

Mackay City Substation Upgrade - Project Update



Part of Energy Queensland

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Mackay City Substation is now powering the Mackay CBD

New substation is high and dry

With storm season already upon us, Mackay city locals can be assured their new energy supply infrastructure has been designed with extreme weather in mind.

The 1974 floods saw the old Tennyson Street Substation inundated – see Figure 1 - so it was important when designing the new Mackay City Substation, that the effects of extreme weather events were taken into consideration. The critical electrical equipment has been elevated in the control room buildings of the new substation – see Figure 2.

Whilst its predecessor, the Tennyson Street Substation, has served the Mackay community well for the past 50 years, the new substation has been designed and built to withstand a one in 200-year flood event – and it's now operational supplying Mackay's CBD and the eastern suburbs with their electricity.



Fig 1 – Tennyson Street Substation inundated in 1974 floods



Fig 2 – New Mackay City Substation built to withstand a one in 200-year flood event

Recovery of old cable

With the new substation in place and the local electricity network now connected to the new Mackay City Substation, we are on the home straight with the project.

The next step is to accurately locate and recover the underground cables that were connected to the old Tennyson Street Substation.

To ensure that we can do this activity safely and efficiently, tomorrow we will have a team on the ground in Tennyson Street who will locate the old, redundant cables, so that those easily accessible can be recovered in coming weeks. While we have records on the old underground cables, there is a need to how the cables have been installed so that we can plan the appropriate cable recovery method.

Just as we have in the past, we will use hydrovac excavation, which is a form of non-destructive excavation that uses highly pressurised water and a high-volume suction vacuum, to help us locate the cables.

First, small cuts will be made into the ground or bitumen to provide an entry hole. Then the ground is loosened using a jetting rod with high pressure water (like a household gurney) and the high-volume suction vacuum removes the water and loosened dirt to provide access to the underground assets – see Figure 3. We will locate the cables that need to be removed and then these access holes will be backfilled, and the bitumen reinstated.



Fig 3 – Hydro Excavation Access Point

We will access the cables through seven locations in Tennyson Street – see highlighted areas indicated on Figure 4. While the hydro excavation is underway, access to some carparks in Tennyson Street, including in front of the old Tennyson Street substation adjacent to Porters delivery entrance, in front of Tennyson House, and in front of the building adjacent to Inner Labyrinth in Tennyson Street, will be temporarily affected throughout the day. As well, the hydrovac excavator will make some minor noise when it is in operation.

When these remaining cables have been located, our team will finalise our plans for the removal of the cables and we

will share those detailed plans with our neighbours and stakeholders shortly.



Fig 4 – Locations of hydro excavation for cable location

Getting in touch with us

As always, we thank you for your patience while these works are underway and encourage you, if you have any questions about the Mackay City Substation Project, to contact Kate Austin - Senior Community Engagement Advisor - 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: <https://www.ergon.com.au/network/network-management/network-infrastructure/major-projects/regions/central/tennyson-street-substation-refurbishment>

During storm season, fallen powerlines are the lines that matter most.

So look out for them, stay clear and call 000 or Ergon Energy on 13 16 70 if powerlines are down.

Take care.
Stay line aware.