

Mackay City Substation Upgrade



June 2019

We're improving electricity supply services to Mackay's CBD and eastern suburbs with the refurbishment of the Mackay City Substation in Tennyson Street.

We're on the move – substation buildings delivered to Mackay

What does a lot of forward planning, three Ergon Energy fabrication specialists, two crane operators and two dogmen operating 80 tonne and 100 tonne cranes, two flat-bed semi-trailers and their drivers, and some precision manoeuvring, all have in common?

It was all needed for the safe and successful delivery of the new Mackay City Substation buildings to Ergon's Cemetery Road Depot in Mackay. In a complex logistical operation at the end of May, the modular substation buildings, which were manufactured in Ergon's Banyo Workshops in Brisbane, were crane-lifted onto the back of semi-trailers and transported almost 1,000 kilometres to have them ready to move to the site.

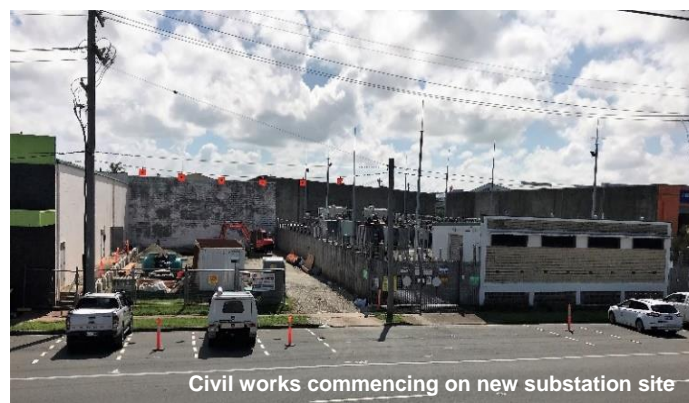


Now safely established on site in the Mackay Depot, the substation buildings will undergo a series of factory acceptance testing by our local technicians, before they are loaded up onto trucks for their final journey over to Tennyson Street and lifted into place at the Mackay City Substation later in the year.



Site construction commenced

Work commenced on site at the Mackay City Zone Substation in Tennyson Street in March, with our civil contractors Corbett, busy undertaking a range of civil works to prepare the site for the new substation buildings and electrical equipment.



These preparatory civil earth works have included levelling out the parcel of land adjacent to the existing substation where the new substation equipment will be established and laying foundations for the electrical equipment. As well, blockwork for transformer bunding has been established, communications pits have been installed and temporary fencing has been installed for safety.

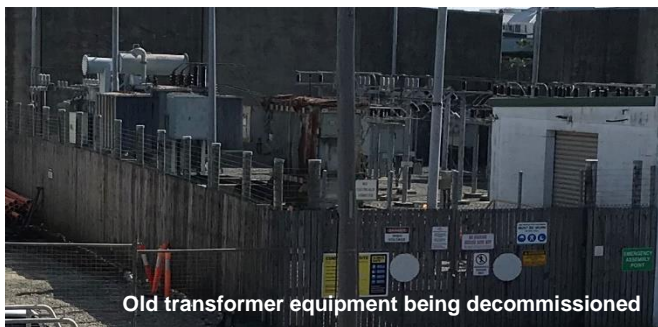


Civil earth works begin on substation foundations

The next steps in the refurbishment is to remove the aged transformers and associated equipment and bring in the new electrical equipment.

Ergon substation specialists have been busy preparing for the removal of the first old transformer (T1) with decommissioning work progressing throughout April and May in readiness for the new transformer to be brought in.

This complex work involves isolating the old transformer and its associated equipment from the high voltage network. The old transformer is then disassembled by removing cables, fixtures and fans, and draining oil from the transformer, so that it is ready to safely remove from site.



Old transformer equipment being decommissioned

The removal of the old transformer and installation of the new T1 is scheduled for 21st June.

Businesses in Tennyson Street can **expect some disruption** while the new transformer is manoeuvred into place and the old transformer safely removed. This work will involve closing off one side of the street to vehicle and foot traffic, with traffic controllers assisting. Our aim is to enable businesses to remain open. However, some disruptions may be experienced during the day to ensure the safety of the community and the workers on site. The power supply will not be interrupted.

This step is a major milestone for the project and a complex operation that will again involve semi-trailers, cranes and a number staff and contractors on the ground.

Our specialist transformer team will then remain at the site to assemble the new transformer onsite through to late June.

Key construction dates

Our planning and preparation works are well progressed, and the staging of the construction has been designed to ensure the least possible disruption to local businesses and residents. The key activities during the project are below:

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
Community Engagement	<ul style="list-style-type: none"> Inform community of project – meet with directly affected customers Distribute newsletters Update community on project progress and construction impacts Consider community feedback 	Ongoing
Planning Approval	<ul style="list-style-type: none"> Develop an Environmental Management Plan Undertake appropriate 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 (commenced February 2019) Transport substation buildings to Mackay (complete May 2019) Remove old transformer and install the new one (June 2019) Substation buildings moved to site (September 2019) Completion (early 2021) 	2018-2021

Please note that these dates may be subject to change.

Getting in touch with us

For more information about this project, or to provide feedback, please contact our Senior Community Engagement Advisor, Kate Austin on 1300 653 055 or email us at: NetworkProjectEngagement@energyq.com.au

Our Senior Community Engagement Advisor will be on site and contactable on the 21st June to answer any questions that may arise from the community. You can also keep up to date by visiting our project website:

<https://www.ergon.com.au/network/network-management/network-infrastructure/major-projects/regions/central/tennyson-street-substation-refurbishment>