

Burdekin River to Reid River Transmission Line and Substation FAQs

Why is this section of CopperString 2032 being re-assessed?

In March 2023, Powerlink took ownership of the CopperString 2032 project. Powerlink recently completed a review of the section of the project between the Burdekin River east to the proposed Mulgrave substation site. This review identified significant constructability, access and operational issues for the proposed transmission line corridor and substation site due to very steep terrain and the requirement to construct significant access tracks and waterway crossings through areas that experience flooding and inundation.

Given these factors, Powerlink will no longer be proceeding with the transmission line and substation in this location. Instead, a new area for investigation, known as the Study Area, has been identified north-east from the Burdekin River to Reid River that allows for better constructability and environmental outcomes.

What is a Study Area?

A Study Area is a broad area of investigation where Powerlink will undertake landholder and community engagement together with a range of technical studies to ultimately identify a suitable location for the proposed transmission line, substation, and other supporting infrastructure. For this project, the Study Area stretches north east from the Burdekin River to Reid River area. It's approximately 60km long and varies in width from approximately 8km to 15km. The area is intentionally wide to ensure the broader community is notified about the project and can provide feedback. This will also provide flexibility to identify the most suitable location for the proposed infrastructure based on engagement and technical studies.

What is the Recommended Corridor and Substation Site Selection Report (RCSSSR)?

The Recommended Corridor and Substation Site Selection Report (RCSSSR) identifies and selects a recommended transmission line corridor and substation site option within the Study Area that has the least overall impact from a social, environmental and economic perspective. The Southern Corridor has been selected as the recommended transmission line corridor with the least overall impact across social, environment and economic objectives when compared to the Northern Corridor option. This generally 2km wide corridor has the following attributes

- lower impact on essential habitat and minimal trigger areas for protected plants, while containing slightly more remnant vegetation with impacts that can be mitigated through strategic placement of the proposed line
- whilst containing slightly more Agricultural Land Class B, impacts on the additional area can be mitigated / avoided through strategic placement of the proposed line
- impacts less transport infrastructure and notably is further from the Macrossan Airfield
- contains no dwellings thereby enabling good physical separation to the proposed line, which is common across both corridors assessed
- lower costs and less complex construction measures due to a shorter length and less potential bend points (changes of direction).

Substation Site 4 has been identified as the recommended substation site with the least overall impact across social, environment and economic objectives when compared to the three other options considered. This substation site has the following attributes –

- land has been extensively cleared and is generally flat with a slight slope down to the north. All other sites contain areas of remnant vegetation
- good transmission line entry and exit opportunities

- site is closest to the Flinders Highway providing good access and requiring least access road upgrade
- closest dwelling is well removed from the site, being approximately 1.0 km from the site boundary with vegetation providing visual screening opportunities
- site is not affected by Q200 flood level. A more detailed comparative analysis of the corridors and substation sites assessed can be found in the RCSSSR, available on the project webpage or by request from the project team.

What infrastructure is proposed in this new area?

The section of CopperString 2032 between the Burdekin River and Reid River will comprise –

- a 500kV transmission line, approximately 54km long, between the Burdekin River and a proposed substation at Reid River. The line will be located within a 120m wide easement.
- Two short sections of adjacent 275kV transmission lines, approximately 8km long, east from the substation at Reid River connecting to Powerlink’s existing transmission network on the Strathmore to Ross 275kV line. The two adjacent lines will be located within a 120m wide easement which may widen at the connection point with the existing Strathmore to Ross line (subject to design).
- a 500/275kV substation at Reid River. The substation will be located within a 1km x 1.1km area.

What will the transmission towers look like?

Overhead transmission lines will be supported by steel lattice towers. Tower pads (including a temporary work area) will be approximately 60m x 60m. Towers will generally be spaced around 500m-650m apart depending on the local geography and other factors, such as land use, sensitive environmental areas, clearance requirements and structure loading limits. The towers are likely to be around 60m-85m high, with shorter towers likely on higher ground and taller towers within low points of the corridor, again depending on the terrain, land use and other factors.

Powerlink is planning the transmission route with the intent to minimise impacts on landholders and the local community. This includes identifying and minimising the number of dwellings near the proposed electricity infrastructure. More broadly, Powerlink also identifies other social infrastructure such as lookouts, camping areas, and community recreation facilities when assessing suitable corridors for visual impacts from its transmission lines.

How are each corridor and substation site assessed?

The corridor and substation site have been assessed using qualitative and quantitative information. Qualitative assessment includes professional expert input and observations in the field. Quantitative assessment considers numerical data on impacted areas such as high value environmental features, transmission line length and individual counts (for example, houses, number of land parcels and number of bend points for a potential transmission line).

The assessment process involves weighing up the potential environmental, social, technical and economic impacts of potential corridor and substation site options. The recommended corridor and substation site is the option that has the least overall impacts based on careful consideration of the assessment factors.

When selecting a proposed route for a new transmission line or location for a substation, we consider a range of factors, including:

- Social impacts, including land use and proximity to residential dwellings.
- Topography (features of the land, such as hills and creeks).

- Important agricultural land and activities.
- Significant Aboriginal and non-Aboriginal Cultural Heritage.
- Environment and conservation areas.
- Constructability and access.
- Location of towns and high population areas.
- Location of existing infrastructure.
- Economic cost.

Additional factors we consider when selecting a site for substations include:

- Proximity to existing network.
- Sufficient space for maximum development, including rebuilding.
- Surrounding area suitable for transmission line connections.
- Flooding risk.
- Rocky and uneven terrain.
- 24/7 substation access from nearest, formed road.

Is community feedback being considered?

Community and landholders are now able to review the recommended transmission line corridor and substation location and provide comment. Powerlink will provide assistance to understand the report and provide feedback. This feedback is essential to ensure we have fully considered all matters of importance to the community and landholders related to the location of the proposed electricity transmission infrastructure.

No final decisions on the transmission line and substation location will be made until engagement has been undertaken and all required approvals have been achieved. We will continue to engage with landholders, the local community and other stakeholders as the project progresses.

Where can I find a copy of the Recommended Corridor and Substation Site Selection Report?

A full copy of the RCSSSR is available on our website at <http://www.powerlink.com.au/copperstring2032>
Please contact us if you would like to receive a hard copy of the report.

How can I have a say on the Recommended Corridor and Substation Site Selection Report?

Input from landholders, the wider community and other stakeholders about this project is vital and will guide our decision making and planning. We welcome your feedback and are seeking your input by Friday 4 October 2024.

To provide feedback on the recommended transmission line corridor or substation location:

- Visit the project website and use the interactive Social Pinpoint map to provide comments
- Call the project team on 0407 545 422, or
- Email projects@powerlink.com.au.

Feedback can also be provided at one of our community information drop-in sessions (details below).

- Woodstock Community Hall, Glenn Road, Woodstock Thursday 12 September 2024, 2pm–7pm
- Mingela Rural Fire Brigade Hall, 17 Towers Street, Mingela Saturday 14 September 2024, 9am–3pm