TRANSPOWER

Enabling Huapai

Substation Designation Project

Frequently Asked Questions

FOR PROJECT UPDATES

BACKGROUND

What electricity infrastructure does Transpower have in Huapai?

The Huapai switching station at 108 Matua Road manages the flow of electricity through high-voltage lines. It is not currently a full substation with transformers but plays a key role in routing power across the network.

The station is designated for 'Electricity transmission – Huapai electricity sub-switching station' under the Auckland Unitary Plan. A designation is a form of zoning that provides long-term approval of intended work and certainty for the community about the location and nature of the works. It also protects the land from activities that may compromise the proposed public work.

Transpower also owns the adjacent property at 125 Tapu Road, which is not currently designated. Both 125 Tapu Road and 109 Matua Road lie within the National Grid Corridor Overlay, which identifies areas where high-voltage transmission lines are located.

What is the current zoning for the Transpower property?

The Huapai switching station at 108 Matua Road is zoned 'future urban' in the Auckland Unitary Plan. The property at 125 Tapu Road is zoned 'single house and future urban'. Both properties fall within the National Grid Corridor Overlay.

What is Transpower proposing in Huapai?

To help maintain a reliable power supply for the region's growing needs and supply into Northland, we're planning to extend our designation at 108 Matua Road to include our adjacent property (5.13 hectares) at 125 Tapu Road to accommodate a new substation in the future.

We expect to lodge these plans (called a Notice of Requirement [NoR]) with Auckland Council in late 2025.

We will also apply for resource consents to relocate and connect existing transmission lines to the new substation.

Why is this project necessary and why Huapai?

The entire Huapai site is crucial for electricity transmission within Auckland and to Northland. Transpower's long-term planning has identified a need to expand or add transmission facilities at the site to meet growing electricity demand.

The proposed extension of the designation is a proactive step to secure the region's energy infrastructure, safeguard against potential disruptions, and support population and industrial growth.

In summary, the project is essential to:

- **Accommodate growth and future-proof critical electricity infrastructure** by supporting connections for new electricity distribution and generation customers.
- **Improve reliability** by strengthening the security and resilience of the electricity supply in Auckland and Northland.
- **Support local development** by ensuring power infrastructure keeps pace with population and industrial growth.

What is the projected growth for the region?

Residential development is rapidly increasing around the Huapai site, and this is expected to continue. Over the next 30 years, north-west Auckland is expected to accommodate an extra 100,000 people, 40,000 new houses, and 20,000 new jobs (source: Supporting Growth Alliance).

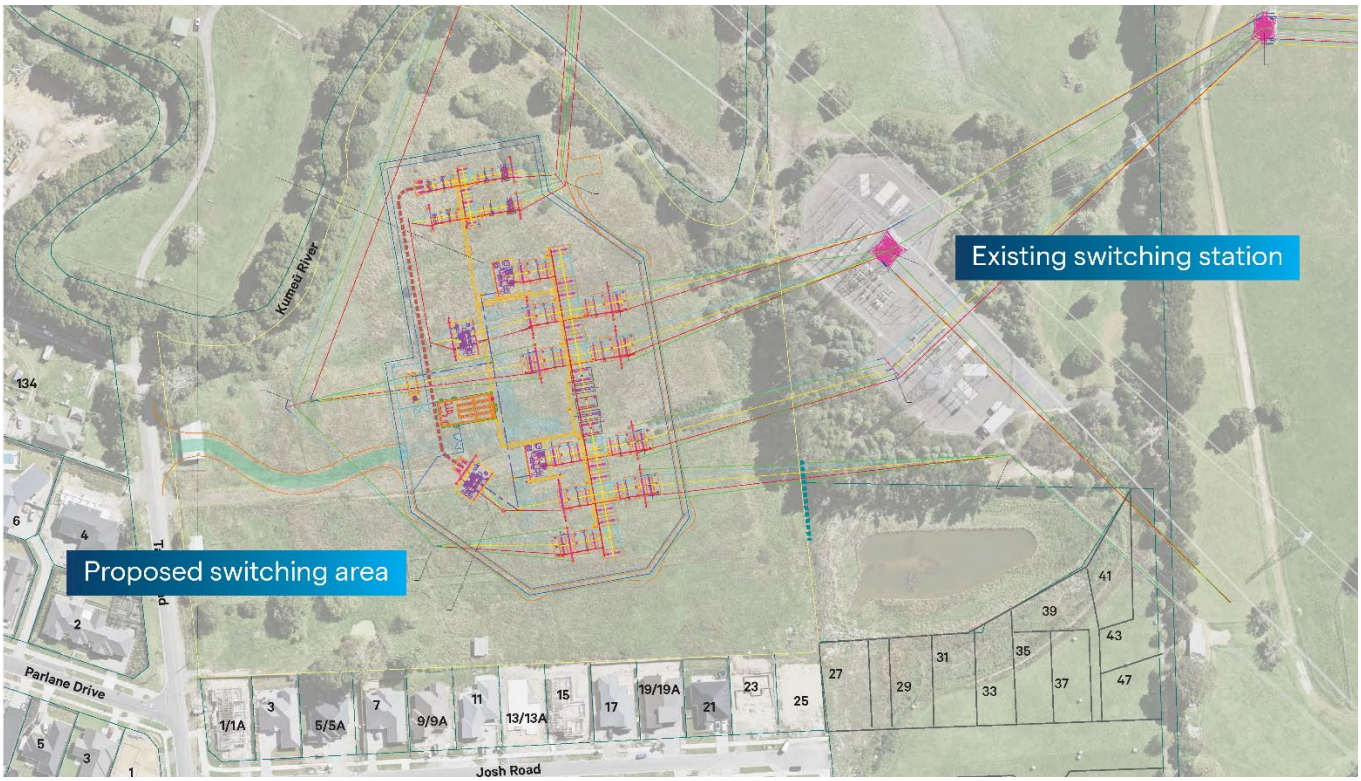
Why not extend the current station at 108 Matua Road?

Transpower conducted an alternatives assessment into the future upgrade or redevelopment of the existing Huapai site. This assessment found that repurposing the existing station is not practicable because a larger area of land is required.

Why can't Transpower build the substation at a different location?

Relocating to an alternative site would involve significant costs because Transpower would need to purchase new land and duplicate the existing infrastructure. We would also need to relocate the transmission lines while keeping the current power supply reliable.

Given that Transpower already owns the site at 125 Tapu Road, extending the designation to include this land is the most practical and cost-effective option for long-term development.



Proposed site and layout

BACKGROUND

The Kumeu area is subject to flooding. What are the implications of this for the location of the Huapai station?

The Kumeu area is known for flooding, so it's important that any new infrastructure can cope with that risk.

Because the Huapai substation is critical infrastructure, Transpower must design it to withstand a major flood that might only happen once every 450 years. In comparison, local council rules only require buildings to be designed for a 1-in-100-year flood.

Beca is drafting a Flood Report to outline the design steps necessary to ensure the substation doesn't make flooding worse for neighbouring properties. Still in its early stages, the report shows that even in a worst-case scenario, flood risks will remain the same or even improve.

A copy of this report will be made available when completed. Transpower will incorporate these requirements into the detailed design of the substation.

Viewpoint A

View from 4 Parlane Drive, deck area.

Existing view

Viewpoint B

From 15 Josh Road, deck area along the northern boundary.

Existing view

NOTICE OF REQUIREMENT (NoR)

What is a NoR?

A NoR is a formal request made by a requiring authority such as a council, government agency, or utility provider (such as Transpower) to set aside land for a future public project, for instance, a power station, roads, schools, and hospitals. It's a way of protecting the land now, even if the project won't be built right away. The public gets a chance to have their say before any final decisions are made.

What is Transpower seeking under its NoR?

Transpower is lodging a NoR to alter designation 8524 for the Huapai electricity substation at 108 Matua Road. The NoR seeks to authorise the extension of the existing designation boundary to include the adjacent Transpower-owned property at 125 Tapu Road to accommodate a new substation, electricity transmission facilities, and associated infrastructure.

Transpower will also apply for resource consents under the Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009. These applications will seek to authorise the relocation of existing transmission lines in the vicinity of the site to connect them to the new substation.

What is the timeline for lodgement of the NoR?

The NoR and resource consent applications are being submitted in late 2025 to future-proof the site and to provide long-term certainty. Construction is not anticipated for several years and will occur as electricity demand increases to ensure infrastructure is ready when needed.

What happens once the NoR is lodged, and can I provide feedback?

Once the NoR is prepared and lodged with the Auckland Council, the following occurs.

- The council decides whether the designation should be publicly or limited notified.
- If it is publicly notified, people and groups can lodge submissions with the Council.
- If it is limited notified, only those people the Council consider directly affected by the proposal will be notified.
- Once the NoR is notified (either publicly or limited), those who prepared submissions and wish to be heard in support of their submission can appear at a public hearing.
- The Council recommends to the requiring authority whether it thinks the designation should be confirmed in the district plan (with or without modification to the conditions) or be withdrawn.
- The requiring authority decides whether to accept or reject the Council's recommendation in part or full.
- The Council or any submitter can appeal the decision of the requiring authority. The appeal is lodged with the Environment Court.

Can I provide feedback on the plans as part of the NoR process?

We are committed to engaging directly with neighbours who live closest to the proposed substation site. This gives residents an opportunity to share feedback on specific aspects of the proposal, particularly landscaping plans and other ideas that might improve how the station fits with their individual properties.

While there are certain technical and operational requirements that define how the substation must be designed, we're keen to listen to local concerns and ideas where there is room for flexibility.

This early engagement helps us prepare a more informed NoR. Once the NoR is lodged with Auckland Council, there will also be a formal process where the wider community can make submissions.

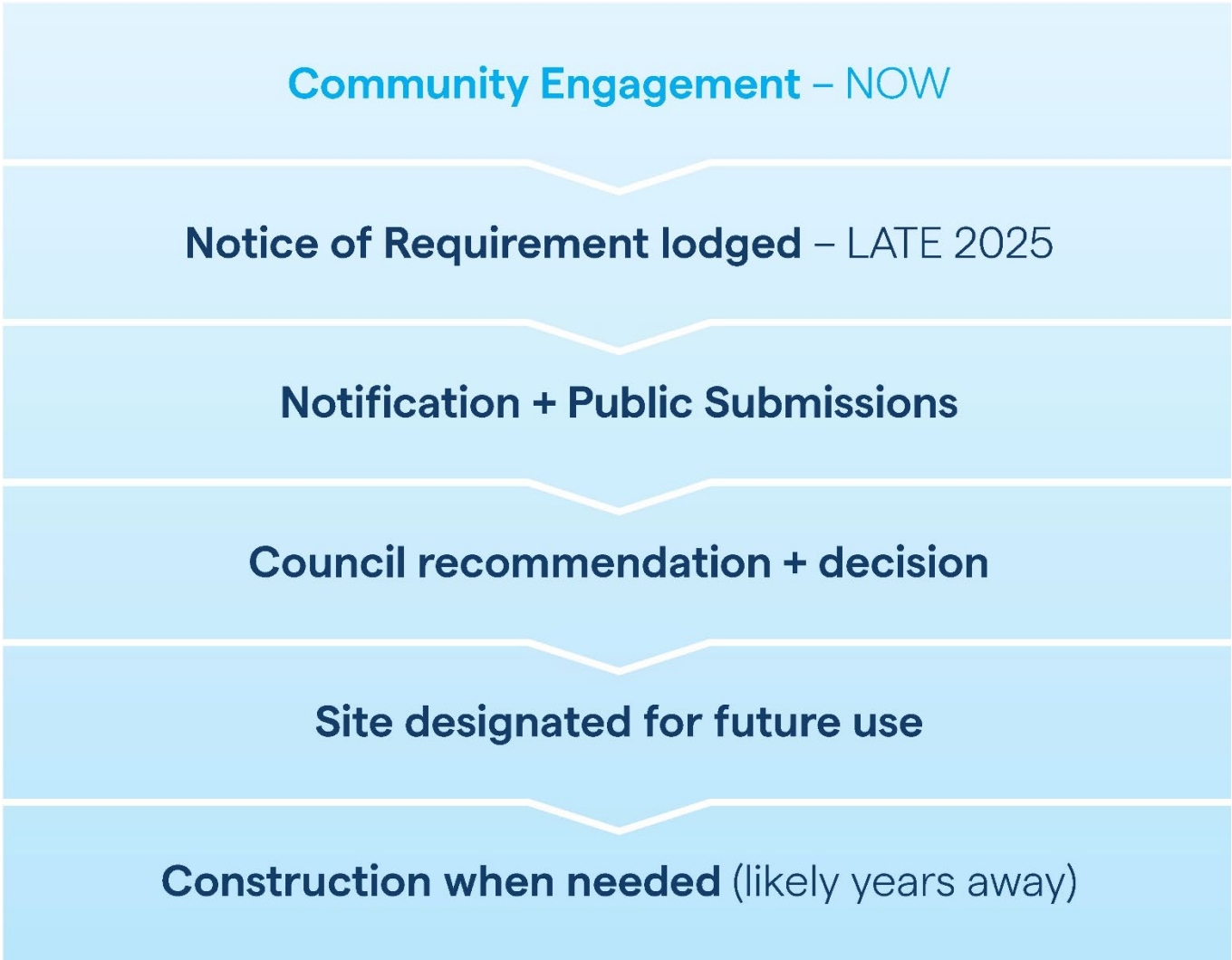
NOTICE OF REQUIREMENT (NoR)

When will the plans and planting plans be publicly available?

We will share the station and planting plans with neighbours before lodging the NoR, and formal feedback can be provided as part of the NoR process.

Once the designation is confirmed, how soon can you start construction?

Once the designation is confirmed, the substation could be built at any time, but no funding for further design and construction is committed and we do not anticipate building the station for several years. The main purpose of the designation is to future-proof the site and enable Transpower to quickly respond when the need arises.



Timeline & process.

What are Transpower's plans for the existing station at 108 Matua Road?

The existing station will continue to operate until we build the new station sometime in the future. Once we have built the new station, the existing station will be decommissioned.

Will Transpower sell its land at 108 Matua Road?

Transpower has no plans to sell 108 Matua Road. It is likely that the site will be used for ecological mitigation and enhancement. Plans for this are still being developed.

What will the new station look like?

The project is expected to include, but will not be limited to:

- reconfiguring the site entrance from Tapu Road to the west
- earthworks to form a building platform
- earthworks on land subject to Hazardous Activities and Industries
- building new substation infrastructure and supporting facilities, including transformers, gantries, fire walls, switch room buildings, circuit breakers, and capacitor banks
- constructing new or extending existing buildings, structures, fencing, car parks or other impermeable surfaces, lighting, signage, and telecommunications facilities
- planting a 20-metre buffer zone along the southern boundary of 125 Tapu Road
- reconductoring overhead lines
- replacing three existing towers with poles
- removing one existing tower
- installing four new poles

Will it be bigger than the existing switching station?

Yes, the station on 125 Tapu Road will be bigger than the existing station on 108 Matua Road. For the NoR and resource consent applications, a concept design has been developed for the largest practicable substation and associated facilities on the site at 125 Tapu Road, Huapai. It is not the final design; what is ultimately built may be smaller in scale or have a different orientation.

https://www.transpower.co.nz/projects/enabling-huapai

As technology and design standards evolve, new types of infrastructure may replace existing technology, which is why Transpower needs to have flexibility in the design and configuration of activities that can occur on the site. Any potential adverse effects from the development of the site can be managed in future through the outline plan of works process and designation conditions proposed in a NoR.

Where will access to the new station be once it is built?

Access will be from Tapu Road both during construction and once the station is operational.

Will the overhead pylons and lines remain?

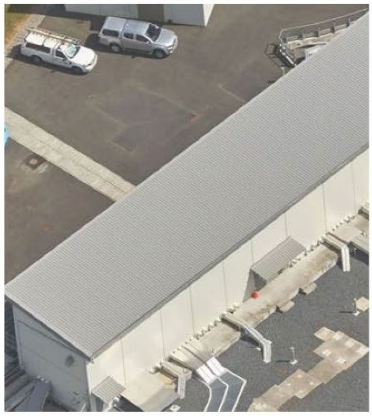
Yes. The project also involves applying for resource consents to relocate and connect existing transmission lines to the new substation.

THE STATION

Indicative substation layout

Transformer

Gantries



Switchroom building

Top: indicative substation layout. Bottom left to right: transformer, gantries, switch room building.

Will daily operation of the station be noisy?

No, the substation is not expected to be noisy during normal day-to-day operation.

The existing designation for the Huapai site sets a maximum noise level of 45 decibels, which is similar to the background noise in a quiet suburban street. Transpower must continue to meet this limit as part of its designation conditions.

We are proposing some small updates to the conditions to bring them in line with modern standards used in the Auckland Unitary Plan. However, the 45-decibel noise limit itself will not change.

Will I be able to see the station from my property?

You are likely to see parts of the station once it is constructed. However, we are developing a planting plan to complement the surrounding environment, to help the site integrate well with the area, and to provide visual screening for neighbouring properties. We have been meeting with immediate neighbours to help develop these plans. As there are no immediate plans to build the station, plants are anticipated to be well established before the station is built.

What is the planting plan?

The planting plan includes a mix of native trees, shrubs, and wetland species designed to soften the appearance of the substation and support local biodiversity. Taller trees like tōtara, kahikatea and tītoki will screen views of the site over time, while lower-growing plants are used near transmission lines to ensure safety.

There are seven different planting zones, including riparian planting near the river, wetland planting to support stormwater management, and boundary planting to provide visual screening. Many of the species were chosen for their ecological value and ability to thrive in the local environment.

The plan was shaped by input from landscape and ecology experts, with consideration for community views on how best to integrate the station into the surrounding area.

Viewpoint A

View from 4 Parlane Drive, deck area.

Proposed: **Year 1**

Proposed: **Year 5**

Proposed: **Year 10**

Viewpoint B

From 15 Josh Road, deck area along the northern boundary.

Proposed: **Year 1**

Proposed: **Year 5**

Proposed: **Year 10**

Native species selected to grow up to 10–15 metres high

Plants will be well established before construction starts

How native planting will screen the site over time

COMMUNITY

What are the benefits of this project for the local community?

The benefits of this project include:

- **a future-proofed infrastructure,** which will ensure reliable electricity supply to meet the needs of a growing population
- **economic opportunities** as the project will support local jobs and businesses during construction and maintenance
- **regional contribution,** with Huapai's strengthened role as a critical energy hub, benefiting both local and regional communities.

How will this project affect the surrounding environment and community?

Transpower has undertaken thorough investigations and alternatives assessments to ensure minimal disruption. The proposed development:

- uses land already owned by Transpower, minimising additional land use
- aims to integrate with the local environment and address residential development pressures.

This will affect my property value. Will Transpower compensate me for the lost value?

Transpower owns the land at 125 Tapu Road (since November 2000) and at 108 Matua Road (since September 1999).

Both properties have long been identified for electricity infrastructure use. Since 2016, 125 Tapu Road has had zoning that includes both Residential – Single House and Future Urban, with a National Grid Corridor overlay. The land at 108 Matua Road is officially designated for an electricity substation, and it also falls within the National Grid Corridor.

This zoning and designation information is publicly available on Auckland Council's Unitary Plan viewer and would have been included in the Land Information Memorandum (LIM) you received when you purchased your property

Because this information was already in the public domain and reflected in the land's planning documents, Transpower is not required to compensate neighbouring landowners. The law assumes buyers can check how nearby land is zoned or designated before making a purchase.

Will the station emit electric and magnetic fields (EMFs) and at what levels?

Yes, like all substations and power lines, the Huapai station will emit electric and magnetic fields (EMFs). EMFs are invisible areas of energy that form around electrical equipment including household appliances, power lines, and substations.

The EMF levels at the Huapai substation will be similar to those of other substations around New Zealand and within the safety limits set by the International Commission on Non-Ionising Radiation Protection (ICNIRP), the global authority on EMF safety. The same applies to the new sections of transmission line.

New Zealand's Ministry of Health endorses the ICNIRP guidelines, and Transpower is required to comply with them in the design and operation of the substation and associated infrastructure.

CONSTRUCTION

When will the new station be built?

Construction of the proposed substation is not expected to begin for several years. We are planning now to ensure the site is ready when needed and to keep neighbours informed.

What is the likelihood of the project going ahead?

It is highly likely the land will be designated, which means the site will be protected for future use as a substation. However, the timing of construction will depend on several factors, including population growth in the area, demand for electricity, new connection requests from electricity distribution or generation companies, and increasing electrification (such as more electric vehicles) in response to climate change. Once the designation is confirmed, the substation could be built at any time. However, construction is not expected for several years.

KEEPING YOU INFORMED

How will the community be kept informed throughout the project?

A project engagement lead has been appointed. Her contact details are:

Philippa White, Engagement Lead
communications@transpower.co.nz
021 241 8740

You can also email Transpower at communications@transpower.co.nz

For more information go to: www.transpower.co.nz/projects/enabling-huapai

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