

Kamerunga to Woree Replacement Project

POWERLINK QUEENSLAND

Powerlink is a leading provider of high voltage electricity transmission network services, combining innovation with insight to deliver safe, cost effective and reliable solutions. We own, develop, operate, and maintain the high voltage electricity transmission network in Queensland. Our network extends 1,700km from north of Cairns to the New South Wales border. We aim to connect Queenslanders to a world class-energy future, providing electricity to more than five million Queenslanders and 253,000 businesses.

Project introduction

Powerlink's Kamerunga Substation and the transmission line between the Kamerunga and Woree substations are critical components of the electricity transmission network that supplies power to northern Cairns.

Both the Kamerunga Substation and transmission line are now nearing the end of technical service life and must be replaced to ensure a safe and reliable electricity supply into the future.



Powerlink acknowledges the Traditional Owners and their custodianship of the lands and waters of Queensland and in particular, the lands on which we operate. We pay our respect to their Ancestors, Elders and knowledge holders and recognise their deep history and ongoing connection to Country.



Call 07 4034 7601 | Email kamerunga-woree@powerlink.com.au
powerlink.com.au/Kamerunga-woree



SAFE FOR LIFE
Everyone. Everywhere. Everyday.

Project planning

New substation in Barron

The existing Kamerunga Substation, located in Caravonica, is nearing the end of its technical service life.

The recommended substation replacement site is a Powerlink-owned parcel of land off Cairns West Arterial Road, approximately 600m from the existing substation location. The parcel of land was purchased in 2021 to account for anticipated future transmission network requirements.

New transmission line

Kamerunga to Redlynch – overhead line

The existing Kamerunga Substation connects the Barron Gorge to Cairns transmission line from the Barron Gorge Hydroelectric Power Station to the existing Kamerunga to Woree line.

The proposed overhead transmission corridor will include a connection to the Barron Gorge to Cairns line from a point at the existing Kamerunga Substation site to the new substation in Barron. The corridor will then proceed to the Redlynch masterplan area.

The new corridor is directly adjacent to and east of the existing line and is mainly located on primary industry and industrial land, as well as State and Local Government owned land.

Redlynch to Woree – underground cable

Significant residential development since the overhead transmission line was first established has meant the construction of a new overhead line from Redlynch to the Woree Substation is not feasible. Alternative overhead line routes would also pose significant impacts to residential areas.

As a result, Powerlink is proposing to transition from an overhead transmission line via a transition point at Redlynch to a 10.4km underground cable to Woree Substation.

The underground cable will follow a different corridor to the existing overhead line and will be largely located in Council and State-owned roads. No residential land or easements on private residential property will be required to construct the underground cable.

From Redlynch, the proposed underground corridor will run under Freshwater Creek and through Goomboora Park before continuing through roads, footpaths and verges to the Woree Substation.



Existing transmission line between Redlynch and Woree



Existing transmission line between Redlynch and Woree

Project need.

Kamerunga Substation

Located around 10km north-west of Cairns CBD, Kamerunga Substation was first established in the 1970s. Equipment at the substation is nearing the end of technical service life and will need to be replaced.

Kamerunga to Woree transmission line

The Kamerunga to Woree 132 kilovolt (kV) transmission line provides the critical service of connecting the Barron Gorge Hydroelectric Power Station to the transmission network, supplying power to northern Cairns. The transmission line has been in operation since the 1960s, and a replacement line will need to be constructed.

Powerlink requires an easement for an overhead 132kV transmission line to be 40m wide for this project. When the Kamerunga to Woree line was originally built, industry standards at the time required the easement to be 20m wide for this voltage. As standards evolve over time, we now require a wider easement to enable the continued safe, secure and reliable operation of the transmission line.

To ensure continuous electricity supply to the area, we must maintain the existing line while constructing a new replacement transmission line. Where possible, we have positioned the recommended replacement corridor adjacent to the existing line.

There has been significant residential development adjacent to the line between Redlynch and Woree, meaning we are unable to widen the existing transmission easement through this area. Therefore, the decision has been made to underground this component of the line along a new corridor.

Project investigations

Powerlink has undertaken a range of activities to investigate the development of transmission line replacement options.

Due to various constraints in the area, Powerlink has identified this project requires both an overhead and underground infrastructure solution. The replacement segments are:

- a replacement overhead transmission line between Kamerunga and Redlynch
- an underground transmission cable, situated in a new corridor, between Redlynch and Woree to replace the current overhead transmission line
- a new substation in Barron to replace the existing Kamerunga Substation.

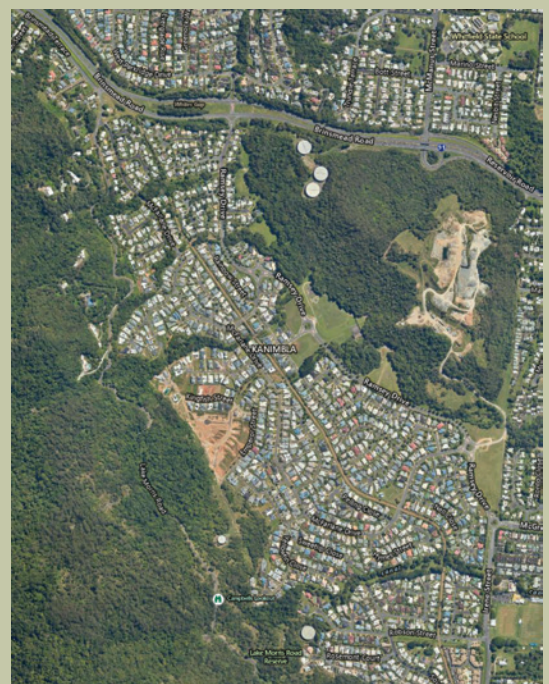
Through detailed desktop and field investigations, Powerlink has developed a recommended corridor for further investigation and refinement. (Please see map included.)



Kamerunga Substation - 1976 (Source: Powerlink archives)



Kanimbla - 1968 (Source: QImagery)

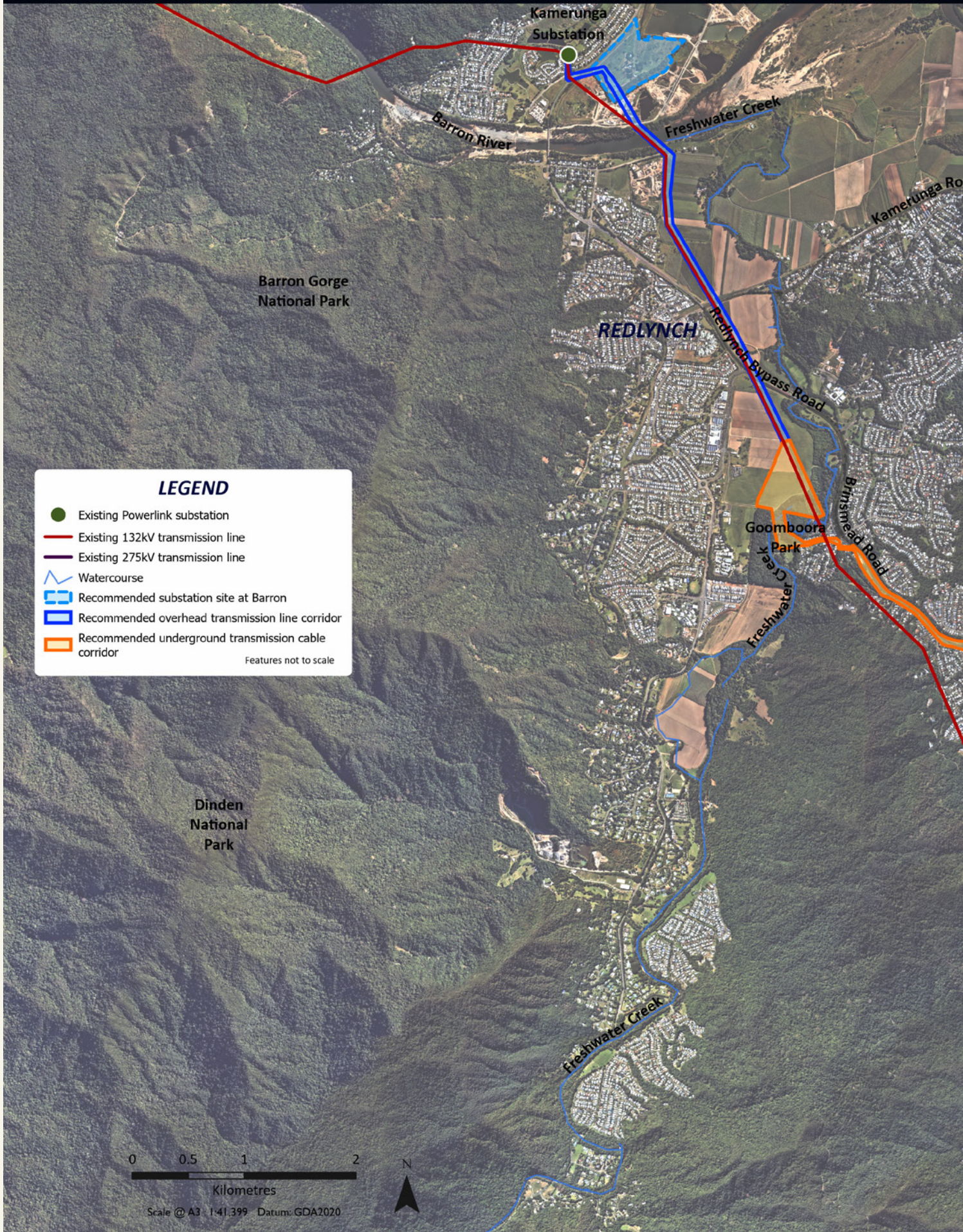


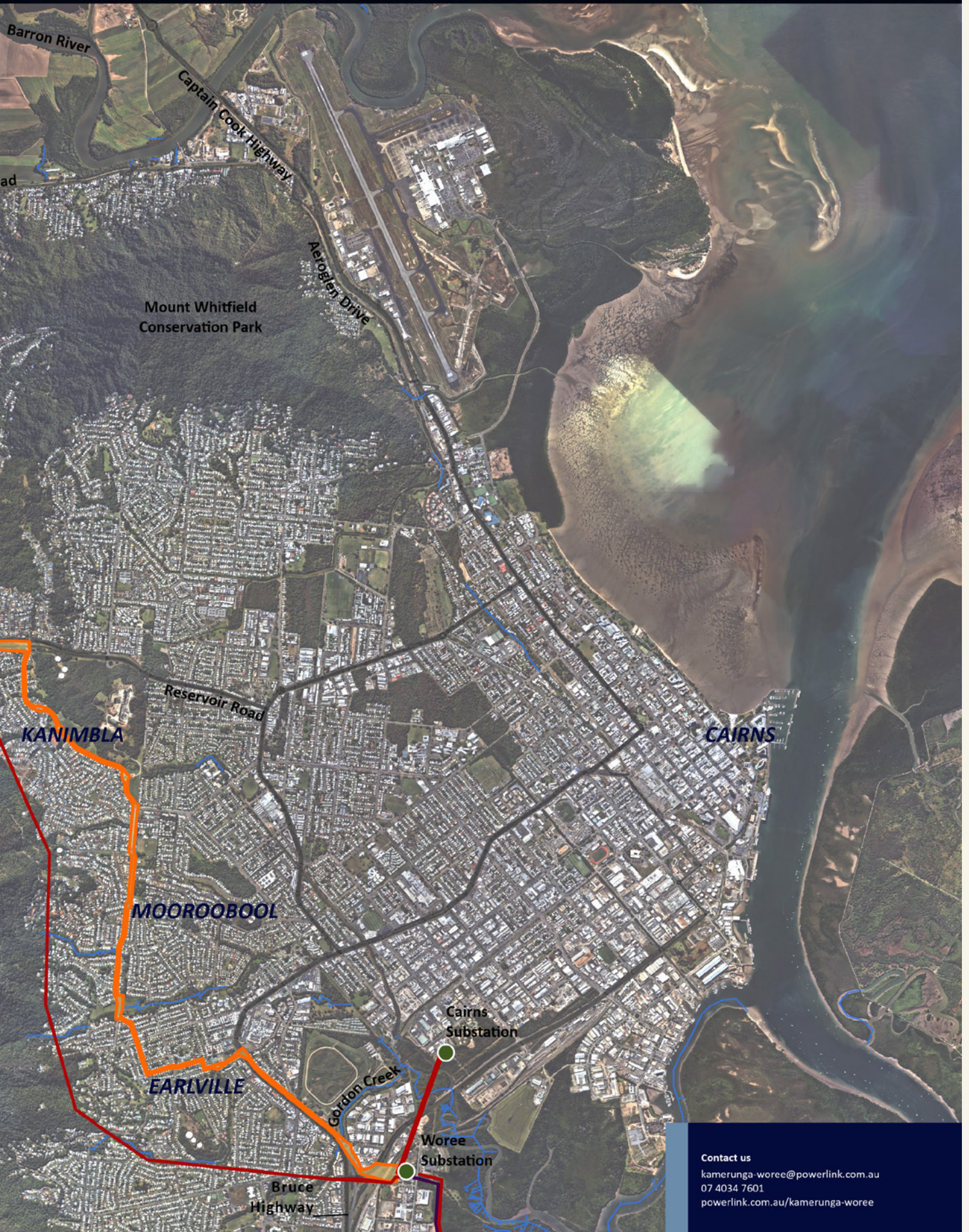
Kanimbla - present day (Source: QImagery)



SAFE FOR LIFE
Everyone. Everywhere. Everyday.

Kamerunga to Woree Replacement Project





Contact us
kamerunga-woree@powerlink.com.au
07 4034 7601
powerlink.com.au/kamerunga-woree

Project approvals

Ministerial Infrastructure Designation

A comprehensive Environmental Assessment Report (EAR) will be prepared to assess the social, environmental and economic impacts of the project. This report is expected to be released for public consultation in mid-2025.

A key component of project planning leading into the EAR is the Draft Corridor and Site Selection Report that is now available for comment on our project webpage under our **Reports** tab. This report outlines the work undertaken to identify the recommended corridor for both the replacement overhead transmission line and underground cable, and a recommended site for the new substation.

Following preliminary engagement on the Draft Corridor and Site Selection Report, Powerlink will progress finalising the corridor that will be put to the Minister for Housing, Local Government and Planning for a Ministerial Infrastructure Designation (MID) to provide planning approvals for delivery of the new substation and transmission line as a single program of works.

A MID can be used to deliver certain types of community-supporting infrastructure such as hospitals, schools, police/ambulance/fire stations, sporting facilities, power lines, water supply infrastructure and sewerage treatment plants.

Have your say

Powerlink is now seeking feedback from landholders, Traditional Owner groups, the community and other stakeholders on the Draft Corridor and Site Selection Report. Feedback helps to provide specific, on-ground information that informs our decisions regarding the most appropriate location of the infrastructure. We welcome your input on the report by **5pm Wednesday 30 October 2024**.

Community information drop-in sessions

We will be hosting community information drop-in sessions along the recommended corridor to provide landholders, local residents and the wider community with an opportunity to meet with our project team, ask questions and provide feedback.

While not compulsory, we encourage everyone to register for these sessions to help us manage venue capacity and staffing numbers. This will also enable us to contact you in the unlikely event that a session may need to be rescheduled. You will also get a chance to raise questions ahead of the drop-in sessions and register for project email updates.

Session dates and times

Day/Date	Location	Time
Thursday, 3 October 2024	Peace Lutheran College 50-60 Cowley St, Kamerunga	5:00pm - 7:00pm
Wednesday, 9 October 2024	Redlynch Central Shopping Centre 7-15 Larsen Rd, Redlynch	3:30pm - 6:30pm
Thursday, 10 October 2024	Earlville Shopping Centre 537 Mulgrave Rd, Earlville	3:30pm - 6:30pm
Saturday, 12 October 2024	Goomboora Park Shale St, Brinsmead	9:30am - 12:30pm

Further information

For more information on the Kamerunga to Woree Replacement Project, including interactive maps and registering for the sessions, please visit our project website by scanning the QR code.



Please provide your feedback
via 07 4034 7601 or
kamerunga-woree@powerlink.com.au

Call 07 4034 7601 | Email kamerunga-woree@powerlink.com.au
powerlink.com.au/Kamerunga-woree



SAFE FOR LIFE
Everyone. Everywhere. Everyday.