

Gracemere Substation Project Update



Part of Energy Queensland

February 2021

Construction is set to begin on Gracemere's new substation and powerline project.

Construction of Gracemere's new 20MVA modular substation and powerline will start in February and when complete will bolster Gracemere's electricity supply.

We've been busy preparing for construction to begin.

Happy new year! We are excited to start 2021 by kick-starting construction of the new Gracemere substation in John Street, and the 66,000 Volt powerline, which will connect the new Gracemere substation to Egans Hill substation.



Fig 1 – Location of new Gracemere substation – Corner of John, James and Platen Streets

Over recent months, we have been busy completing a range of activities to help prepare for construction of the substation and powerline.

We have finalised the substation and powerline designs and conducted environmental, native title and cultural heritage assessments. Rockhampton Regional Council have also relocated some of their sewerage and water pipes to ensure these services are not disturbed during construction.

We've been engaging with landholders to discuss access and easements for their properties for the powerline to Egans Hill. With a range of improvements and developments on the horizon for Gracemere, we have also met with a range of elected representatives and Rockhampton Regional Council staff, to brief them on our plans for the project and to ensure that we are aligning and coordinating our plans.

Civil Construction Contractor Appointed

We recently called for tenders for the substation civil construction works at the new Gracemere substation site and to extend the Egans Hill substation to accommodate a high voltage connection to Gracemere substation.

NF Corbett has been appointed as civil contractor for these substation civil works. NF Corbett is a Queensland based, family operated business, with many years' experience completing substation civil works.



We have held an onsite induction with Corbett's, who will be commencing civil construction on site at the Gracemere and Egans Hill substation sites in February.

What will the substation look like?

The Gracemere substation will be located at the back of the block located on the corner of John, James and Platen Streets as shown in Figure 2.



Fig 2 – Concept of new Gracemere substation – from corner of John Street

One of the first activities we will undertake is to level out the site and build up the back of the block to provide a flat construction site. Temporary builders fencing will be erected around the site to protect the public and maintain safety within the construction area.

To meet substation security requirements and keep the public safe, a permanent fence will be constructed around the substation site with lockable access gates for our crews. Following feedback from the community about the visual amenity of the substation, we will construct a dual-fence design. The inner fence will be a chain-link mesh fence with barb-wire top to meet our substation security requirements. The outer fence however, will be a more appealing timber paling fence.

To limit traffic movement, we have designed the substation with a 'drive through' design. Vehicles will enter the substation via John Street and exit via Platen Street.

To further improve the visual amenity, we will landscape the perimeter of the fence, which when fully established, will help to screen the substation.



Fig 3 – Example of dual fence construction around the new Gracemere substation

The substation will have a modern, modular substation control building which will be fabricated by us at our Banyo Workshops in Brisbane and be delivered to site in the coming months.



Fig 4 – Concept of the modular substation control building.

In our planning, we have considered the future electricity needs of the Gracemere community and incorporated 'growth' in our substation design. Should the electricity needs of Gracemere grow, the substation design allows for future expansion of the electrical infrastructure, whilst remaining within the footprint of the substation site. This will help to reduce impacts on the community associated with any future electrical expansion.



Fig 5 – Gracemere Substation layout with room to expand to meet the future electricity needs of the Gracemere community.

Where will the powerline route to Egans Hill go?

We will be connecting the Gracemere substation to Egans Hill substation via a 66,000 Volt powerline. Through earlier community consultation, several potential routes for the powerline were investigated.

To reduce the physical and visual impact on the community, we have considered a range of options for the existing 11kV powerline routes and the new 66kV powerline from the outskirts of the CBD to Gavial-Gracemere Road. The final line route was selected on the basis that it best meets the range of community and environmental concerns put forward, as well as meeting electrical design standards and cost considerations.

The high voltage cable will exit the Gracemere substation into John Street, travel up John Street into Lawrie Street and down into Gavial-Gracemere Road to the Broadhurst Drive intersection. This section of the powerline will be underground around the Gracemere CBD. Undergrounding this section will reduce congestion in the CBD area where land for electrical infrastructure is limited and accommodate the Department of Main Roads plans to expand Lawrie Street later in the year.

The powerline will then proceed in an overhead construction from Broadhurst Drive down Gavial-Gracemere Road, along Sullivan Road, where it will connect to the Burnett Highway – see Fig 6.



Fig 6. – Powerline route between Egan Hill substation and new Gracemere substation

When will construction on the project start?

Work on the powerline between Egans Hill and the new Gracemere substation is scheduled to start in February 2021. Some of the key activities scheduled to deliver the project, and our progress, are listed in the following table:

Stage	Activity	Timing
Network Planning	<ul style="list-style-type: none"> Identify network constraints and undertake preliminary evaluation Research options Determine most appropriate solution 	Complete
Planning Approval	<ul style="list-style-type: none"> Develop an Environmental Management Plan Undertake internal and external approval processes (including Material Change of Use - MCU) 	Complete
Construction	<ul style="list-style-type: none"> Finalise substation and powerline designs (complete) Commence civil construction (Feb 2021) Fabrication of modular substation building (Feb – April 2021) Transport and install Gracemere substation building (May 2021) Gracemere substation electrical infrastructure works (July – Dec 2021) Build powerline between Egans Hill and Gracemere substations (Mar – Sep 2021) Substation commissioning (Feb-May 2022) Project completion (May 2022) 	2020 - 2022

Please note that these dates may be subject to change.

As the project progresses, we will continue to provide the community with more detailed updates about each phase of the project.

Getting in touch with us

We are committed to working in consultation with Rockhampton Regional Council and the Gracemere community to limit any impact on the community and to keep the community informed as we progress the project, securing Gracemere's future electricity needs.

For more information about the Gracemere substation project, to provide feedback, or **to register for future updates via email or SMS**, please contact our Senior Community Engagement Advisor, Kate Austin - on 1300 653 055 or email us at: NetworkProjectEngagement@energyq.com.au

You can also keep up to date on the project by visiting our project website: www.ergon.com.au/gracemere-project

Network General Enquiries

13 74 66 7am – 5pm, Monday to Friday

Faults only

13 22 96 24 hours a day, 7 days a week

Life-threatening emergencies only

Triple zero (000) or 13 16 70

24 hours a day, 7 days a week