate or worsen any material damage to that land, or displace to other land or structures, resulting from erosion, subsidence, slippage, debris flow, or surface water flooding. Policy 2.19.18 Manage subdivision, use and development in areas considered to be susceptible to land instability by siting work in stable locations to avoid hazard risks or adopting specifically designed measures such as appropriate building foundations or batter slopes to mitigate the hazard risks.</i>	<i>Where subdivision, land use or development is intended or expected to occur, it is important that every endeavour is made to avoid locations which are susceptible to significant risks of natural hazards. In some situations it may not be possible to consider alternative locations (for instance, where the development changes the use of existing buildings, or for infrastructure that has locational requirements), and for some hazards the risk may be fairly low or equal throughout the District. In these situations, every effort should be made to mitigate potential adverse effects expected to result from the hazard on people, property and the environment</i>
<i>Comment: The site is not located in any identified natural hazard areas. Geotechnical investigations have confirmed that the solar farm can be safely established as to not be affected by or generate any instability effects or natural hazard risk on people, property or the environment.</i>		

Overall, the proposal is considered to be consistent with the direction provided by the objectives and policies of the Sough Taranaki District Plan.

11.5 Iwi Management Plans

11.5.1 Taiao, Taiora – An Iwi Environmental Management Plan for the Taranaki Iwi Rohe

Taiao, Taiora is an iwi environmental management plan that represents the views of Taranaki Iwi with regards to environmental resource management. The purpose of this plan is to describe and detail some of Taranaki Iwi whakaaro and approaches to caring for the environment so it can be recognised and provided for during decision-making processes including resource consent applications and concession



applications. The 'Take Matua' section contains the objectives, issues and policies associated with each atua in the rohe and provides a framework for how certain activities are viewed and assessed. These matters are guided by the following principles of environmental management:

- Taranaki rohe will be a place that supports and sustains the needs of ngā uri o Taranaki culturally, spiritually, and economically. A place for the people of Taranaki Iwi to live, grow, and thrive together like our ancestors before them;
- Taranaki Iwi are kaitiaki of the Taranaki rohe. Current and future generations of Taranaki Iwi will actively work to improve the land that they own and assert Mana Whenua. Taranaki Iwi will walk the talk with leadership by action and advocate for enhancing the environment in our rohe. In some cases, this may mean getting involved in matters outside of their rohe where those matters will have an effect on the environment within it.
- The people of Taranaki Iwi will seek to live in a manner that sustains and is in harmony with the environment and its mouri for the wellbeing of the people.
- Taranaki Iwi acknowledges that achieving environmental outcomes from current activities will not always be immediate. Taranaki Iwi do expect that all activities be actively managed with the goal of reducing and where possible, avoiding any adverse environmental effects associated with those activities.
- Taranaki Iwi will oppose actions that clearly lead to adverse, irreversible and unacceptable impacts on the environment and its mouri.

As set out in Sections 7.1.1 and 10.8, Harmony has consulted with the Te Kāhui o Taranaki Trust who have expressed their support for the application including the proposed conditions of consent. Notwithstanding that expression of support, an assessment against the relevant provisions has been undertaken. As relevant to this application, "Taiao, Taiora" seeks the following in summary:

- Wetlands and the surrounding lands of rivers will be restored with a natural diversity of ngāi tipu me ngāi kīrehe.
- Restoration of important plant and animal species habitat including protection from weed and pest species.
- A reduction in the resilience of fossil fuels including avoiding new prospecting, exploration and extraction of minerals, coal gas and petroleum and awareness and pro-active action against the impacts of climate change.
- Will prioritise and advocate the use of clean technology in all areas including electricity supply and transportation.
- New developments are supported by landscape assessments that consider underlying cultural values that are important and inseparable element of the landscape.
- Intensive farming practices and associated impacts on the environment are managed and reduced where appropriate.

As set out in the preceding sections of this assessment, the proposed solar farm project will provide a significant role in providing clean renewable energy to the region that will reduce reliance on fossil fuels and the need for further oil and gas prospecting. The landscape assessment has incorporated the cultural

elements of the surrounding landscape which has informed a design led approach to ensure the development is commensurate and compatible with the surrounding cultural and visual landscape. A comprehensive planting and restoration scheme will also enhance wetland and riparian areas that will also provide habitat and enhance indigenous biodiversity. The existing land use will be converted from intensive dairy farming therefore resulting in a subsequent decrease in impacts on water quality.

The He Whakamārama (Appendix S) also confirms that mana whenua consider that the proposal aligns with the principles of Taiao, Taiora. For this reason and reasons set out above, it is considered that the proposal does not conflict with the objectives and policies set out in Taiao, Taiora.

11.6 Statutory Assessment Summary

The above assessments demonstrate that the proposal will be consistent with the relevant objectives and policies and assessment criteria of the relevant documents, as required under Schedule 6 - Section 9(1)(h) of the Covid-19 Act, subject to fair and reasonable conditions being imposed as recommended in the draft condition set in Appendix X.

12 OTHER RELEVANT MATTERS

12.1 Taranaki Iwi Claims Act 2016

The Taranaki Iwi Claims Act acknowledges the apology given by the Crown to Taranaki Iwi in the Deed of Settlement, provides cultural redress, included the vesting of a number of properties as reserves, and gives effects to the Statutory Acknowledgement and Deed of Recognition areas set out in the deed of settlement.

The Statutory Acknowledgement and Deed of Recognition identify specific areas of interest to Taranaki Iwi, particularly along river and coastal margins (Tangahoe, Whenuakura, Patea, Mohakatino, Tongapōrutu rivers and the coastal area between the Whenuakura River and Waingangoro River) and conservation areas including Tongapōrutu, Mohakatino Swamp and the Pou Tehia Historic Reserve.

The proposal is not situated within any of the identified statutory acknowledgement areas. Notwithstanding, extensive consultation has been undertaken with the Te Kāhui o Taranaki Trust who have expressed their support for the proposal.

On this basis, the proposal is not considered to conflict with any of the requirements of the Taranaki Iwi Claims Act 2016.

12.2 Proposed National Policy Statement for Renewable Energy Generation [2023] – Draft for Consultation

A draft Proposed National Policy Statement for Renewable Energy Generation has been released for consultation. This document represents an important component of a proposed package of national direction tools to enable New Zealand to meet government targets for increasing renewable electricity generation and reducing greenhouse gas emissions from use of non-renewable sources. The proposed changes would help ensure current planning settings enable New Zealand to significantly expand its renewable electricity generation capacity, which is vital for electrifying transportation and our industries, and shifting to a low-emissions economy.



The proposed NPS will provide stronger and more directive policy direction for regional authorities to provide for and realise the benefits of renewable energy generation in their statutory frameworks. Specific direction is also proposed in relation to REG activities in ‘areas with significant environmental values’, Māori interests in REG, and for small-scale and community scale REG. The consultation period on this document closed in June 2023 and the NPS is intended to be progressed as a priority and gazetted by the end of 2023.

12.3 Advancing New Zealand’s Energy Transition

This paper was released in August 2023 by the Ministry of Business, Innovation and Employment and forms one part of a package of documents consulting on the next phase of Aotearoa New Zealand’s energy transition. Each document addresses a critical aspect of the energy transition – the emerging roles for hydrogen, measures to enhance the electricity system, phasing down the use of fossil gas, and proposals for regulating a future offshore renewable energy industry.

This paper presents an overview of these energy system discussion documents, identifies cross-cutting issues, and shows how this consultation supports work towards developing an overarching Aotearoa Energy Strategy. The Energy Strategy will chart a path for the energy sector to 2050, promoting our objectives for a highly renewable, reliable, and affordable energy system that supports economic growth and productivity. The most relevant paper is the ‘*Measures for transition to an expanded and highly renewable electricity system*’ which seeks to manage the phase out of fossil fuels in the electricity system, while responding to substantially increased electricity demand that is occurring through the electrification of other sections (such as industry and transport).

12.4 Measures for Transition to an Expanded and Highly Renewable Electricity System

This paper was released in August 2023 by the Ministry of Business, Innovation and Employment which builds on significant existing work to help decarbonise our energy and electricity sectors. Since 2019, the Government has developed its first Emissions Reduction Plan (ERP), which incorporates and builds on many proposals in the Government’s 2020 Accelerating Renewable Energy and Energy Efficiency consultation. These include:

- progressing improvements to ‘national direction’ instruments for renewable electricity generation and transmission infrastructure to speed up consenting.
- boosting funding for the Government Investment in Decarbonising Industry (GIDI) Fund by \$650 million over four years in Budget 2022, which is helping to decarbonise industry.
- utilising the GIDI Fund, announcing a significant electrification partnership with New Zealand Steel in May 2023 that could reduce New Zealand’s emissions by 1 per cent.
- supporting community energy projects through the Māori and Public Housing Renewable Energy Fund.

Of note is the development of the NPS:REG which will provide more direction and an efficient pathway for renewable energy generation. As set out in Section 12.2, the NPS is planned to be gazetted by the end of 2023 which should further enable the development of renewable energy projects throughout New Zealand.

12.5 Aotearoa New Zealand Energy Strategy

The Government is currently developing an Aotearoa New Zealand Energy Strategy to support a transition to a low carbon economy and address strategic challenges in the energy sector. The strategy is expected by the end of 2024 and will support the vision that *'by 2050 Aotearoa has a highly renewable, sustainable and efficient energy system that is accessible and affordable, secure and reliable, and supports New Zealanders' wellbeing*²⁶.

The strategy has not yet been released in draft form and therefore, it is not possible to provide an assessment of the proposal against it. However, given that the Ōpunake solar farm will provide for renewable energy in a low impact manner, it is considered highly likely the proposal will be consistent with, and contribute to achieving, the stated vision.

13 SECTION 104B

Schedule 6, Section 32(1) of the Covid-19 Act stats that Sections 104A-104D apply to the Panel's consideration of a proposal.

Section 104B is the section applicable to Discretionary Activities, and states:

After considering an application for resource consent for a discretionary activity or non-complying activity, a consent authority –

- a) may grant or refuse the application; and*
- b) if it grants the application, may impose conditions under section 108.*

In this instance, when accounting for the proposed mitigation, the adverse effects of the proposal are assessed as generally less than minor²⁷ and therefore acceptable. In addition, the development aligns with the policy framework provided by national, regional and district policies and plans and other relevant documents. A set of draft conditions has been provided which will ensure that the development is managed in such a way as to avoid, remedy or mitigate adverse effects resulting from the proposal. In addition, the proposal will have a number of positive effects, including (but not limited to):

- Enhanced ecological outcomes in the receiving environment.
- Diversity and resilience in electricity supply, contributing to an increase in energy security.
- A significant contribution to achieving New Zealand's renewable energy target.
- Local economic and employment benefits.
- A reduced reliance of fossil fuels and resulting positive effects for climate change.

Overall and on balance, the proposal will have positive outcomes for the environment and the community.

²⁶ Ministry of Business Innovation and Employment, webpage [Aotearoa New Zealand Energy Strategy | Ministry of Business, Innovation & Employment \(mbie.govt.nz\)](https://www.mbie.govt.nz/aotearoa-new-zealand-energy-strategy).

²⁷ With the exception of construction traffic effects which are considered to be minor during construction

14 PART 2 ASSESSMENT

Schedule 6, Section 9(1)(g) of the Covid-19 Act requires an assessment of the proposal against Part 2 of the RMA.

14.1 Section 8

Section 8 of the RMA requires all persons exercising functions and powers under it to take into account the principles of the Treaty of Waitangi. The RMA does not go so far as to define the principles of the Treaty that should be taken into account, but the Court of Appeal, the Waitangi Tribunal and statements by Government indicate that the following are appropriate principles:

- Early consultation and acting in good faith;
- The principle of partnership; and
- The need for active protection.

While this requirement pertains to decision makers, rather than Applicants, in this case the Applicant has undertaken good faith consultation throughout the project. The Applicant (who will be the consent holder) is committed to continuing this relationship throughout the life of the project and beyond, including establishing formal relationship agreements with Taranaki Iwi.

On that basis, the proposal can be said to give effect to the principles of the Treaty of Waitangi.

14.2 Section 7

Section 7 requires that Councils shall have particular regard to a number of matters, those which are considered particularly relevant to the proposal are set out below:

- (a) *Kaitiakitanga;*
- (aa) *The ethic of stewardship;*
- (b) *The efficient development and use of natural and physical resources;*
- (c) *The maintenance and enhancement of amenity values;*
- (d) *Intrinsic values of ecosystems;*
- (f) *Maintenance and enhancement of the quality of the environment;*
- (g) *any finite characteristics of natural and physical resources;*
- (i) *The effects of climate change; and*
- (j) *The benefits to be derived from the use and development of renewable energy.*

Subclause (j) directly acknowledges the benefits of renewable energy; these benefits have been outlined throughout this assessment and are a significant factor in the consideration of this application. In addition, the proposal provides for the enhancement of the environment, through ecological restoration and the conversion of the site from dairy cattle farming to sheep farming to enable the continuation of productive land use (and therefore protecting the characteristics of natural resources) and providing opportunities for ongoing iwi involvement. As such, it is considered that the proposal positively aligns with the matters outlined above.

14.3 Section 6

In achieving the purpose of the RMA, all persons exercising functions and powers under it in relation to managing the use, development and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:

- (a) *the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:*
- (b) *the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:*
- (c) *the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:*
- (d) *the maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers:*
- (e) *the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga:*
- (f) *the protection of historic heritage from inappropriate subdivision, use, and development:*
- (g) *the protection of protected customary rights:*
- (h) *the management of significant risks from natural hazards.*

The proposal provides for the significant ecological enhancement of both riparian margins and a degraded wetland in a manner that accords with subclause (a). Additionally, the project has been designed to align with the aspirations of iwi (including through ecological restoration) and the Applicant has committed to an ongoing relationship with those parties.

14.4 Section 5

Section 5 is set out as follows and the matters within it are considered below:

- 1 *The purpose of this Act is to promote the sustainable management of natural and physical resources.*
- 2 *In this Act, sustainable management means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while—*
 - (a) *sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and*
 - (b) *safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and*
 - (c) *avoiding, remedying, or mitigating any adverse effects of activities on the environment.*

Sections 6, 7 and 8 all serve to inform the analysis and consideration of whether the purpose of the RMA under section 5 will be achieved by development of the Ōpunake solar farm. As is detailed throughout the assessment of environmental effects, the development will result in an acceptable level of adverse effects, primarily during the construction phase, with longer term adverse effects being less than minor in nature and outweighed by positive effects arising from ecological enhancement and the generation of renewable energy.



Overall, development of the Ōpunake solar farm is considered to represent sustainable management.

15 CONCLUSION

The proposal aligns with the purpose of the Covid-19 Act, in that it provides for renewable energy; positive employment and economic outcomes during construction; resilience in energy supply; and because it will progress faster through this process than through traditional consenting pathways.

The proposal has been designed to ensure that adverse effects, particularly those associated with visual amenity and rural character are minimised and positive ecological effects are realised through extensive ecological enhancement. While there will be some minor effects associated with construction, best practice approaches to construction traffic management and erosion and sediment control will ensure effects are minimised. Further, construction noise can and will be managed through the implementation of a site management plan and conditions of consent. Due to the nature of the activity, operational effects associated with the Ōpunake solar farm will be very low and will be readily outweighed by the ongoing positive effects associated with renewable electricity generation and, to a lesser extent, educational opportunities.

Given the acceptable nature of the anticipated adverse effects, the extent of positive effects, and the support expressed by iwi, the development clearly aligns with relevant local, regional, and national documents. Consequently, it is considered that the purpose of the RMA, as set out in Part 2, is best served through granting consent.



Appendix A
Application Form



Appendix B
Referral Decision



Appendix C
Project Plans





Appendix D
Infrastructure Specifications



Appendix E
Preliminary Site Investigation



Appendix F
Ecological Effects Assessment



Appendix G
Archaeological Assessment



Appendix H
Glint and Glare Assessment



Appendix I
Acoustic Assessment



Appendix J
Assessment of Landscape Effects



Appendix K
Geotechnical Assessments



Appendix L

GreenEnco – Work Phases and Job Creation



Appendix M
Rule Assessment



Appendix N
Transport Assessment Report



Appendix O
Draft Restoration Plan



Appendix P

Draft Construction Method Statement



Appendix Q

Draft Construction Management Plan



Appendix R
Draft Operational Management Plan



Appendix S

Iwi Recommended Conditions



Appendix T
TRC Correspondence



Appendix U
Consultation Pack



Appendix V

Record of Consultation – Adjoining Parties



Appendix W

Draft Erosion and Sediment Control Plan



Appendix X
Draft Conditions



Appendix Y
Legal Advice on NPS:HPL



Appendix Z

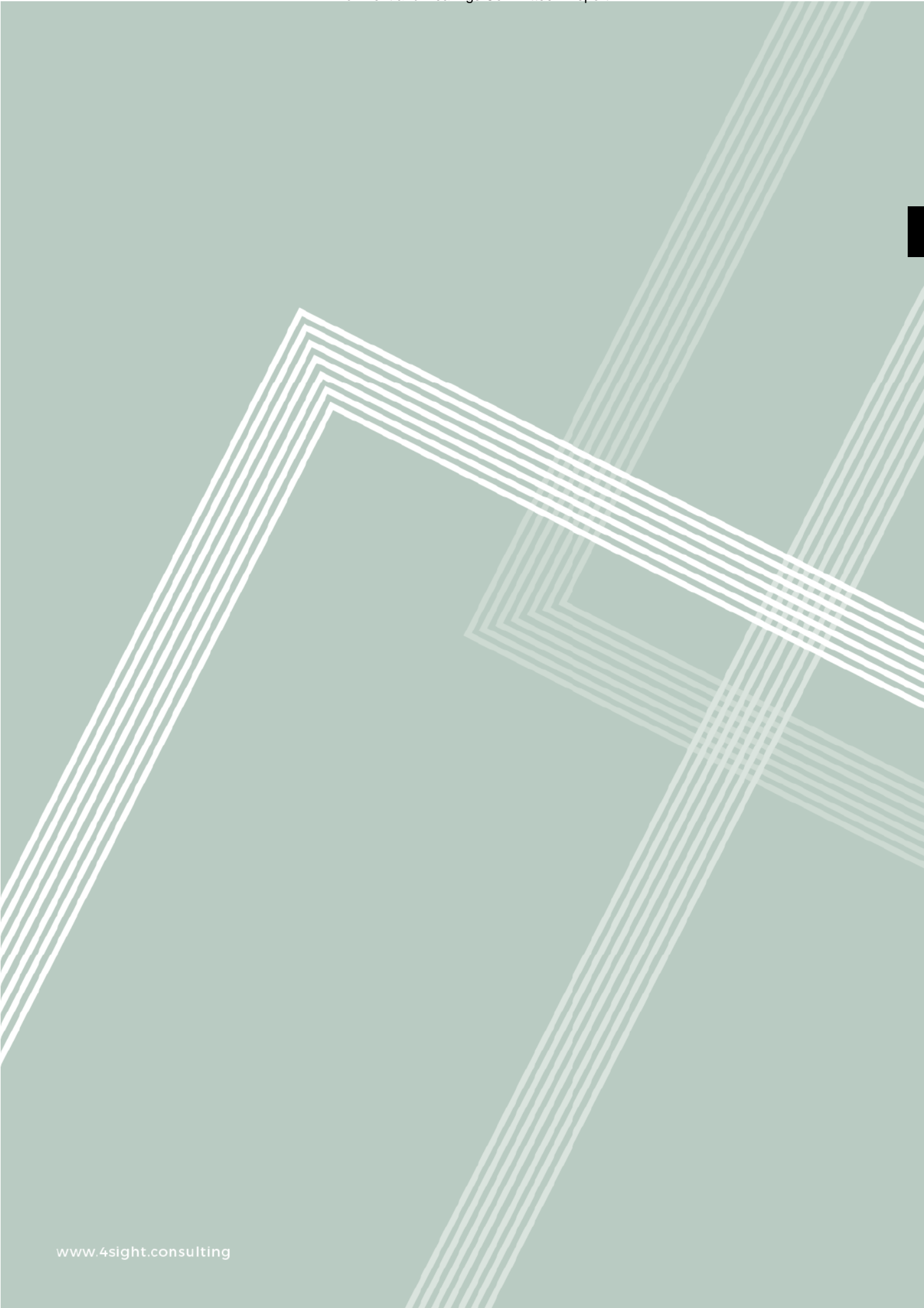
Framework Construction Traffic Management Plan



Appendix AA
Records of Title









Template for written comments from councils

6

Invitation to comment on applications for referral under the Covid-19 (Fast-track Consenting) Act 2020

You have been invited to provide comments to the Minister for the Environment (the Minister) on an application to refer a project to an expert consenting panel for fast-track consenting under the Covid-19 Recovery (Fast-track consenting) Act 2020 (FTCA).

The information below provides the context for this application, the reasons for the invitation to comment and information to assist you in responding. Please note that the Minister has requested that you reply within 10 working days from receipt of the application and invitation to comment. Under section 21(5) of the FTCA the Minister is not obliged to consider any comments provided after this time.

Overview of the fast-track process

The FTCA introduces a short-term consenting process to fast-track projects that can boost employment and economic recovery.

For a project to access the fast track process the Minister must first make a decision to refer the project to an expert consenting panel. The referral process involves seeking comment from local authorities and Ministers of the Crown. The Minister also has discretion to seek comment from any other person.

It is important to note that the Minister's role is not to undertake a detailed assessment of the merits or effects of the project at this stage.

The Minister's referral decision must be made in the context of the eligibility criteria in section 18 of the FTCA, and the matters in sections 19 and 23(5) of the FTCA. Specifically, section 18 requires the Minister to be satisfied that the proposed project:

- will help to achieve the purpose of the FTCA
- does not include an activity that is prohibited in the RMA, RMA regulations or a local authority plan or proposed plan
- does not occur on land returned under a Treaty settlement if the relevant landowners have not agreed in writing
- does not occur in a customary marine title area if the holder of the relevant customary marine title order has not agreed in writing

- does not occur in a protected customary rights area, and have a more than minor effect on the exercise of the protected customary right, if the holder of the relevant protected customary rights recognition order has not agreed in writing.

In considering whether a proposal would help achieve the purpose of the Act, section 19 of the FTCA specifies matters the Minister may consider. These include whether the project will give rise to economic costs and benefits for people or industries affected by COVID-19; whether the project will create a public benefit; the effect on social and cultural wellbeing of current and future generations, and whether there is potential for significant adverse effects.

Section 23(5) of the FTCA gives reasons why the Minister may decline to refer an application for fast-tracking, whether or not it meets the criteria in section 18. These include:

- the applicant has not provided enough information to determine whether the project meets the section 18 criteria
- it would be more appropriate for the proposed project, or part of the project, to go through standard consenting or designation processes under the RMA
- the proposed project is inconsistent with a relevant national policy statement
- directing the project to a panel would be inconsistent with a Treaty settlement
- the proposed project involves an activity that would occur on land that the Minister for Treaty of Waitangi negotiations considers necessary for Treaty settlement purposes
- the applicant has a poor history of environmental regulatory compliance
- there is insufficient time for the application to be referred and considered before the FTCA is repealed (ie, 8 July 2022).

Comments you choose to provide at this point will assist the Minister to determine whether a project will help to achieve the FTCA's purpose and should be referred. **Please note that your comments, including your name and contact details, will be made available on our website and to the applicant either in response to an Official Information Act request or as part of the Ministry's proactive release of information.**

Please advise if you object to the release of any information contained in your comments, including your name and contact details. You have the right to request access to or to correct any personal information you supply to the Ministry.

If the Minister decides to refer a project, it progresses to an expert consenting panel who makes a decision on whether to grant consents or notices of requirement. The decision will be made in accordance with the relevant decision-making considerations in the RMA and applying the purpose of the FTCA and section 6 of the Act (Treaty of Waitangi).

Guidance on comments sought

The comments the Minister invites from you at this stage of the fast-track process are intended to be high-level, and in the context of the matters in sections 18, 19 and 23 (outlined above).

For example, the Minister would like:

- your initial thoughts on whether this project could create benefits for your district / region
- your initial thoughts on significant issues that could arise from this project (if any)
- your view on whether it would be more appropriate for the project, or part of the project, to go through standard RMA consenting or designation processes

- a summary of the applicant's environmental regulatory compliance history (if they have a poor compliance history)
- a summary of any joint management agreement, Mana Whakahono ā Rohe, transfer of power, memorandum of understanding, or other relationship agreements under the RMA, including the parties involved
- information on any other significant matters you consider the Minister should be aware of when deciding whether a project should be referred to an expert consenting panel.

The letter from the Minister may also ask for your comment on other specific matters.

Additionally, section 6 of the FTCA requires any person performing functions and exercising powers under this FTCA to act consistently with the principles of the Treaty of Waitangi and Treaty settlements (including Treaty settlement deeds), and this also provides relevant context for your comments.

Please note you are not expected to undertake a detailed assessment of the effects of the proposal.

A template is attached for you to provide your comments on. Please use a separate form for each application.

If you wish to discuss this application, please contact Fast-track Consenting Team officials at fasttrackconsenting@mfe.govt.nz.

Opportunities for further comment and involvement

You will have a further opportunity to provide comments for any projects that the Minister refers to an expert consenting panel.

At that stage of the fast-track process, the applicant is required to lodge a detailed application for resource consents and/or notices of requirement with the Environmental Protection Authority. An application must include an environmental assessment and information about cultural impacts.

An expert consenting panel will be appointed for each project by the panel convener, who is a retired Environment Court judge. The panel must include a chair and one person nominated by the relevant local authorities, and one person nominated by the relevant iwi authorities. Further panel members may be included, as outlined in clause 3 of Schedule 5 of the FTCA. The panel convener will therefore seek nominations from the relevant groups for these positions prior to making the panel appointments.

The panel is responsible for fully assessing the merits of the proposed project and deciding whether to grant the resource consents and/or notices of requirement. The panel will be given any comments you provided earlier to the Minister, and must also invite further comment from you, relevant iwi authorities, Ministers of the Crown and other persons and groups referred to in clause 17 of Schedule 6 of the FTCA.

Comments on applications for referral under the COVID-19 Recovery (Fast-track Consenting) Act 2020

This form is for local authorities to provide comments to the Minister for the Environment on an application to refer a project to an expert consenting panel under the COVID-19 Recovery (Fast-track Consenting) Act 2020.

Local authority providing comment	South Taranaki District Council (STDC)
Contact person (if follow-up is required)	Liam Dagg Group Manager Environmental Services, STDC liam.dagg@stdc.govt.nz (06) 278 0555; 027 2487775

Comment form

Please use the table below to comment on the application.

Project name	Opunake Solar Farm Project
General comment – potential benefits	<p>The South Taranaki District Council (STDC) sees the Opunake Solar Farm Project as a significant advancement in renewable energy alternatives for the district and for New Zealand. We concur with the benefit statements in the project application.</p> <p>This project is a key step in achieving a transition into sustainable and renewable energy options for the region. The project aligns with the aspirational goals of both the Taranaki 2050 Roadmap and Tapuae Roa Economic Development Strategy which have both been developed to the region into a low-emissions economy.</p> <p>STDC notes that the intent is to optimise the use of productive farmland by having dual occupancy of the site. This has been identified within the application as constructing the solar panels at a height that enables continued use of the land below as grazing for stock. STDC sees this as a prime opportunity to set an example for other such solar projects and activities within the district.</p> <p>This project aligns with the climate change and environmental sustainability goals and targets in STDC's Environment and Sustainability Strategy.</p> <p>It is expected that the project will provide considerable employment opportunities in South Taranaki, which will bring people with highly technical knowledge and skill sets to the district, helping to improve the local economy and improving career opportunities for our rangatahi. Promoting employment and supporting investment in our District will also help us to recover from the economic and social impacts of Covid-19. Furthermore, the proposed site is located within reasonable proximity of Opunake and Hawera, two of the biggest towns within the South Taranaki district, which will encourage sustained employment for the towns and wider areas.</p>

<p>General comment – significant issues</p>	<p>Loss of productive farmland if dual occupancy of the site is not undertaken – grazing below the solar panels.</p> <p>Reverse sensitivity effects on sensitive activities (dwellings etc.) within the area, including noise and traffic from construction phase.</p> <p>Wetland and waterbody degradation if protection mechanisms are not implemented.</p> <p>Visual impact from surrounding properties but also a significant change on the South Taranaki landscape</p> <p>Remediation of site after the activity ceases – site will be listed with identified HAIL activity and subject to provisions of NES-CS. Further, is the intent to return the site to productive farmland as it is now or will it be used for a different purpose.</p> <p>Changes to ecological habitats and well-established areas that may impact flora and fauna species within the wider area.</p> <p>Natural Hazards (fault lines, waterbodies, lahar risk)</p>
<p>Is Fast-track appropriate?</p>	<p>Yes. Council believes it is appropriate for the project to go through the fast-track consenting process. It achieves the purpose of the Act, by contributing to New Zealand’s efforts to mitigate climate change and transition more quickly to a low-emissions economy. The project meets the criteria specified in section 18 of the Act to have it referred to a consenting panel. As explained in the application, the timeframe for the project to be processed under this Act aligns with manufacturing of the solar panels, allowing the production of power to the Opunake substation to commence sooner.</p>
<p>Environmental compliance history</p>	<p>Harmony Energy NZ #4 Limited does not have any negative environmental regulatory compliance or enforcement history with STDC.</p>
<p>Reports and assessments normally required</p>	<p>Under a normal land-use consent process, the project would be considered a Discretionary Activity by the STDC District Plan. It would require an Assessment of Environmental Effects that is proportionate to its significant scale. Chapter 20 of the STDC District Plan identifies general and specific information required for Large-scale renewable electricity generation activities. Reports and assessments required include:</p> <ul style="list-style-type: none"> • Cultural Impact Assessment and Archaeological assessment • Landscape and Visual Effects assessment • Ecological assessment on indigenous vegetation, fauna, local catchments and how earthworks may disrupt natural landforms. • Traffic impact assessment report • Acoustic assessment report and provisions for safeguards and contingencies in relation to noise effects and effective reporting and monitoring methods of noise. • Engineering and Geotechnical report • Assessment against NPS-HPL, NPS-FW • Preliminary Site Investigation (PSI) or Detailed Site Investigation (DSI) in some instances.
<p>Iwi and iwi authorities</p>	<p>STDC identifies Taranaki Iwi as the iwi authority for the project area.</p> <p>The project application does identify that consultation with treaty settlement entity Te Kahui o Taranaki has been undertaken on several occasions and that a Cultural Values Assessment shall be supplied from Iwi.</p>

<p>Relationship agreements under the RMA</p>	<p>There are no formal relationship agreements, beyond recurring Iwi Liaison Committee and Huinga a Iwi meetings that provide an opportunity for discussions between parties on projects such as this. Council is committed to developing Mana Whakahono a Rohe agreements if formally initiated by any of the four Iwi Authorities that cover the district.</p> <p>There are statutory acknowledgements and deed of recognition between the Crown and Taranaki Iwi that are relevant to the project site where the solar panels are to be constructed. This includes the Otahi Stream and tributaries as shown on OTS-053-37.</p> <p>The Otahi Stream and an unnamed tributary of the Otahi Stream traverse the project site from north-east to south-west.</p>
<p>Insert responses to other specific requests in the Minister's letter (if applicable)</p>	<p>1. Are there any reasons that you consider it more appropriate for the project, or part of the project, to proceed through existing Resource Management Act 1991 (RMA) consenting processes rather than the processes in the FTCA?</p> <p>No, STDC believes the project should be consented under the Covid-19 (Fast-track Consenting) Act 2020. The fast-tracking legislation provides a holistic and integrated framework for the project to be considered. By comparison, the District Plan does not provide a direct pathway for consenting of a project with this scale and complexity, with this due mainly to the number of district plan chapters that have to be considered in both quantifying and assessing the effects. This project would be limited notified if it came to Council as a resource consent, with this due mainly to the impacts on amenity and the breadth of the potential affected party catchment. We consider the fast-track consenting legislation provides an appropriate level of community input.</p> <p>2. Does the applicant, or a company owned by the applicant, have any environmental regulatory compliance history in your district?</p> <p>Energy Farms Limited have no environmental regulatory compliance history with STDC.</p>
<p>Other considerations</p>	<p>During the construction phase, dry grass is the highest fire risk and the primary sources of ignition are cigarettes, cutting and welding. This should be addressed in a comprehensive construction management plan, which we anticipate will be a standard condition of any consenting pathway.</p> <p>STDC is in the process of undertaking a Plan Change of the Operative District Plan. One area of focus for the Plan Change is proposed intensification and rezoning of land on the north and north-eastern fringe of the Opunake urban area.</p> <p>It is noted that the site of the proposed Solar Farm project is identified by Taranaki Regional Council's property information map as being Land Use Capability 3 and 6. Therefore, the project is subject to the provisions of the National Policy Statement for Highly Productive Land 2022.</p> <p>There are known fault lines located in and around Opunake. It is recommended that further consideration into these fault lines is undertaken as part of the assessment for an activity of this scale.</p> <p>The Hiringa Energy Green Hydrogen Project that was assessed under the FTCA within the South Taranaki District. It is STDC's expectation that lessons are learnt from this previous consent and changes or improvements on the process will be applied for this and future consents passed through the Act process.</p>

Note: All comments, including your name and contact details, will be made available to the public and the applicant either in response to an Official Information Act request or as part of the Ministry's proactive release of information. Please advise if you object to the release of any information contained in your comments, including your name and contact details. You have the right to request access to or to correct any personal information you supply to the Ministry.



Pūrongo-Whakamārama

Information Report

To	Environment and Hearings Committee
From	Tuarua Kaiarataki Taiao / Group Manager Environmental Services, Liam Dagg
Date	5 June 2024
Subject	Environmental Services Activity Report

(This report shall not be construed as policy until adopted by full Council)

7

Whakarāpopoto Kāhui Kahika / Executive Summary

1. This report updates the Environment and Hearings Committee on activities relating to the Environmental Services Group (the Group) for the months of March and April 2024.
2. The Group is comprised of four business units:
 - a) Planning and Development
 - b) Quality Assurance
 - c) Regulatory Services, and
 - d) Environment and Sustainability
3. The first part of the report goes through the operational activities for each of the business units. The second part of the report provides an update on key projects and programmes.
4. Key points to note for the months of March and April and Quarter 3 (January through to March):
 - a) There is a downward trend in consenting activity for both building and resource consents.
 - b) Subdivision remains strong compared to land use consent activity.
 - c) Compared to the same time last year, there is a reduction in the number of callouts for barking or roaming dogs.

Taunakitanga / Recommendation

THAT the Environment and Hearings Committee receives the Environmental Services Activity Report.

Ratonga Hanga Whare / Building Control Services

5. Building consent activity is stable with the number of consents being lodged per month, but overall, the lodgement numbers are down on what was being lodged year-to-date at the same time last financial year (Table 1). Statutory compliance remains an area under review in terms of what other measures can be put in place to improve turnaround times.

Table 1. Building Consents Statistics Summary

Application Activity Building Consents	April 2024	March 2024	February 2024	January 2024	YTD From 1 July 2022	YTD 1 July 2023
Lodged	41	46	41	30	506	394
Issued	54	36	47	24	449	389
Issued within statutory timeframe	66.7%	66.7%	70.2%	75%	82.0%	71.5%
Inspections	191	224	204	184	2405	2114
Value	\$4,365,100	\$4,922,350	\$4,598,300	\$5,676,400	\$92,001,670	\$54,740,710

6. Building activity was highest in Te Hāwera Ward across the months of March and April, but all other wards saw activity also, Taranaki Coastal running second in March (Figure 1), and Eltham-Kaponga in April (Figure 2).

Figure 1

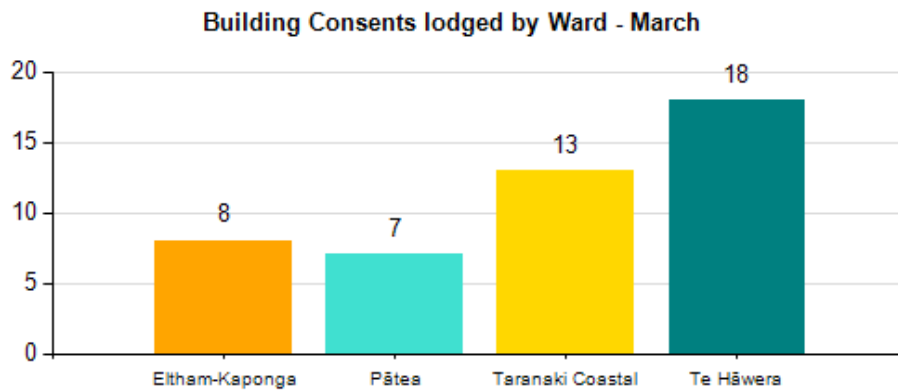
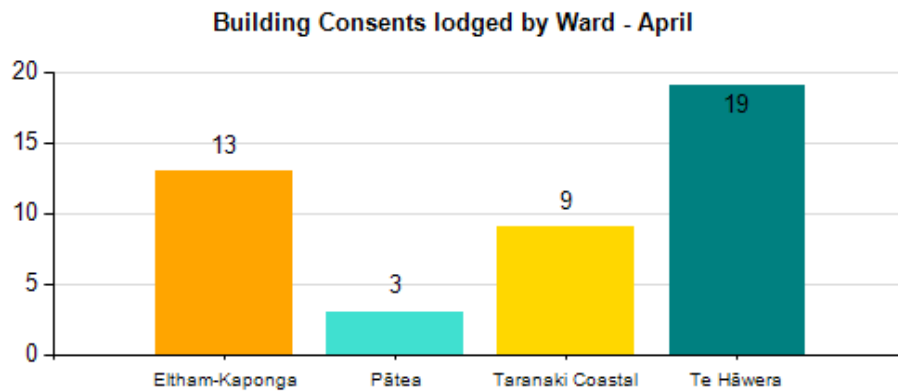


Figure 2



7. Commercial activity is not high compared to residential work across the two reporting months (Tables 2 and 3). New dwelling lodgements are low compared to what was being seen in 2022 and 2023. Te Hāwera is where most of the new houses are being constructed.

Table 2. Building Consents lodged by Type March

Category	Activity	Eltham-Kaponga	Pātea	Taranaki Coastal	Te Hāwera	Total
Commercial	Additions/Alterations			1	2	3
	Amendment	1			1	2
	New Construction	1				1

	Sub Total	2	0	1	3	6
Residential	Additions/Alterations			2	3	5
	Amendment		1	2	4	7
	Fire	5	3	3	3	14
	New Construction	1		3	3	7
	New Dwelling		1	1	1	3
	Relocation		2	1	1	4
	Sub Total	6	7	12	15	40
Total		8	7	13	18	46

Table 3. Building Consents lodged by Type April

Category	Activity	Eltham-Kaponga	Pātea	Taranaki Coastal	Te Hāwera	Total
Commercial	Additions/Alterations	1				1
	Amendment			2	1	3
	Relocation	1				1
	Sub Total	2	0	2	1	5
Residential	Additions/Alterations	2	1		1	4
	Amendment	1	1		3	5
	Fire	5	1	5	5	16
	New Construction			1	2	3
	New Dwelling				6	6
	Relocation	2		1		3
	Sub Total	10	3	7	17	37
Total		12	3	9	18	42

Ratonga Whakamahere Taiao / Planning Services

8. Resource consents are also seeing a decrease, similar to building consents. For both lodgements and consents granted, the numbers are well down on activity when compared to the same time last year (Table 4).

Table 4. Resource Consent Statistics for April and March 2024

Application Activity	April 2024	March 2024	February 2024	January 2024	YTD From 1 July 2022	YTD From 1 July 2023
Lodged	23	20	18	7	172	143
Granted	15	13	19	6	142	115
Issued within statutory timeframe	86.7%	100.0%	94.7%	100.0%	98.6%	93.0%

9. Subdivision remains strong compared to land use resource consents (Table 5). Most of the land use consent activity has been in Te Hāwera (Figures 3 and 4). Subdivision activity was across all four wards, with the highest lot yields in Taranaki Coastal during March (Figure 5) and Te Hāwera in April (Figure 6).

Table 5

Category	April 2024	March 2024	February 2024	January 2024	YTD From 1 July 2022	YTD From 1 July 2023
Certificate of Compliance	1				2	1
Land Use Change of Condition	3	1	1		5	9
Land Use General	5	8	3	3	71	48
Subdivision	13	10	12	4	90	79
Subdivision Change of Condition	1	1	2		4	6

Figure 3

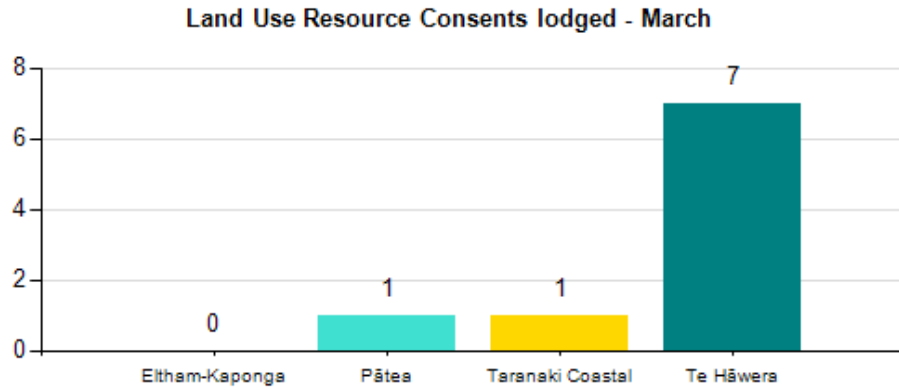


Figure 4

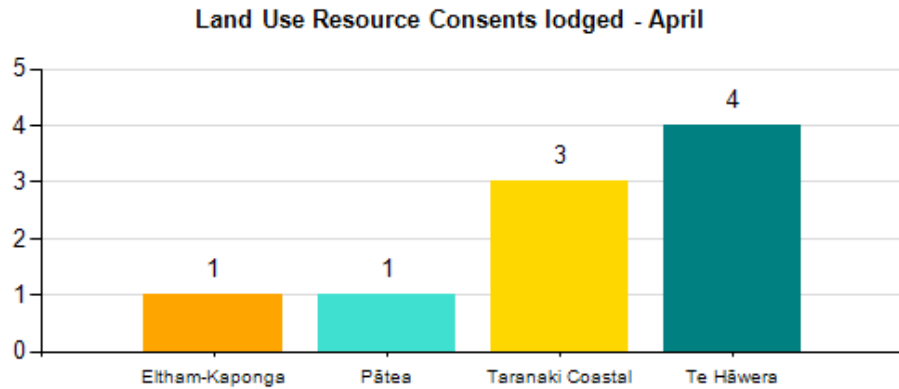


Figure 5

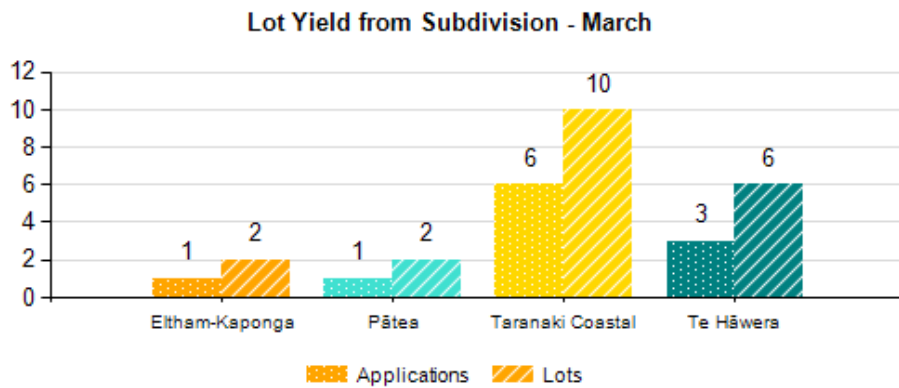
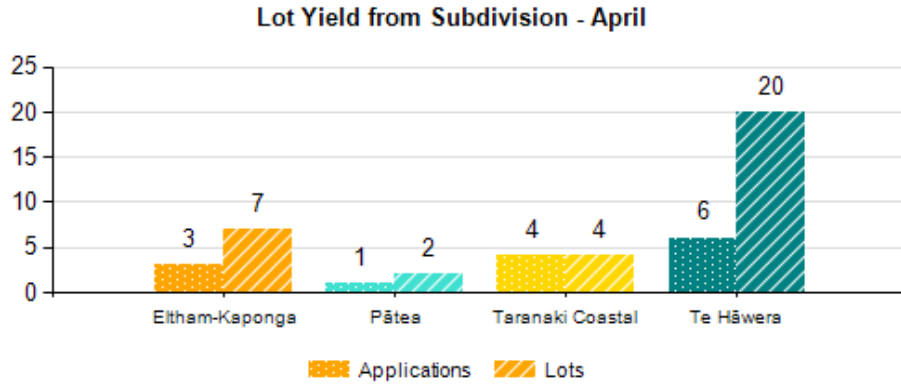


Figure 6



7

Land Information Memorandum

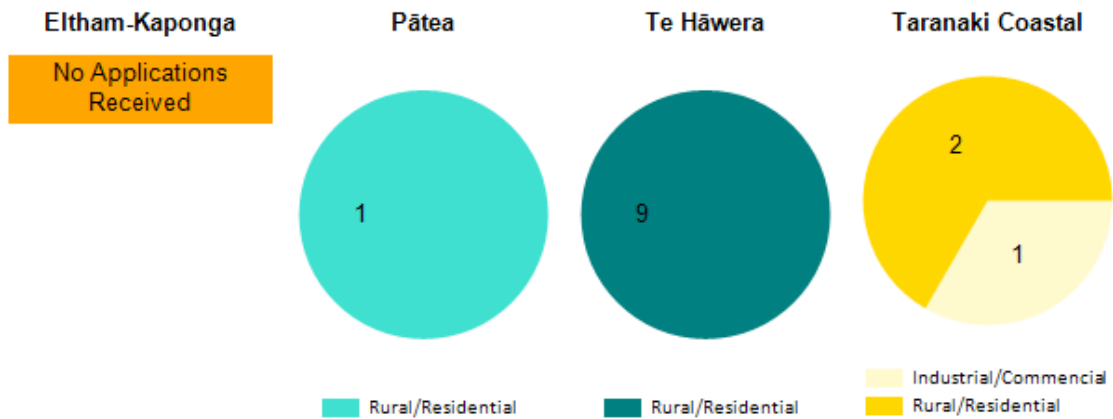
10. Request for Land Information Memorandums (LIMs) saw an increase in April, and this activity is strong compared to the same time last year (Table 6). Overall, most of the LIM applications have been for residential or rural land, with most in Te Hāwera across the two months. Of interest is the commercial LIMs that have been applied in wards other than Te Hāwera (Figures 7 and 8).

Table 6

LIM Applications	April 2024	March 2024	February 2024	January 2024	YTD From 1 July 2022	YTD From 1 July 2023
Lodged	25	13	18	14	139	153

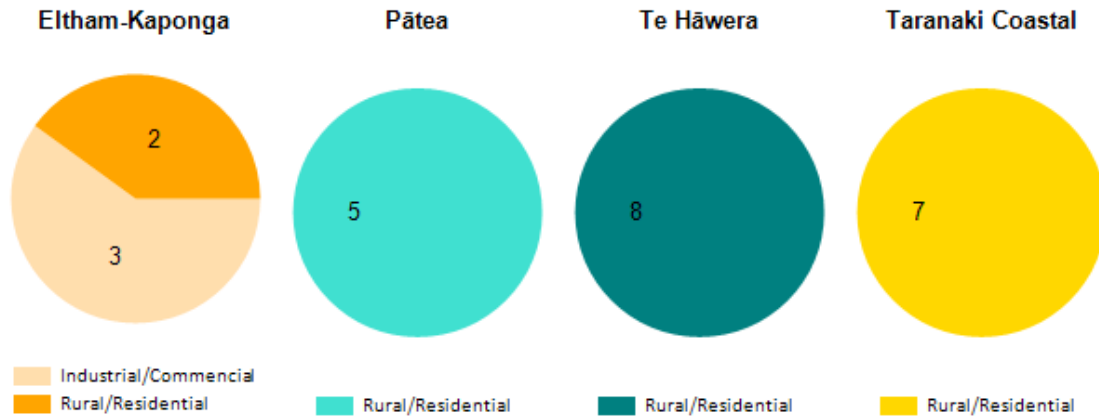
LIM Applications by Ward March

Figure 7



LIM Applications by Ward April

Figure 8



7

Ratonga Waeture / Regulatory Services

11. The statistics for Customer Service Requests relating to animals is shown in Table 7. March and February were bad months for dog attacks, and year to date there have been a higher number of dog attacks compared to the same time last year. While the monthly trends for barking and roaming dogs have been consistent month on month for 2024, a positive is the overall decrease in both categories when compared to the same time last year. The same can also be said for wandering stock and reports of threatening/menacing dog behaviour.

Table 7

Service Requests Animals	April 2024	March 2024	February 2024	January 2024	YTD From 1 July 2022	YTD From 1 July 2023
Attack	3	7	6	3	33	45
Barking	28	43	35	37	339	307
Roaming	45	40	56	44	566	484
Stock Wandering	4	7	10	10	114	88
Threatening/Menacing	1	5	2	3	41	31

12. Most of the barking and roaming dog call outs were in Te Hāwera ward during March and April (Figures 9 and 10). However, dog attacks do not reflect this trend, the other three wards are where these have been reported across the last two months.

Figure 9

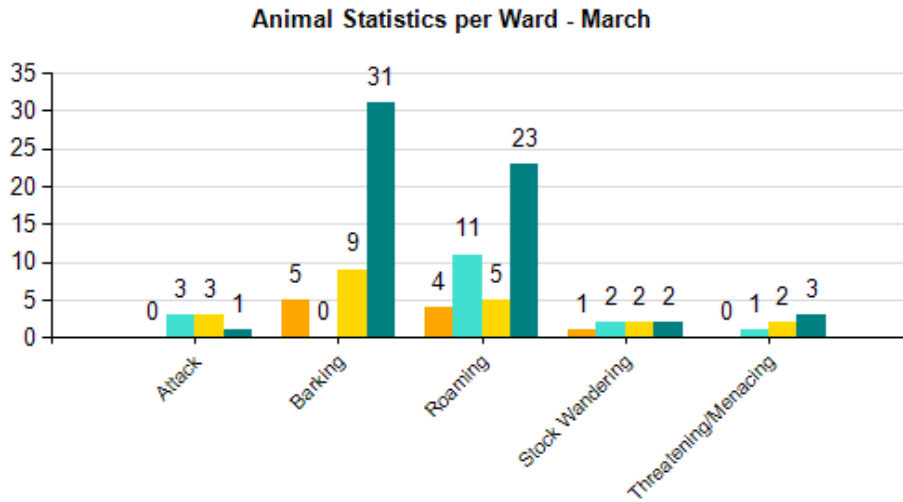
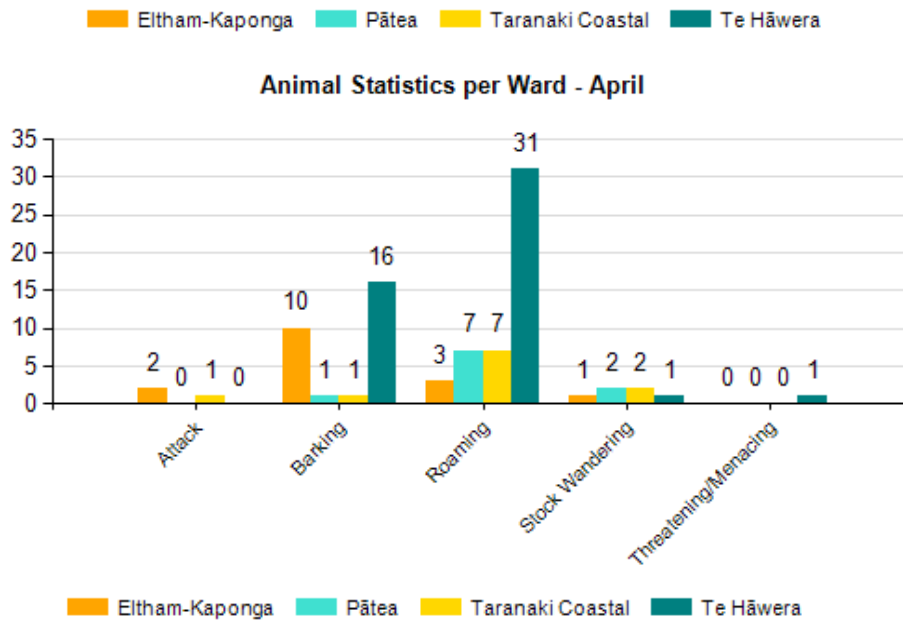


Figure 10



13. The statistics for Customer Requests relating to other regulatory compliance matters are shown in Table 8. Noise complaints in March were high, although this number decreased in April. Abandoned vehicle callouts have decreased since February, but the activity has seen an increase compared to the same time last year. Illegal dumping follows a similar trend, a high number of callouts in March, and the callout is on track with the same time last year. Noise callouts have decreased with the move out of summer. The callouts have been across all four wards, with the highest in Te Hāwera for noise across both reporting months (Figures 11 and 12).

Table 8

Service Requests Compliance	April 2024	March 2024	February 2024	January 2024	YTD From 1 July 2022	YTD From 1 July 2023
Abandoned Vehicle	6	3	9	13	65	79
Environmental Other	11	7	9	3	177	66
Illegal Dumping	1	5	2	3	29	32

Noise	38	50	43	80	537	540
Private Trees or Section Overgrown	4	2	6	6	47	43

Figure 11

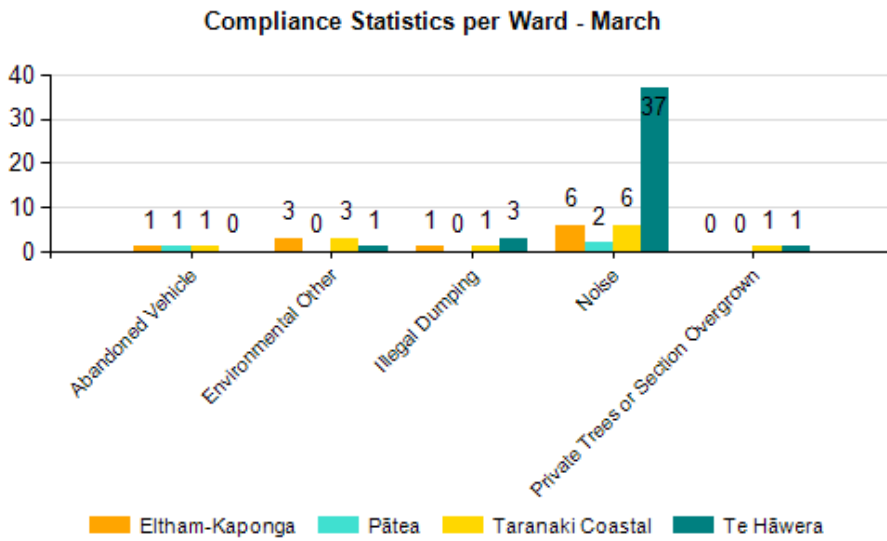
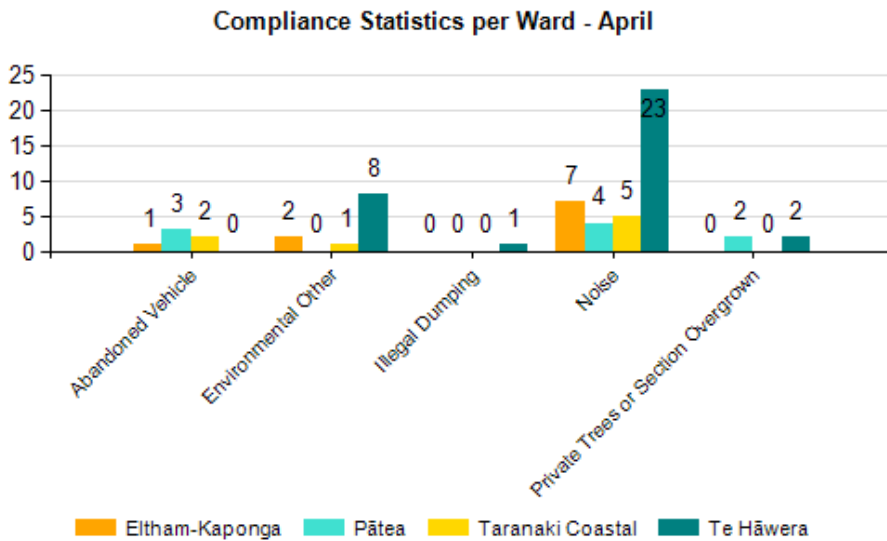


Figure 12



14. Below are the details of current prosecutions:

Prosecution Type	Ward	Outcome
Dog Attack on Human	Taranaki Coastal	Ongoing – Frist appearance on 19 January 2024. The next appearance set for 15 August 2024.

7

Rautaki Kaupapa me ngā Hōtaka / Strategic Projects and Programmes

Regional Organics Processing Facility

15. The Request for Proposal (RFP) was released on 24 April to four shortlisted companies. The closing date for the RFP process is scheduled for June, the evaluation process completion is scheduled in August.

Reforestation Project

16. During the 2024 planting season, the Reforestation Coordinator will be planting on the Rukumoana section and the Pātea Saltmarsh. There are also some additional blocks being considered to potentially plant in next year. Analysis is also being completed to quantify the planting done since 1990 to better report on our emission off-setting activities.

Business Waste Minimisation

17. Discussions are ongoing with construction, retail/commercial, and marae. The next steps will be to conduct physical assessments of the waste produced by the respective groups and collaboratively look at how we can work towards reducing the waste.

Plan Change Update

18. The submission period for Change 3 (Papakāinga Development) has been extended out to 30 May 2024. This was due to a large number of the ratepayers not being directly notified or provided with the Public Notice as part of the recent rating notice mailout.
19. Plan Changes four and five are the next two changes that are currently being worked on. Plan Change four is the rezoning of land within the area of the South Taranaki Business Park. As a part of this Plan Change, we are reconfiguring the existing Structure Plans within the District Plan to provide indicative roading layout and reticulated service to assist developers and landowners with an understanding how these areas could be developed. Plan Change five will focus on an updated financial contributions chapter. We aim to notify these plan changes following the adoption of the Long Term Plan.



Liam Dagg

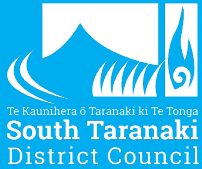
**Tuarua Kaiarataki Taiao /
Group Manager Environmental Services**

8. Whakataunga kia noho tūmatanui kore / Resolution to Exclude the Public

THAT the public be excluded from the following parts of the proceedings of this meeting, namely:

The general subject of each matter to be considered while the public is excluded, the reason for passing this resolution in relation to each matter, and the specific grounds under section 48(1) of the Local Government Official Information and Meetings Act 1987 for the passing of this resolution are as follows:

General subject of each matter to be considered	Reason for passing this resolution in relation to each matter	Ground(s) under section 48(1) for the passing of this resolution
<p>1. Confirmation of minutes – Environment and Hearings Committee held on 24 April 2024.</p>	<p>To enable the Committee to:</p>	<p>That the exclusion of the public from the whole or the relevant part of the proceedings of the meeting is necessary to enable the Council/Committee to deliberate in private on its decision or recommendation in any proceedings where:ii) the local authority is required, by any enactment, to make a recommendation in respect of the matter that is the subject of those proceedings.Use (i) for the RMA hearings and (ii) for hearings under LGA such as objections to Development contributions or hearings under the Dog Control Act. s.48(1)(d).</p>



Karakia

9. Karakia

Ruruku Whakakapi – Closing Prayer

Unuhia, unuhia

Unuhia ki te uru tapu nui

Kia wātea, kia māmā te ngākau, te
tinana, te wairua i te ara takatū

Kia wātea, ka wātea, āe rā, kua wātea

Rire rire hau pai marire!

Draw on, draw on,

Draw on the supreme sacredness

*To clear, to free the heart, the body and the
spirit of mankind*

To be clear, will be clear, yes is cleared.

Deeply in peace!