

# Kamerunga to Woree Replacement Project

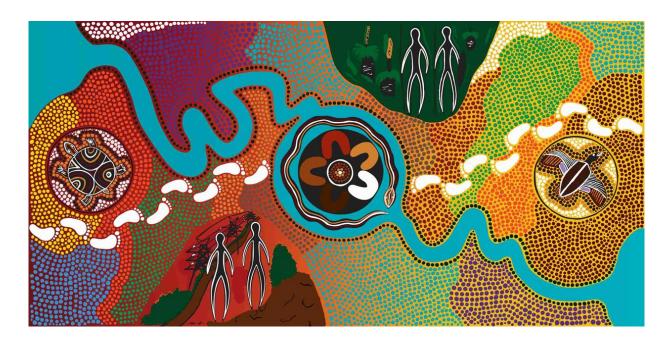
Final Corridor and Site Selection Report

# **Table of Contents**

Execut	ive summary	3
1.0	Introduction	7
1.1	Project background	7
1.2	Purpose of this report	7
2.0	Corridor and Site engagement and feedback	9
2.1	Corridor and Site engagement	9
2.2	Corridor and Site feedback	10
3.0	Legislative and approval requirements	10
4.0	Conclusion and Next Steps	12
4.1	Conclusion	12
4.2	Future studies	12
5.0	References	14
Appen	dix A	15
Appen	dix B	24

# Acknowledgement of Country

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.



# **Executive summary**

This Final Corridor and Site Selection report (CSSR) has been prepared by Queensland Electricity Transmission Corporation Limited, trading as Powerlink Queensland (Powerlink), for the proposed Kamerunga to Woree Transmission Line Replacement project, which includes the replacement of the existing Kamerunga Substation and associated site selection.

Powerlink has engaged JBS&G Australia Pty Ltd (JBS&G) to undertake technical, spatial and mapping analysis to support the preparation of both the Draft and Final CSSR.

# Project background

Powerlink owns, operates and maintains Queensland's high voltage electricity transmission network, which extends 1,700 kilometres from Cairns to the New South Wales border, comprising of 15,345 circuit kilometres of transmission lines and 147 substations.

Powerlink's Kamerunga – Woree transmission line, between the existing Kamerunga and Woree Substations, provides a critical connection between the Barron Gorge power station and the transmission network, supplying power to northern Cairns.

Both the existing 132kV transmission line, and the Kamerunga Substation are reaching the end of their designed life and are scheduled for replacement. Powerlink is undertaking a transmission line replacement project for the 132kV transmission line between the existing Kamerunga and Woree Substations that will also include replacing the existing Kamerunga Substation.

Investigations into the existing easement alignment have identified that re-building within the existing easement is not a viable option, as there is insufficient easement width and a number of encroachments that impact the technical ability to rebuild on the same alignment. A new corridor is required for the purposes of replacing the 132kV transmission line.

# Approach to corridor selection

Investigations into the ability to rebuild the existing 132kV transmission line within the existing easement corridor identified several technical constraints. These constraints have emerged due to a combination of high-density population growth and the narrow width of the existing easement (approximately 20 metres), which has resulted in encroachments and/or dwellings located in close proximity to the edge of the corridor. Due to these constraints, rebuilding within the existing easement while keeping the line energised throughout construction is not possible. De-energisation would present an unacceptable risk to the reliability of electricity supply in the Cairns region.

To address these challenges, a new corridor for the replacement 132kV transmission line was identified,. The corridor selection process aimed to balance the need for the project with a range of project objectives, including minimising impacts on the community and environment while ensuring the ongoing reliability and security of supply.

Three objectives were used to inform the approach to corridor selection:



#### Social

To consider the use of land and the community livelihood within and adjacent to corridor options.



#### **Environment**

To consider a balanced approach to corridor selection with the least practicable impact on environment and heritage values.



The methodology for corridor selection incorporated:

- feedback from engagement with landholders, Traditional Owner groups, Cairns Regional Council, the community, and other stakeholders
- publicly available spatial data and technical information to assess environmental, social, planning, and heritage constraints
- input from technical specialists to ensure constructability, network reliability, and compliance with regulatory and legislative frameworks.

This approach enabled the identification of a final transmission corridor and substation site that, on balance, represents the least overall impact when considering social, environmental and economic values. The final corridor allows for the development of the replacement 132kV transmission line without requiring de-energisation of the existing line, thereby maintaining reliability of supply during construction. The final overhead portion of the corridor is 4.1km and the underground portion of the corridor is 10.3kms long. The final corridor varies in width between 60m to 250m for the overhead alignment. Where the underground line is located in road reserve there is no easement required. Underground cable joint bays are a standard 3m wide and will be contained within the road reserve.

Further engagement and technical assessments will be undertaken to refine the corridor to a 60m wide easement alignment and validate the substation location during the next phase of project planning and design.

# Final transmission corridor and substation site

All feedback received during the Draft CSSR consultation period has been collated and considered by Powerlink. The main issues raised by landholders and key stakeholders are as listed:

Construction	Construction timings and impacts to neighbourhoods during construction, including the closing of roads.	
Commercial impacts	Impacts to businesses and landholders effected by the easement.	
Visual amenity	What will the powerline look like and how will that impact the amenity of the surrounding area.	
Impacts to trees	Will trees need to be removed for the underground alignment.	

Flooding of the Substation	Inundation of the substation site during flood and water flow concerns for surrounding areas from the substation.
Increased cyclone resilience	The feedback noted that underground assets are more resilient to the impacts of cyclones. This was seen as positive for the project.

The feedback provided valuable insights into the project and will support Powerlink's ongoing engagement with landholders, the community, Traditional Owners groups, Council and other stakeholders. As a result, amendments were made to the corridor:

- A realignment of the draft corridor north of the Barron River to better align with position of the new Barron River substation.
- The new Kamerunga Substation site at Barron, was refined to exclude the eastern side of the Stewarts Road property
- The transition site at Redlynch, was narrowed, to align with the underground corridor
- The corridor between Lower Freshwater Road and Kamerunga Road has been widened to allow ongoing investigations and consideration of landholder feedback and their long-term property use

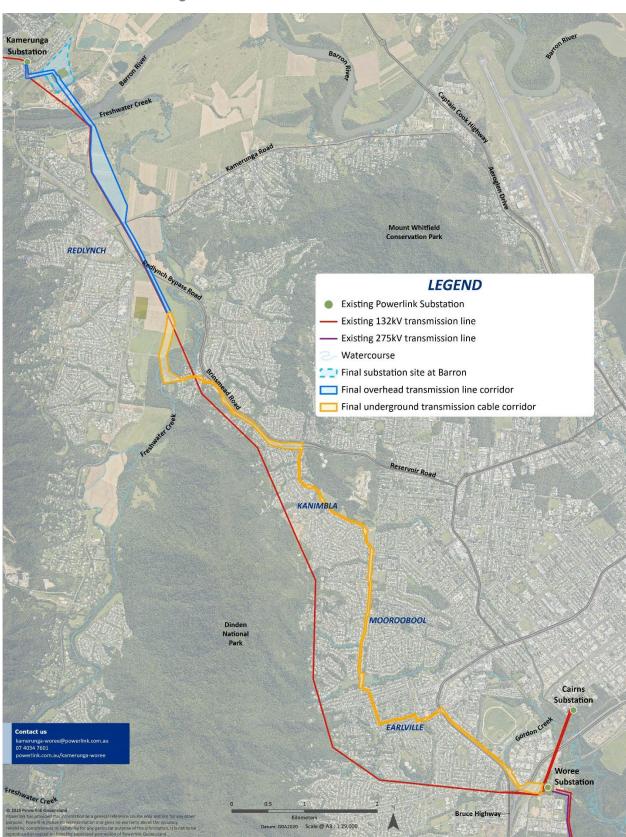


Figure 1 Final Corridor and Recommended Site

#### 1.0 Introduction

### 1.1 Project background

Powerlink Queensland (Powerlink) is a leading Australian provider of high-voltage electricity transmission network services, providing electricity to more than five million Queenslanders, and 253,000 businesses. The network extends 1,700 kilometres from Cairns to the New South Wales border, comprising 15,345 circuit kilometres of transmission line and 147 substations.

Part of this network includes a 132kV transmission line in Cairns, Queensland, from the Kamerunga Substation to the Woree Substation. The existing Kamerunga to Woree transmission line provides a critical connection for the Barron Gorge Power Station to the transmission network while also supplying power to northern Cairns. The transmission line structures, and associated foundations were designed and constructed to have a design service life of approximately 50 years. The Kamerunga to Woree transmission line was constructed in the 1960's and although it has received life extending maintenance works, a full replacement is now required.

The existing Kamerunga Substation provides the critical service of connecting the Barron Gorge Power Station to the transmission network and providing bulk electricity supply to northern Cairns. Substations are designed and constructed to have a design service life of approximately 40 years. Similar to the Kamerunga to Woree transmission line, the Kamerunga Substation was constructed in the 1970's and whilst life-extension works have occurred over time, it is now scheduled for replacement.

A review of capacity and supply of the existing substation identified the existing Kamerunga Substation site is too restricted to rebuild or accommodate any further expansion. In anticipation of future transmission network requirements, Powerlink strategically acquired land in the nearby vicinity at Stewarts Road, Barron in 2021. The new greenfield substation site, located in Barron is located within a rural zoned area, away from the residential areas of Caravonica where the existing Kamerunga Substation is located.

#### 1.2 Purpose of this report

Powerlink has prepared this report to identify a final corridor, concluding the corridor and site selection and assessment processes (involving landholders, Traditional Owner groups, Council, the community and other stakeholders). The final overhead corridor will continue to be refined by working with landholders and Traditional Owners to a 60m-wide easement alignment.

The approach identified and considered opportunities and constraints from an environmental, social and economic perspective and has confirmed the suitability of a final corridor and substation site for further ongoing investigations. The corridor selection approach sought to balance the constraints and opportunities across the recommended corridor and selected substation site with the objectives identified, ultimately resulting in a final corridor with least overall impact.

Subsequent phases of the project will include further engagement with landholders, Traditional Owner groups, Council, the community and other stakeholders. Detailed environmental, heritage and social impact assessment including targeted investigations, impact assessments and the development of planning, design and construction considerations will also be undertaken.

# 2.0 Corridor and Site engagement and feedback

In September 2024 Powerlink commenced preliminary engagement on the Project with the release of the Draft Corridor and Site Selection (CSSR) for comment.

The following sections detail the consultation undertaken for the DCSSR and the feedback received.

## 2.1 Corridor and Site engagement

Preliminary stakeholder engagement was undertaken to provide landholders, Traditional Owner groups, community and broader stakeholders with an opportunity to provide feedback on the Draft CSSR. This engagement involved:

- Establishing a project specific webpage to host information about the project, consultation
  opportunities and a map showing the proposed draft corridor for the transmission line and proposed
  substation site location. <a href="https://www.powerlink.com.au/projects/kamerunga-woree-replacement-project">https://www.powerlink.com.au/projects/kamerunga-woree-replacement-project</a>
- Interactive spatial map <u>Kamerunga to Woree Replacement Project Draft Corridor and Site Selection |</u>
   Social Pinpoint
- Correspondence with the wider community and all project stakeholders including providing project information such as a community notice and project newsletter
- Hosting a series of community information drop-in sessions across the project area
- Project briefings with Cairns Regional Council Mayor and relevant Divisional Councillors
- Project briefings with MPs
- Correspondence with project area Traditional Owner groups
- Correspondence and meetings with directly impacted landholders to discuss the project and property considerations.

Stakeholders were invited to provide comments on the Draft CSSR between 9 September and 30 October 2024. Throughout this consultation period, feedback was received via various methods including emails, hardcopy and digital feedback forms, phone calls and in-person.

Powerlink also hosted four community information drop-in sessions along the recommended corridor to provide landholders, local residents and the wider community with an opportunity to meet with the project team, ask questions and provide feedback.

The sessions were held on:

- 3 October 2024, Peace Lutheran College
- 9 October 2024, Redlynch Central Shopping Centre
- 10 October 2024, Earlville Shopping Centre
- 12 October 2024, Goomboora Park.

These sessions were promoted via the project webpage, newsletters, social media and in letters and emails issued at the start of the engagement period.

#### 2.2 Corridor and Site feedback

The majority of interactions to-date have been positive to neutral across the project. Feedback gathered during the preliminary engagement phase has been considered against Powerlink's project objectives – social, environmental and economic - and where appropriate, used to inform the final corridor.

The main topics raised during this period have included:

- Decommissioning and removal of the existing overhead transmission line and impacts to properties during this phase, including if Powerlink will retain the easement.
- Project construction timings and general construction impacts
- Property value impacts along underground cable route
- Flood impact concerns and how this would affect residential areas
- Increased cyclone resilience with undergrounding a significant section of the transmission line
- Extending underground beyond current proposed section
- Potential impacts construction of the new substation in Barron would have on flood levels/flow
- Impact to trees along the underground cable corridor.
- Property Values potential positive impact the removal of the overhead line from Redlynch to Woree and perceived negative property value impacts along underground cable route

Further formal feedback opportunities will be available during the statutory engagement as part of the Ministerial Infrastructure Designation (MID) process. The timing of that consultation period is at the discretion of the Minister for State Development, Infrastructure and Planning.

# 3.0 Legislative and approval requirements

To progress the project, several legislative and regulatory approvals are required. The following commentary relates to local, State and Federal Government planning and environmental approvals required for the project.

Further detailed design and environmental assessment is required to fully ascertain the likely impact of the project and the planning and environmental approvals required. The potential approvals listed below are provided at a preliminary level and are subject to change once further refinements to the transmission line and substation design are undertaken and actual disturbance footprints, ecological and heritage values are further understood.

- Ministerial Infrastructure Designation (MID) under the Planning Act 2016 (Qld)
- Protected Plants Clearing Permit under the Nature Conservation Act 1992 (Qld)
- Compliance with the duty of care provisions and other relevant provisions under the *Aboriginal Cultural Heritage Act 2003 (Qld)*
- Compliance with the general biosecurity obligations under the Biosecurity Act 2014 (Qld)
- Biosecurity Instrument Permit under the Biosecurity Act 2014 (Qld).

- Authority under Section 34 of the *Nature Conservation Act 1992 (Qld)* for tenure over the Kamerunga Conservation Park (a Protected Area).
- Species Management Program (Low or High Risk) under the Nature Conservation Act 1992 (Qld).

Further detail on legislation potentially applicable and other obligations are provided in **Appendix A** of this report.

# 4.0 Conclusion and Next Steps

The final corridor and substation site has been identified for the Kamerunga to Woree Replacement Project. The assessment used criteria and measures, informed by feedback from landholders, Traditional Owner groups, Council, the community and other key stakeholders, and spatial analysis.

Engagement conducted has provided valuable insights. Powerlink will continue to seek feedback during the statutory engagement as part of the legislative approval process for the project.

Following release of the Final CSSR, additional detailed technical studies and continued engagement will help to determine the final transmission line design and alignment.

#### 4.1 Conclusion

Taking into consideration the feedback provided during the Draft CSSR consultation period as well as the social, environmental and economic objectives of the project, the final corridor is broken into two defined sections being an overhead section and an underground section:

#### Overhead Section

The line will leave the existing Kamerunga Substation running south to Kamerunga Road and east along Kamerunga road until it enters the new Barron River Substation. From the new substation it heads south crossing the Barron River and connects with the existing Powerlink tower at Freshwater Road. From Freshwater Road to Kamerunga Road the line crosses private property. The replacement corridor from Freshwater Road to the Redlynch transition site is adjacent to the existing Powerlink easements and transmission infrastructure.

#### **Underground Section**

The corridor will continue from the Redlynch transition site to the existing Woree substation via an underground section, located within local road parcel and reserves.

#### 4.2 Future studies

Further investigations are required to support the approval process for the Project. These additional investigations will assist with the continued refinement to avoid and/or minimise impacts to landholders and surrounding community areas, as well as environment, cultural values and agricultural areas through siting and design.

#### Social

- Landholder and community consultation further engagement with stakeholders, particularly impacted
  and surrounding landholders and Traditional Owner groups, on the final corridor and site to understand
  use of land, proximity to homes and potential impacts to properties.
- Social and economic impact assessment further assessment to identify potential social and economic impacts from the construction and operation of the Project.

#### Environment, heritage and planning

- Ecology targeted field surveys and ecology reporting were undertaken during the finalisation of the
  corridor. However, there may need to be additional work done to support the final corridor to identify
  any areas that contain habitat for threatened flora and fauna species, threatened ecological
  communities and marine plants. The assessment will also determine the potential impact to habitat for
  threatened flora and fauna species.
- Waterways (fish passage streams) further assessment is required to confirm whether a Development Approval (Operational Works) is required for waterway barrier works (WWBW).
- Tidal Works further investigation is needed to determine if a Development Approval (Operational Works) is required for works within a coastal management district.
- Quarry Material further investigation is required to determine if a Quarry Allocation Notice is required.
- Watercourses further assessment to determine if Riverine Protection Permits are needed.
- Biosecurity matters further investigation into the potential biosecurity risks will be undertaken prior to construction.

#### Land

- Land, geology and soils contaminated land, acid sulfate soils or dispersive soils can pose construction
  issues due to the need to implement specialist management or design practices and/or treatment. Field
  investigations including sampling and analysis will be undertaken as part of geotechnical investigations.
- Ground conditions further geotechnical investigations to identify problematic soils and geology such
  as hard rock, which can pose constructability difficulties, or substantially increase project costs due to
  specialist design required and/or additional construction materials and foundations, as well as access
  and easements to be provided.

# 5.0 References

Cairns Regional Council. (2016) CairnsPlan 2016. <a href="https://www.cairns.qld.gov.au/building-planning-business/planning-schemes/current">https://www.cairns.qld.gov.au/building-planning-business/planning-schemes/current</a>

DCCEEW. (2023). Australia's Commonwealth Heritage List. Retrieved from Australian Government Department of Climate Change, Energy, the Environment and Water: <a href="https://www.dcceew.gov.au/parks-heritage/heritage/places/commonwealth-heritage-list">https://www.dcceew.gov.au/parks-heritage/heritage/places/commonwealth-heritage-list</a>

DCCEEW. (2023). Protected Matters Search Tool. Retrieved from Australian Government Department of Climate Change, Energy, the Environment and Water:

https://www.dcceew.gov.au/environment/epbc/protected-matters-search-tool

DTATSIPCA. (2023). Aboriginal and Torres Strait Islander Cultural Heritage Database and Register. Retrieved from Queensland Government, Department of Seniors, Disability Services and Aboriginal and Torres Strait Islander Partnerships: <a href="https://culturalheritage.datsip.qld.gov.au/achris/public/home">https://culturalheritage.datsip.qld.gov.au/achris/public/home</a>

Queensland Government. (2023). Queensland Heritage Register. Retrieved from Queensland Government: <a href="https://www.qld.gov.au/environment/land/heritage/register">https://www.qld.gov.au/environment/land/heritage/register</a>

State of Queensland (Department of Environment and Science). (2023). Queensland Spatial Catalogue - QSpatial. Retrieved from <a href="http://qldspatial.information.qld.gov.au/catalogue">http://qldspatial.information.qld.gov.au/catalogue</a>



# Summary of legislative considerations

A summary of legislation potentially applicable to the project is provided below in Table D-1 below. Further design and detailed investigations and assessment will be required to confirm the appropriate approval pathway for the project.

Table D-1 Summary of legislation

# Legislation Summary Commonwealth legislation Environment The EPBC Act (Cth) is the centrepiece of Commonwealth environmental laws. It provides a Protection and legal framework to protect, and manage nationally, and internationally important flora, **Biodiversity** fauna, ecological communities and heritage places — defined in the EPBC Act as MNES.

Conservation Act 1999 MNES include:

- The world heritage values of a declared world heritage property;
- The national heritage values of a declared national heritage place;
- The ecological character of a declared Ramsar wetland (wetlands of international importance);
- Listed threatened species and ecological communities;
- Listed migratory species;
- Nuclear actions (including uranium mining);
- Commonwealth marine areas;
- The Great Barrier Reef Marine Park; and
- A water resource, in relation to coal seam gas development and large coal mining development.

The EPBC Act is administered by the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) and establishes a process for environmental assessment and approval of proposed actions that have, will have, or are likely to have a significant impact on MNES.

If a project may cause a significant impact on an MNES, the project must be referred to DCCEEW for assessment of the potential impacts. The Minister will decide whether the project is:

- Not a controlled action: the project does not need to be assessed further;
- Not a controlled action 'particular matter': the project does not need to be assessed further, providing the action is completed in accordance with conditions that are supplied with the decision; and
- A controlled action: the project will need to be assessed against the EPBC Act, through one of several processes available.

Ecological investigations and subsequent significant impact assessment will be completed to understand the presence of, and potential impacts on, MNES. Outcomes of these investigations will determine the requirement for referral to the Commonwealth Minister for the Environment.

# Legislation Summary The Native Title Act 1993 (Native Title Act) (Cth) establishes a national framework for the Native Title Act 1993 protection and recognition of Native Title, including by conferring on Indigenous people who hold (or claim to hold) Native Title rights and interests in respect of any land or waters, the right to be consulted with and in some cases to participate in decisions about activities proposed to be undertaken. The recommended corridor and site intersect two native title claims: Djabugay Nation Native Title Claim Area (QC2016/008); and Gimuy Walubara Yidinji People Claim Area (QC2012/017). Under the Native Title Act (Cth), native title cannot be claimed on freehold land as it is extinguished over the area. Where the corridor intersects roads that were declared as roads on or before the 23 December 1996, native title is extinguished and is not required to be considered. On land where native title exists, Powerlink must comply with the requirements of the Native Title Act (Cth) to secure an easement for the transmission line. Construction of the transmission line is covered by processes under section 24KA or possibly by an Indigenous Land Use Agreement. Section 24KA validates future acts that consist of the construction, and operation of public infrastructure and suspend the native rights over the land for the duration of the easement. Therefore, the legislative requirements under the Native Title Act (Cth) are low risk to the project. State legislation Aboriginal Cultural The Aboriginal Cultural Heritage Act 2003 (Qld) is administered by DTATSIPCA and aims to Heritage Act 2003 provide effective recognition, protection, and conservation of Aboriginal cultural heritage. It establishes the processes for managing activities that may cause potential harm to Aboriginal cultural heritage, which is identified through the Aboriginal Cultural Heritage Database, and Register and the Cultural Heritage Duty of Care Guidelines. Should the project be considered to pose a high risk to Aboriginal cultural heritage, engagement with the relevant cultural heritage parties for the area is likely to be required. It may also necessitate preparation of a cultural heritage management plan or cultural heritage management agreement. Activities which pose a high risk to Aboriginal cultural heritage which may apply to the project include: Works in, or within proximity to registered Aboriginal cultural heritage sites or places; Works in areas with little or no previous ground disturbance; and Works in proximity to water features. Powerlink are in the process of undertaking engagement with the relevant parties to discuss the project and its potential impacts. Acquisition of Land Act The Acquisition of Land Act 1967 (Qld) is administered by Department Natural Resources 1967 and Mines, Manufacturing and Regional and Rural Development (DNRMRRD) and sets out the processes for compulsory and voluntary acquisition of land for a public purpose by a constructing authority. Powerlink may acquire freehold land or register an easement over land for the transmission line. Land may be acquired either by voluntary agreement for

easements or other tenures required or, where agreement cannot be reached, by

compulsory resumption of land.

Legislation	Summary			
Biosecurity Act 2014	The <i>Biosecurity Act 2014</i> (Biosecurity Act) (Qld) is administered by the Department of Primary Industries (DPI) and provides a biosecurity system framework which aims to minimise biosecurity risk, and facilitate responses to biosecurity impacts, to ensure the safety, and quality of agricultural inputs, and to align the state's management of biosecurity risk and other requirements for plant and animal responses to biosecurity risk with federal and international obligations. The Biosecurity Act also aims to manage emerging endemic, and exotic pests, and diseases as well as the transfer of diseases between humans and animals and contaminants in carriers.			
	Under the Biosecurity Act, a general biosecurity obligation is placed on all persons to undertake all reasonable and practicable measures to prevent or minimise biosecurity risk. Additionally, the movement of biosecurity matter must comply with movement restrictions associated with each relevant biosecurity zone, and Biosecurity Instrument Permits are required for the movement of biosecurity matter which cannot comply with movement restrictions.			
Coastal Protection and Management Act 1995	The <i>Coastal Protection and Management Act 1995</i> (CPM Act) is governed by the DETSI and seeks protect the coastal zone and its resources and biological diversity in Queensland.			
	Operational works for tidal works or works completely or partly undertaken in a Coastal Management District (CMD) requires a development approval; under Schedule 10 of the Planning Regulation unless it is accepted development under schedule 7 or considered excluded work.			
	Other triggers under schedule 10 of the Planning Regulation include Material Change of Use (MCU) or Reconfiguring a Lot (RAL)in a CMD.			
	The MID Corridor crosses the Barron River, approximately 5.5 km from its mouth on the east coast of Queensland. The Barron River is tidal at this location. The State Planning Policy (SPP) interactive mapping system (IMS) indicates that the Barron River (located at the suburb of Kamerunga) and Gordon Creek (located at the suburb of Woree) are mapped as coastal management district which traversed by OH Transmission line and UG Cable component of MID Corridor (refer to Table 7 2)			
	However, if the project is granted an Infrastructure Designation, operational work for tidal works works in a CMD or MCU and RAL in a CMD will be considered accepted development under the Planning Act and will not require a development permit.			
	Additionally, where works require the removal of material from land under tidal water for sale, reclamation or fill above the high water mark, or for land-based disposal, an allocation of quarry material (allocation notice) will be required from DETSI.			
Electricity Act 1994	The <i>Electricity Act 1994</i> (Qld) is administered by the Department of Energy and Climate, requires that all electricity industry participants must ensure a safe, efficient, and reliable supply of electricity, as well as ensure that the supply of electricity is carried out in an environmentally sound manner.			
	Section 31 of the <i>Electricity Act 1994</i> (Qld) states that the transmission entity must properly account for the environmental effect of its activities under the transmission authority. Powerlink hold a transmission licence in Queensland and is required to develop its network to meet the security, and reliability standards of the National Electricity Rules, the <i>Electricity Act 1994</i> (Qld) and the terms of its transmission licence.			
	The legislative requirements of the <i>Electricity Act 1994</i> (Qld) are standard to Powerlink projects and pose a low risk to the construction and operation of the transmission line.			
Electrical Safety Act 2002	The <i>Electrical Safety Act 2002</i> (Qld) is administered by the Department of State Development and Infrastructure and seeks to regulate electricity works to prevent death, injury or destruction caused by electricity. The transmission line must be designed in			

Legislation	Summary		
	compliance with the requirements outlined under the <i>Electricity Safety Act 2002</i> (Qld). These requirements are standard to Powerlink processes and are considered to have a low risk to the project.		
Environmental Protection Act 1994	The <i>Environmental Protection Act 1994</i> (EP Act) (Qld) is administered by DESI and aims to protect Queensland's environment, while allowing for development that improves the total quality of life, both now and in the future.		
	The EP Act regulates activities that will or may have the potential to cause environmental harm and prescribes several mechanisms to ensure that objectives are met. The two primary environmental duties that apply to everyone in Queensland are:		
	<ul> <li>General environmental duty – a person must not carry out any activity that causes, or is likely to cause environmental harm, unless all reasonable and practicable measures to prevent or minimise the harm have been taken. Environmental harm is defined in Section 14 of the EP Act (Qld) as any adverse effect, or potential adverse effect (whether temporary or permanent and of whatever magnitude, duration or frequency) on an environmental value and includes environmental nuisance.</li> </ul>		
	<ul> <li>Duty to notify of environmental harm – a person must inform the administering authority and landowner or occupier when an incident has occurred that may have caused or threatens serious or material environmental harm that is not authorised.</li> </ul>		
	The EP Act (Qld) also provides the power to administering authorities to order the actions to be taken to improve environmental performance, conduct audits, and environmental evaluations of activities, approve environmental management programs and impose penalties or prosecute persons for non- compliance with the requirements of the EP Act (Qld).		
	The EP Act (Qld) is supported by the following subordinate legislation:		
	<ul> <li>Environmental Protection Regulation 2019 (EP Regulation);</li> </ul>		
	<ul> <li>Environmental Protection (Air) Policy 2019 (EPP (Air));</li> </ul>		
	<ul> <li>Environmental Protection (Noise) Policy 2019 (EPP (Noise)); and</li> </ul>		
	<ul> <li>Environmental Protection (Water and Wetland Biodiversity) Policy 2019 (EPP (Water and Wetland Biodiversity)).</li> </ul>		
Fisheries Act 1994	The Fisheries Act 1994 (Fisheries Act) (Qld) is administered by DPI and governs the management of fisheries, declared fish habitat areas and marine plants. Works which may cause disturbance to 'waterways' as defined under the Fisheries Act (Qld) can be subject to assessable operational work for waterway barrier works, unless construction complies with the conditions under the 'Accepted development requirements for operational work that is constructing or raising waterway barrier works (ADR WWBW).		
	Should any works within a waterway not comply with the AADR WWBW, operational works permit is ordinarily required under the Planning Act (Qld).		
	Additionally, if it is determined that works will impact marine plants, an operational works permit for the destruction/damage of marine plants will be required unless works can comply with the 'Accepted development requirements for operational work that is the removal, destruction or damage of marine plants (ADR Marine Plants)'.		
	However, if the project is granted an Infrastructure Designation, operational works permits may be considered accepted development and may not require a development permit.		

Legislation	Summary
Land Act 1994	The Land Act 1994 (Qld) is administered by the DNRMRRD and governs the allocation and management of land for development. The Electricity Act 1994 (Qld) provides exemptions to the Land Act 1994 (Qld) for works by transmission entities. Transmission entities are entitled to take necessary action in publicly controlled places (such as unallocated State land) to provide or supply electricity under section 101 of the Electricity Act 1994 (Qld), as well as undertake works on road reserves through written agreement from the road authority under section 102.
Nature Conservation Act 1992	The <i>Nature Conservation Act 1992</i> (Qld) (NC Act) is administered by DESI and is the primary legislation governing the protection and management of native wildlife, habitat and protected areas in Queensland.
	The protected plants flora survey trigger map identifies high risk areas for protected plants to occur and must be used to determine whether a targeted flora survey is required for a particular area. High risk areas are those in which endangered, vulnerable, threatened or near threatened flora is known or likely to exist. Where clearing is required in an area containing a protected plant species, a clearing permit must be obtained from DESI.
	Removal of native vegetation and habitats has the risk of impacting on animal breeding places. To mitigate risk and impacts, a Species Management Program (SMP) is required. Where impacts to least concern (non-colonial) species is expected, a low risk SMP is required. If an animal breeding place for a critically endangered, endangered, vulnerable, near threatened, special least concern or least concern (colonial breeder) fauna species is recorded in areas of potential impact, a high risk SMP is required.
	Authorisation is required for installing, operating and maintaining infrastructure (including service facilities and eco-tourism facilities) in protected areas in Queensland. Authorities may be granted under Sections 34, 35 and 35a of the NC Act for these purposes, but only if certain legislative requirements under those sections are satisfied.
	As the proposed MID Corridor traverses the Kamerunga Conservation Park (a protected area under the NC Act), the Project will require and application to DETSI and written agreement from DETSI prior to works. The application requires the following to be provided to DETSI:
	<ul> <li>Application form for a lease, agreement, licence, permit or other authority under Sections 34, 35 or 35A of the NC Act.</li> </ul>
	<ul> <li>Submission Report - Outlines how the proposal meets the requirements of the NCA, and DETSI operational policies.</li> </ul>
	<ul> <li>EMP - Outlines how the proposed use or activity impacts the relevant protected area and how the protected area's key natural, cultural, social and recreational values will be managed (Guideline – Preparing Environmental Management Plans for Queensland Parks and Wildlife Service and Partnerships authorities).</li> </ul>
	<ul> <li>Environmental offset proposal - outlines how environmental offsets will be addressed.</li> </ul>
	<ul> <li>Spatial data - Shows the location of the proposed use or activity within the protected area, and relevant geophysical characteristics.</li> </ul>
	<ul> <li>An Authority Plan showing the proposed authority area. Authority plans are used to define areas of land in circumstances where a cadastral survey is not required.</li> </ul>
	Powerlink will progress a request for the appropriate authority under the NC Act and also secure and ongoing lease agreement with DETSI concurrent with the MID request.

Legislation	Summary
Planning Act 2016	The Planning Act (Qld) is administered by the Department of Housing, Local Government, Planning and Public Works and establishes a system of land use planning and development assessment prescribed under the Planning Regulation 2017 (Planning Reg). The proposed project is considered 'Electricity Operating Works', which is considered 'infrastructure' and therefore prescribed development under the Planning Reg.
	Under the Planning Act (Qld), the Planning Minister is the only minister with the power to designate land for infrastructure. The 'Minister's Guidelines and Rules' outlines the process for making a ministerial designation.
	An approval for a ministerial designation will require submission of an environmental assessment report that includes requirements about works for the infrastructure (such as the height, shape, bulk, landscaping, or location of works), the use of premises including access and ancillary uses, or lessening the impact of the works or use (such as environmental management procedures).
	Under section 44 of the Planning Act (Qld), infrastructure that is designated is considered accepted development and will not require further approvals under the Planning Act (Qld); with the exception of building work approval under the Building Act 1975 (Qld).
	A MID will be required for construction of the transmission line.
State Planning Policy	The State Planning Policy (SPP) identifies matters of State interest requiring protection and enhancement. The SPP is at the top of the planning hierarchy in Queensland and is the overarching policy for all other regional and local planning instruments. The SPP States that the SPP applies to the extent relevant, when designating premises for infrastructure under the Planning Act and development applications.
Transport Infrastructure Act 1994	The <i>Transport Infrastructure Act 1994</i> (Qld) is administered by TMR and regulates the management of state-controlled road networks across Queensland.
	Under section 50 of the <i>Transport Infrastructure Act 1994</i> (Qld), construction, maintenance, and operation of ancillary works and encroachments within State-controlled roads (e.g. placement of a transmission line over the road) can only be completed where written approval has been granted from TMR.
	Under section 33 of the <i>Transport Infrastructure Act 1994</i> (Qld), written approval is required from the DTMR to carry out road works on a State-controlled Road (SCR) or interfere with a SCR or its operation. This may include where road works to a Council Road interferes with a SCR or its operations.
	Under section 62 of the <i>Transport Infrastructure Act 1994</i> (Qld), written approval is required from DTMR to locate a permitted access on a SCR. A decision of access approval may include conditions or restrictions on the location or use of the permitted road access, type or number of vehicles to use the permitted road access location.
	Under the <i>Transport Infrastructure (Rail) Regulation 2006</i> permission from the railway manager (Queensland Rail) is required to take over dimensional road loads across Queensland Rail infrastructure (e.g. rail level crossings and rail bridges).
Vegetation Management Act 1999	The Vegetation Management Act 1999 (VM Act) (Qld) is governed by the DNRMRRD and seeks to manage native vegetation across Queensland. Regulated Vegetation Mapping identifies categorised areas of remnant vegetation in Queensland and is used to establish whether clearing of native vegetation is considered assessable development requiring a permit.

Legislation	Summary		
	Clearing of any relevant remnant or regulated regrowth vegetation constitutes operational work under schedule 10 of the <i>Planning Regulation 2017</i> , which will require development approval unless a vegetation clearing code or exemption applies. Under Section 22A of the VM Act (Qld), an application for operational work, including applications where DNRMRRD is a concurrence agency, cannot be accepted as properly made unless the Chief Executive is satisfied that the development is for a relevant purpose. Exemptions exist for electricity infrastructure were associated with an infrastructure designation.		
	Any infrastructure designation or development application will need to demonstrate that Powerlink has sought to reduce the impacts of vegetation clearing through the hierarchy of avoid, minimise and mitigate. Where a significant residual impact remains, an offset, or compensatory measures may be required.		
Water Act 2000	The Water Act 2000 (Water Act) (Qld) is administered by the Department of Regional Development, Manufacturing and Water, and provides a legislative framework for the sustainable use, allocation, and management of water resources in Queensland and regulates activities occurring within designated watercourses under the Water Act (Qld).		
	The Watercourse Identification Map categorises water features as either a designated watercourse, drainage feature, downstream limit of a watercourse or lake and is used to determine the assessment requirements for undertaking activities within a watercourse. Activities including excavating, filling, or destroying native vegetation within a watercourse may require approval under the Water Act (Qld) in the form of a riverine protection permit. Powerlink is an approved entity exempt from requiring a permit if the self-assessment guidelines under DNRMRRD's 'Riverine protection permit exemption requirements' are followed.		
Regional Plans	The recommended corridor and site are subject to Far North Queensland Regional Plan 2009 – 2031. The plan was implemented in 2009 as a statutory plan to guide and manage the region's development, addressing key regional environmental, social, economic and urban objectives.  The transmission line and substation are consistent with the intent of the plan, to provide		
	continued distribution capacity for the region.		
Local Laws	The project is located within Cairns Regional Council Local Government Area. Local Government Areas are subject to individual Local Planning Instruments under the Planning Act (Qld), as well as a range of local laws under the <i>Local Government Act 2009</i> (Qld).		
	Local laws under the <i>Local Government Act 2009</i> (Qld) are used to regulate matters specific to LGAs, particularly relating to pests and weeds, use of local government roads and nuisances such as noise and dust. While the approvals framework for this project gives rise to legislative and regulatory exemptions, the local laws imposed by the relevant LGAs will still apply and may trigger permits required to be obtained for certain activities. The local laws that may apply to the project are provided as follows:		
	<ul> <li>Local Law No. 3 (Community and Environment); and</li> </ul>		
	<ul> <li>Local Law No. 11 (Local Government Controlled Areas and Roads).</li> </ul>		
	Once the land becomes designated as part of the MID process, development relevant to the designation becomes accepted development under the local planning scheme, and, further planning approval is not required. However, the Minister may have regard to the local government assessment framework and decisions may be influenced by zoning, land-use intent, and local ordinances and by-laws. Additionally, the local council will be consulted with during the MID process with regards to impacts on local government-		

controlled roads, prior to the commencement of construction.

# Appendix B

# **Acronyms in CSSR**

DCCEEW	Department of Climate Change, Energy, the Environment and Water (Commonwealth)		
dCSSR	Draft Corridor and Site Selection Report		
DETSI	Department of Environment, Science, Tourism and Innovation (Queensland)		
DNRMRRD	Department Natural Resources and Mines, Manufacturing and Regional and Rural Development (Queensland)		
DPI	Department of Primary Industries (Queensland)		
DWTASIPCA	Department of Women, Treaty, Aboriginal and Torres Strait Islander Partnerships, Communities and the Arts		
EO Act	Environmental Offsets Act 2014 (Queensland)		
EP Act	Environmental Protection Act 1994 (Queensland)		
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)		
Fisheries Act	Fisheries Act 1994 (Queensland)		
JBS&G	JBS&G Australia Pty Ltd		
NC Act	Nature Conservation Act (Qld)		
ОН	Overhead Line		
Planning Act	Planning Act 2016 (Queensland)		
Powerlink	Powerlink Queensland		
SCR	State-controlled Road		
TMR	Department of Transport and Main Roads		
UG	Underground		
UGOH	Underground to Overhead		
VM Act	Vegetation Management Act 1999(Queensland)		
Water Act	Water Act 2000 (Queensland)		