

Whitsundays Network Upgrade Project Update



February 2023

Substation taking shape and cable duplication set to start.

Cannonvale substation

With around 1,100 millimetres of rain having already fallen in the area during 2023, some project delays are to be expected.

The recent wet weather that caused major flooding throughout the Whitsundays also affected work at the Cannonvale substation, impacting installation of the sewer and foundations – see Figure 1a and b.



Fig 1a and 1b - heavy rain caused some delays to scheduled work at Cannonvale substation.

Following the torrential rains earlier in the month, our contractors at the substation welcomed a few dry days during February and pushed ahead to install the new section of sewerage pipe for Whitsunday Regional Council.

The new gravity fed pipeline is almost 60 metres long and at a depth of around 4 metres at its lower end. The pipeline is encased in a special enveloper sleeve which will allow the Council to access and maintain the line without impacting the electrical infrastructure in the substation.

An excavator was used to dig the sewer trench and lower the pipe and enveloper into place. Special shoring stabilised the trench so that the contractors could safely work in the confined space, connecting the pipe to the existing sewerage network – see Figure 2a and b.

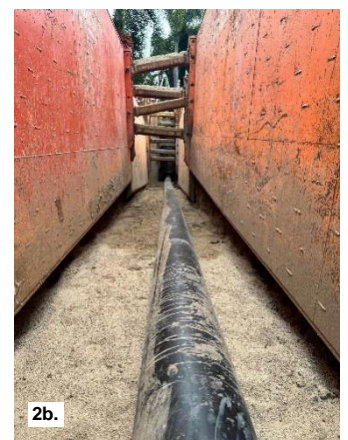


Fig 2a and 2b – The new sewer being line installed with excavator at Cannonvale substation and shoring materials ensure a safe working area in the confined space.

We would like to thank our substation neighbours for their patience during this extensive excavation work.

The contractors at the substation are progressing well on establishing the foundations for conduit pits for control cables and the electrical steel work in the substation yard – see Figure 3.



Fig 3 - Contractors prepare concrete formwork in the substation yard for the electrical equipment foundations.

Our focus at the substation now is to install stormwater drainage along the back of the site at Lupton Place and to build a small retaining wall at the front of the substation site. Once these elements are complete, the site will be fully fenced and secured.

This work is expected to be completed by Easter.

Cable duplication commencing

With work inside the substation taking shape, we will soon be commencing works associated with the cable duplication between the Cannonvale and Mt Rooper substations. Locals will see our crews, and contractors from Zinfra, working across several sites throughout Cannonvale, Airlie Beach, Jubilee Pocket and out beyond the Whitsundays Airport.

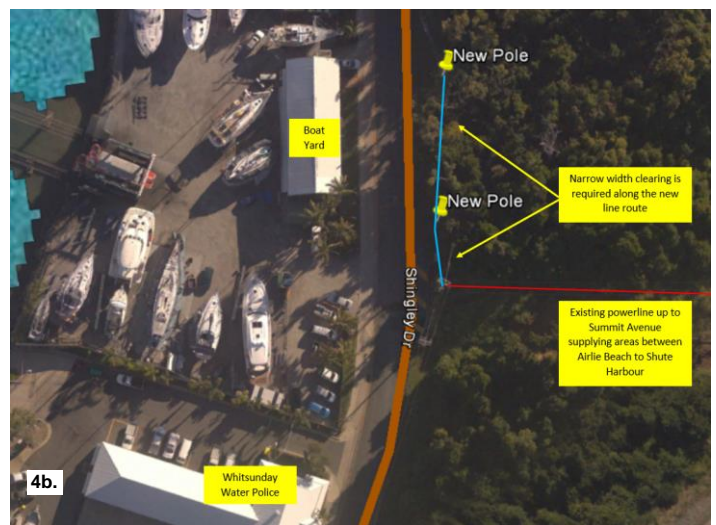
Shingley Drive

To connect the new high voltage cable to the existing electricity network, two new concrete poles will be installed along Shingley Drive, near Hawkes Boat Yard and the Whitsundays Water Police – see Figure 4a and 4b.

It is in this area of Shingley Drive where the new section of underground cable will connect to electrical equipment that ties the overhead and underground sections together. Some pre-work will commence along Shingley Drive in early March with the poles scheduled to be installed in May 2023.



4a.



4b.

Fig 4a and 4b – Area on Shingley Drive where crews will stand and connect new poles for the Whitsundays Network Upgrade project.

Some vegetation clearing will be required to accommodate this new section of the network. With a limited corridor along Shingley Drive for services, our design team have planned this section of the network to have a ‘narrow-width design’ to reduce the amount of vegetation clearing required.

To provide a safe working environment for crews and for those accessing the businesses and facilities at the southern end of Coral Sea Marina, traffic control and pedestrian detours will be established.

During most of the works, vehicular traffic will be limited to one lane with ‘stop-go’ traffic control. However due to the limited space along Shingley Drive, and the size of the crane required to lift the new poles into place, the road will be closed to vehicular traffic when the poles are lifted into place.

We will advise businesses along Shingley Drive when this work is scheduled to be completed and of any impacts that can be expected during that time.

Summit Ave to Airlie Beach Foreshore

The duplicate powerline will run adjacent to the existing line, from Shingley Drive to the top of the hill behind the 'Welcome to Airlie Beach' sign at Summit Avenue. From there the line route traverses Summit Avenue, down Mazlin Street to Broadwater Avenue and then along the Airlie Beach foreshore to Port Drive and then onto Jubilee Pocket – see figure 5.



Fig 5 – Line route for cable duplication between Shingley Drive and Port Drive Airlie Beach.

To safely excavate and install conduit for the electrical cable across Summit Avenue and down to Mazlin Street, Zinfra will be seeking to temporarily close access to Summit Avenue and implement a daily detour for local traffic via Broadwater Avenue – see Figure 6 for work locations.

This small detour is expected to be in place for only a couple of days, with trenches backfilled and all lanes reopened each night. Mazlin Street will be open to local traffic with traffic control managing safe access for residents. Driveway access to homes will be maintained.



Fig 6 – Work area from Shingley Drive to Summit Avenue and down Mazlin Street

The underground cable will enter the Lagoon area from Broadwater Avenue. A small section of the park will be excavated for a trench to install conduit for the cable, running along the back of the Lagoon park between the park boundary and the Variety swing, from the park entrance to behind Hogs Breath Café - see Figure 7.



Fig 7 – Cable path along Broadwater Avenue between Mazlin Street and Airlie Beach foreshore.

Early collaboration with Council during the foreshore development, and a bit of forward planning, led to the early installation of electrical conduit along several sections at the foreshore. While this will limit a lot of disruption along the foreshore, some open trenching will be required to install conduit and underground cable joint bays.

Key members of Ergon's project team, Zinfra and Whitsunday Regional Council representatives, met at the foreshore to discuss the proposed design and approach to works and discuss ways to minimise disruption for foreshore users – see Figure 8.



Fig 8 – Ergon project team, Zinfra and Whitsunday Regional Council representatives discussing changes to design and delivery plans.

This collaboration is reaping benefits for the Council, residents, businesses, and tourists alike, with the team identifying some small, but important adjustments to the design, delivery plan and approach to works.

With changes to the design finalised and approvals being sought, Zinfra are getting ready to start works before the end of the month.

Zinfra will start with a process called hydro excavation, commonly known as 'pot-holing', where they will confirm the location of underground assets such as water mains, electricity, and stormwater pipes, and to prove the integrity of the conduits that were previously installed during the foreshore development.

Hydro excavation is a form of non-destructive excavation that uses highly pressurised water and a high-volume suction vacuum. First, small cuts will be made into the ground or bitumen to provide an entry hole – see Figure 9.



Fig 9 – Hydro excavation access point.

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. Once the tests are completed, these access holes will be backfilled, and the ground or bitumen reinstated.

As part of the hydro excavation, there will be some localised noise and dust and some locations may require partial road closures.

If the conduits are free of damage and obstructions, no further work will be required along those sections, except to pull the high voltage cable through and

connect the sections together in specially designed underground electrical joint bays.

Should the conduits be obstructed or damaged however, they will need to be removed and replaced with new conduit before the cable can be run through.

As well, there are some sections along the foreshore where no conduit currently exists. This includes a section starting behind Beachworx, near the public ping-pong table, around the Council services area and across the central carpark to the pedestrian footbridge over the creek footbridge to the southern side of the foreshore – see Figure 10.



Fig 10 – Area on foreshore where open trenching is required to install conduit for the underground cable.

These sections will be excavated, and conduit installed. To minimise disruption, Zinfra will work small sections of around 25 metres at a time, trenching, installing the conduit and then backfilling each day. To keep the visual amenity of the foreshore area, and to protect the cable, it will run through a steel conduit under the footbridge.

Jubilee Pocket to Whitsunday Airport

To accommodate the new powerline, a concrete termination pole and stay wire – like the one in Figure 11 - will be installed in the road reserve at the corner of Shute Harbour Road and Jubilee Pocket Road, at Jubilee Pocket, adjacent to the footpath.

New poles will go into the road reserve in Ergon's existing easement, adjacent to the 66,000 volt powerline near the airport – see Figure 11.



Fig 11 – The project team discuss the location of the new poles in Ergon's easement adjacent to Shute Harbour Rd near the airport.

The powerline will change from the overhead network at this site, and go underground across Shute Harbour Road to the airport side, and then reconnect with the overhead network to Shute Harbour and Shutehaven.

To ensure safety during the construction phase and ongoing reliability of the powerlines, some vegetation clearing will be required in the area adjacent to Shute Harbour Road south of Whitsunday Airport – see red area in Figure 12.

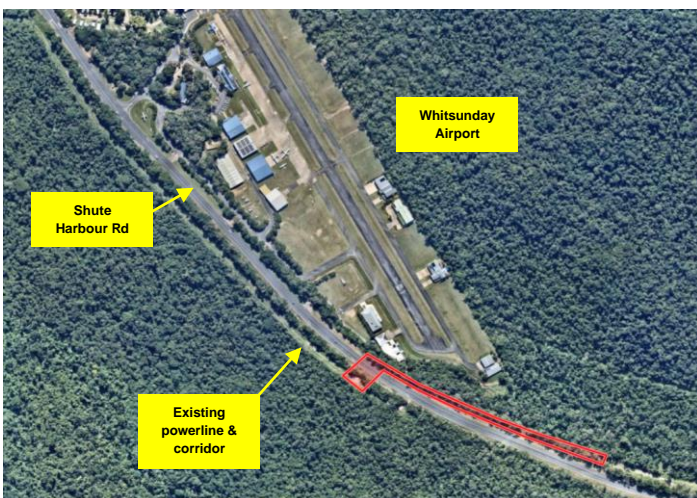


Fig 12 – work area near Whitsunday Airport where vegetation clearing along the road reserve is required.

Getting in touch with us

To keep up to date on the project, to provide feedback, or to **register for future updates via email or SMS**, scan the QR code or visit our project web page [Whitsundays network upgrade - Ergon Energy](https://www.ergon.com.au/whitsundays-network-upgrade). You can also contact our Senior Community Engagement Advisor, Kate Austin on 1300 653 055 or email us at:



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