

TRANSGRID

JULY 2021

FOR DELWP APPLICATION

ENERGYCONNECT (VICTORIAN SECTION)

PLANNING REPORT
APPLICATION FOR A
PLANNING PERMIT

wsp



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EnergyConnect (Victorian Section)
Planning Report
Application for a Planning Permit

TransGrid

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REV	DATE	DETAILS
00	15/06/2021	Final
B	16/07/2021	Update responding to RFI

	NAME	DATE	SIGNATURE
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Approved by:	Emma Taylor	16/07/2021	

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PS117658-PLN- For DELWP Application
REP-001 July 2021



Our ref: PS117658-PLN-REP-001 RevB

By e-Submission
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16 July 2021

For DELWP Application

Michael Juttner
Manager Renewables
Development Approvals and Design
Planning
Department of Environment, Land, Water and Planning
Level 8, 8 Nicholson Street,
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Dear Mr Juttner

**EnergyConnect (Victorian Section)
Planning Report
Application for a Planning Permit**

WSP Australia Pty Ltd (WSP) act on behalf of TransGrid (electricity transmission operator in New South Wales), the permit applicants, in relation to the installation of new electricity infrastructure in the Kings Billabong Park, Red Cliffs.

TransGrid propose to upgrade the existing 220 kV single circuit transmission line between the Red Cliffs substation and the NSW/Victorian border with a new 220 kV double circuit transmission line (the proposal).

The proposal is defined as a '*utility installation*' in accordance with Clause 73.03 Land Use Terms of the Mildura Planning Scheme (MPS) and will require planning approval prior to commencing works.

The proposal has been designed to 'avoid and minimise' impacts to native vegetation, through a collaborative process with project designers in the locating of monopole pads and temporary proposal footprints. Transmission poles were specifically designed to be located in positions that avoided and minimised impacts to native vegetation and threatened species identified during field surveys as far as practicable. During the construction, implementation of no-go zones would also avoid and minimise impacts to native vegetation outside of proposal footprints. Details of the proposed works and vegetation impacts are provided within this report and further outlined in the attached Flora and Fauna Impact Assessment Report (Appendix D).



To assist you in consideration of this Application for a Planning Permit, we enclose the following documentation:

- a completed Application for a Planning Permit form including application fee
- a copy of the Certificate of Titles (Appendix A)
- concept design drawings (Appendix B)
- written consent from DELWP, on behalf of Park Victoria (Appendix C)
- technical assessment reports (Appendix D to Appendix J)
- draft construction environmental management plan (Appendix K).

We look forward to your consideration of this matter. If you have any questions related to this planning permit application, please contact the undersigned on (03) 9861 1103.

Yours sincerely

A handwritten signature in black ink, appearing to be 'Will Parker', written over a faint horizontal line.

Will Parker
Senior Environmental Consultant

cc: WSP Australia Pty Limited - Emma Taylor
Transgrid - Tim Donnan



TABLE OF CONTENTS

	ABBREVIATIONS	V
	EXECUTIVE SUMMARY	VI
1	INTRODUCTION	1
1.1	PROPOSAL CONTEXT AND OVERVIEW.....	1
1.2	PROPOSAL LOCATION AND STUDY AREA	4
1.3	THE PROPONENT	4
1.4	PURPOSE OF THIS TECHNICAL REPORT	4
1.5	APPROVAL PATHWAY	4
2	EXISTING CONDITIONS.....	6
2.1	LOCALITY.....	6
2.2	PROPOSAL LOCATION AND DETAILS	6
2.3	SITE DESCRIPTION.....	6
2.4	EXISTING LAND USE AND INFRASTRUCTURE.....	7
2.5	ADJACENT AND SURROUNDING LAND USE.....	7
3	PROPOSED DEVELOPMENT	8
3.1	DESCRIPTION OF PROPOSAL	8
3.2	ASSESSMENT PROCESS	9
4	REGULATORY FRAMEWORK.....	10
4.1	COMMONWEALTH LEGISLATION.....	10
4.2	VICTORIAN LEGISLATION.....	11
5	STRATEGIC FRAMEWORK.....	14
5.1	NATIONAL STRATEGIES.....	14
5.2	VICTORIAN STRATEGIES.....	14
5.3	NEW SOUTH WALES STRATEGIES	15
6	PLANNING ASSESSMENT.....	16
6.1	PLANNING POLICY AND CONTROLS	16
7	ENVIRONMENTAL ASSESSMENT	38
7.1	BIODIVERSITY	38



7.2	BUSHFIRE RISK.....	42
7.3	LANDSCAPE AND VISUAL AMENITY.....	43
7.4	HERITAGE.....	44
7.5	LAND CONTAMINATION.....	46
7.6	SURFACE WATER	47
7.7	AIR QUALITY.....	49
7.8	NOISE	49
7.9	TRAFFIC, MOVEMENT AND ACCESS	49
8	CONCLUSION.....	51
8.1	CONSISTENCY WITH THE PLANNING SCHEME	51
8.2	SECONDARY APPROVALS	52
9	LIMITATIONS	53
9.1	PERMITTED PURPOSE	53
9.2	QUALIFICATIONS AND ASSUMPTIONS.....	53
9.3	USE AND RELIANCE.....	53
9.4	DISCLAIMER	54

LIST OF TABLES

TABLE 2.1	DETAILS OF LOTS WITHIN PROPOSAL FOOTPRINT	6
TABLE 2.2	SUMMARY OF ADJACENT LAND USES	7
TABLE 4.1	COMMONWEALTH LEGISLATION	10
TABLE 4.2	COMMONWEALTH LEGISLATION	11
TABLE 6.1	CLAUSE 11: SETTLEMENT	16
TABLE 6.2	CAUSE 12: ENVIRONMENT AND LANDSCAPE VALUES	17
TABLE 6.3	CLAUSE 13: ENVIRONMENTAL RISKS AND AMENITY	17
TABLE 6.4	CLAUSE 15: BUILT ENVIRONMENT AND HERITAGE	18
TABLE 6.5	CLAUSE 17: ECONOMIC DEVELOPMENT	18
TABLE 6.6	CLAUSE 19: INFRASTRUCTURE	18
TABLE 6.7	CLAUSE 21.02: KEY INFLUENCES AND ISSUES	19
TABLE 6.8	CLAUSE 21.03: VISION AND STRATEGIC FRAMEWORK	19
TABLE 6.9	CLAUSE 21.05: ENVIRONMENT	20
TABLE 6.10	CLAUSE 21.07: BUILT ENVIRONMENT AND HERITAGE	20
TABLE 6.11	EXTRACT FROM CLAUSE 73.03 (LAND USE TERMS) OF THE MPS	21
TABLE 6.12	PLANNING ZONES	22
TABLE 6.13	PLANNING OVERLAYS	25
TABLE 6.14	PARTICULAR PROVISIONS APPLICABLE TO THE PROPOSAL	32
TABLE 6.15	PARTICULAR PROVISIONS APPLICABLE TO THE PROPOSAL	33
TABLE 6.16	CLAUSE 65 DECISION GUIDELINES ASSESSMENT	35
TABLE 6.17	SUMMARY OF PLANNING PERMIT REQUIREMENT	36
TABLE 7.1	FFG LISTED FLORA RECORDED IN STUDY AREA	41

LIST OF FIGURES

FIGURE 1.1	OVERVIEW OF ENERGYCONNECT	1
FIGURE 1.2	STUDY AREA OVERVIEW	3
FIGURE 1.3	PROPOSAL FOOTPRINT	5
FIGURE 6.1	PLANNING ZONES MAP	24
FIGURE 6.2	ENVIRONMENTAL SIGNIFICANCE OVERLAY	28
FIGURE 6.3	HERITAGE OVERLAY	29
FIGURE 6.4	LAND SUBJECT TO INUNDATION OVERLAY	30
FIGURE 6.5	ENVIRONMENTAL AUDIT OVERLAY	31



LIST OF APPENDICES

APPENDIX A CERTIFICATE OF TITLE

APPENDIX B PLANS AND ELEVATIONS

APPENDIX C WRITTEN CONSENT FROM DELWP ON BEHALF OF
PARKS VICTORIA

APPENDIX D FLORA AND FAUNA IMPACT ASSESSMENT REPORT

APPENDIX E HISTORIC HERITAGE DUE DILIGENCE REPORT

APPENDIX F LANDSCAPE AND VISUAL AMENITY REPORT

APPENDIX G PRELIMINARY SITE ASSESSMENT (CLM)

APPENDIX H HYDROLOGY AND FLOODING IMPACT
ASSESSMENT

APPENDIX I BUSHFIRE MANAGEMENT STATEMENT

APPENDIX J GEOTECHNICAL DESKTOP STUDY

APPENDIX K DRAFT CONSTRUCTION ENVIRONMENTAL
MANAGEMENT PLAN

ABBREVIATIONS

ACT	Australian Capital Territory
AEMO	Australian Energy Market Operator
ANO	Authorised Network Operator
BCS	Bioregional Conservation Status
CHMP	Cultural Heritage Management Plan
DSE	Department of Sustainability and Environment
EE Act	<i>Environment Effects Act 1978</i>
EMF	Electric and Magnetic Fields
EES	Environment Effects Statement
EVC	Ecological Vegetation Class
FFG Act	<i>Flora and Fauna Guarantee Act 1988</i>
HO	Heritage Overlay
HV	High Voltage
ICNIRP	International Commission on Non-Ionizing Radiation Protection
kV	Kilovolt
NEM	National Energy Market
NSW	New South Wales
REZ	Renewable Energy Zone
SA	South Australia

EXECUTIVE SUMMARY

TransGrid (electricity transmission operator in New South Wales (NSW)) and ElectraNet (electricity transmission operator in South Australia (SA)) are seeking regulatory and environmental planning approval for the construction and operation of a new High Voltage (HV) interconnector between NSW and SA, with an additional connection to Red Cliffs in north-west Victoria. Collectively, the proposed interconnector is known as EnergyConnect.

EnergyConnect aims to secure increased electricity transmission between SA, NSW and Victoria, while facilitating the longer-term transition of the energy sector across the National Electricity Market (NEM) to low emission energy sources.

This Planning Report has been prepared in support of a planning permit application under the Mildura Planning Scheme (MPS), which is required to facilitate the Victorian component of EnergyConnect (the proposal). This proposal is being delivered by TransGrid.

The proposal comprises the upgrade of an existing TransGrid 220 kilovolt (kV) single circuit transmission line between the NSW/Victorian border and the Red Cliffs substation in Victoria to a 220 kV double circuit transmission line.

Specifically, the proposal comprises:

- site establishment works including vegetation clearance, minor access track improvements and construction of tower pad and laydown areas
- construction of about 1.3-kilometres of new double circuit transmission line supported by four new transmission line monopoles. At two of the four locations, a double pole arrangement is proposed. At the remaining two locations only a single pole structure would be installed
- decommissioning of the existing transmission line is also a part of the scoped activities, once the upgraded transmission line is operational. Decommissioning activities would include removal of all existing towers, fittings and conductors from the corridor
- vegetation removal required to maintain appropriate clearances between ground vegetation and transmission lines. Vegetation above four-metres in height, within a 50-metre corridor below transmission lines would require ongoing maintenance throughout the operation to ensure electrical safety clearances and protection zones are maintained. The required clearance of vegetation within the corridor would be undertaken in accordance with TransGrid maintenance guides.

The connection of the new transmission line to the Red Cliffs substation and disconnection of existing transmission line within the substation boundary would be undertaken as a separate scope of works and planning approvals process by AusNet.

The new line would also connect to a new line on the NSW side of the border (part of the NSW – Western Section EnergyConnect). The planning approvals for this component are being progressed separately under NSW planning processes.

The upgrade to the existing transmission line between Buronga and Red Cliffs would relieve system constraints and allow for NSW, SA and Victorian consumers to benefit from significant amounts of low-cost, large-scale solar generation in south-west NSW. The proposal is an essential component of EnergyConnect.

The primary objective for the proposal is to reduce the cost of providing secure electricity transmission between NSW and SA in the near term and facilitate the longer-term transition of the energy sector across the National Energy Market (NEM) to low emission energy generation sources.

More specifically, the proposal aims to:

- lower power prices
- improve energy security
- increase economic activity
- support the transition to a lower carbon emission energy system
- support a greater mix of renewable energy in the NEM.

TransGrid is requesting the Department of Environment, Land, Water and Planning (DELWP) assess and approve the attached Application for a Planning Permit.

To avoid and minimise impacts to native vegetation and cultural heritage, an integrated design approach was undertaken in collaboration between ecologists, heritage advisors, transmission line design and construction delivery specialists. The process sought to limit temporary proposal footprints and access tracks and to reduce potential impacts to cultural heritage and ecological assets through siting of the footprint for permanent works.

Strategies to acquire the required vegetation offsets to meet the requirements of the *Guidelines for the removal, destruction or lopping of native vegetation* (Department of Environment, Land, Water and Planning, 2017) (Native Vegetation Removal Guidelines) are currently being investigated to ensure vegetation will be appropriately offset prior to construction. Details of offset requirements are displayed in Appendix D.

1 INTRODUCTION

1.1 PROPOSAL CONTEXT AND OVERVIEW

TransGrid (electricity transmission operator in New South Wales (NSW)) and ElectraNet (electricity transmission operator in South Australia (SA)) are seeking regulatory and environmental planning approval for the construction and operation of a new High Voltage (HV) interconnector between NSW and SA, with an additional connection to Red Cliffs in north-west Victoria. Collectively, the proposed interconnector is known as EnergyConnect.

EnergyConnect comprises several components or ‘sections’ (shown on Figure 1.1). The Victorian Section (referred to as ‘the proposal’) is the subject of this report.

EnergyConnect aims to secure increased electricity transmission between SA, NSW and Victoria in the near term, while facilitating the longer-term transition of the energy sector across the National Electricity Market (NEM) to low emission energy sources.

EnergyConnect has been identified as an immediate priority project in the Australian Energy Market Operator (AEMO) 2018 *Integrated System Plan* (ISP) and a ‘no regret’ actionable project in the 2020 ISP (AEMO, 2020). This is due to its ability to ‘increase transfer capacity between SA and NSW by 750 MW, achieve fuel cost savings and unlock already stranded renewable investments’ within the REZs in western NSW, SA and north-west Victoria (AEMO, 2020).



Figure 1.1 Overview of EnergyConnect

1.1.1 KEY FEATURES OF THE PROPOSAL

The proposal comprises the upgrade of an existing TransGrid 220 kV single circuit transmission line between the NSW/Victorian border and the Red Cliffs substation to a 220 kV double circuit transmission line. Specifically, this comprises:

- site establishment works including vegetation clearance, minor access track improvements and construction of tower pad and laydown areas
- construction of about 1.3 kilometres of new double circuit 220 kV transmission line, with four new transmission line pole locations. At two of the four locations, a double arrangement (i.e. two poles) would be installed. At the remaining locations only a single pole structure would be installed
- the decommissioning and removal of the existing 220 kV single circuit transmission line and towers once the new line is operational. Decommissioning activities would include removal of all existing towers, fittings and conductors from the corridor. Some sub surface footings would be left in place to minimise excavation and disturbance
- the establishment of a formal 50 metre wide corridor for the new transmission line and poles
- vegetation removal required to maintain appropriate clearances between ground vegetation and transmission lines. Vegetation above four metres in height, within a 50-metre corridor below transmission lines would require ongoing maintenance throughout the operation to ensure electrical safety clearances and protection zones are maintained. The required clearance of vegetation within the corridor would be undertaken in accordance with TransGrid maintenance guides
- upgrade of access tracks for use during construction and operation
- establishment of small sections of new access tracks.

The connection of the new transmission line to the Red Cliffs substation and disconnection of existing transmission line within the substation boundary would be undertaken as a separate scope of works and planning approvals process by AusNet.

The new line would also connect to a new line on the NSW side of the border (part of the NSW – Western Section of EnergyConnect). The planning approvals for this component are being progressed separately under NSW planning processes.

An overview of the proposal is provided in (Figure 1.2).

Construction of the proposal would commence in late-2021. Construction timeframes for the proposal are subject to approvals, and the final program would be confirmed during detailed design.



Figure 1.2 Study Area overview

1.2 PROPOSAL LOCATION AND STUDY AREA

The proposal is located in the Kings Billabong Park, Red Cliffs, in the Sunraysia region within the Mildura Local Government Area and approximately 16 kilometres from Mildura and 544 kilometres from Melbourne, respectively.

The proposal study area comprises of a 200 metre wide corridor that extends for about 1.3 kilometres and extends from the Red Cliffs substation to the north-east where it meets the Victorian/NSW border at the Murray River. The proposal study area comprises approximately 33.15 hectares of land and follows the existing 220 kV transmission line corridor and also encompasses the Red Cliffs substation facility and access track into the proposal study area (see Figure 1.2).

The bulk of the proposal study area is classified as Crown Reserve with the remainder freehold land owned by Ausnet.

1.2.1 PROPOSAL NEED

The proposal would increase transfer capacity between the state electricity markets of Victoria and NSW and would support the establishment of the missing transmission link between the SA and NSW transmission networks. The upgrade to the existing transmission line between Buronga and Red Cliffs would relieve system constraints and allow for Victorian, NSW and SA consumers to benefit from expanded access to low-cost, large-scale solar generation in north-west Victoria and south-west NSW.

The proposal is an essential component of EnergyConnect.

1.3 THE PROPONENT

The proposal would be carried out by NSW Electricity Networks Operations Pty Ltd as a trustee for NSW Electricity Operations Trust (referred to as TransGrid). TransGrid is the operator and manager of the main high voltage transmission network in NSW and the Australian Capital Territory (ACT) and is the Authorised Network Operator (ANO) for the purpose of an electricity transmission or distribution network under the provisions of the *Electricity Network Assets (Authorised Transactions) Act 2015* (NSW).

1.4 PURPOSE OF THIS TECHNICAL REPORT

WSP has been commissioned on behalf of TransGrid to prepare the Planning Report to inform the statutory planning approvals for the proposal. The purpose of the Planning Report is to respond to the statutory planning objectives and summarise the potential impacts and appropriate management during the construction and operation of the proposal.

1.5 APPROVAL PATHWAY

TransGrid are seeking statutory planning approval from the Department of Environment, Land, Water and Planning (DELWP) for the upgrade of an existing TransGrid 220 kV single circuit transmission line to a 220 kV double circuit transmission line within a 50-metre-wide corridor that extends for approximately 1.3 kilometres. The proposal is located within a Public Conservation and Resource Zone (PCRZ) and requires written consent from Parks Victoria (public land manager) to lodge an application for the use and development of the land in Kings Billabong Park.

This report and supporting documentation form the Application for a Planning Permit which is deemed to be consistent with s47 of the *Planning and Environment Act 1987* (P&E Act).



Figure 1.3 Proposal footprint

2 EXISTING CONDITIONS

2.1 LOCALITY

The proposal is located in the Kings Billabong Park, Red Cliffs, within the Mildura Local Government Area and approximately 16 kilometres south of Mildura and 544 kilometres north west of Melbourne respectively. The closest residential area is the town of Red Cliffs which is located approximately five kilometres south west of the proposal and has a population of 5,060. Land use in the area consists largely of conservation and agricultural usage as well as land dedicated to public infrastructure; including the existing transmission lines and the Red Cliffs substation (Terminal Station).

2.2 PROPOSAL LOCATION AND DETAILS

The proposal footprint is situated across three allotments. Two lots are Crown land managed by Parks Victoria and one is owned by Ausnet. Details on the lots are below.

Table 2.1 Details of lots within proposal footprint

SPI	ADDRESS	TOTAL LOT AREA	TENURE	ADMINISTRATOR
2227\PP3102	Woomera Avenue Red Cliffs 3496	20,984,798 m ²	Crown Land	Parks Victoria
138F~F\PP3102	Psyche Bend Road Irymple Vic 3498	335,036 m ²	Crown Land	Parks Victoria
1\TP12019	718 Woomera Avenue Red Cliffs 3496	84,090 m ²	Parcel	Ausnet

2.3 SITE DESCRIPTION

The proposal footprint comprises of a 50 metre wide corridor and connecting access tracks that extend for about 1.3 kilometres from the Red Cliffs substation, to the north-east where it meets the Victorian/NSW border adjacent to the Murray River. The proposal footprint is approximately nine hectares and runs generally parallel to, and includes, the existing transmission line corridor. The bulk of the proposal footprint is classified as Crown Reserve.

The proposal is located in a low-lying landscape consisting mostly of Riverine Chenopod Woodland vegetation. The transmission line constructed as part of the proposal will cross the Murray River where it would connect to the NSW Western Section of EnergyConnect. The Murray River runs adjacent to the footprint, (see Figure 1.2). Due to its close proximity to the Murray River and low-lying nature the site is classified as a floodplain. A small, seasonal, drainage line also bisects the proposal footprint, approximately 500 metres from the southern extent.

Aside from the cleared management corridor for the existing transmission line, the site is characterised mostly by depleted woodland and shrubland vegetation that occurs in low lying flood plains and locations along the Murray River. A full description of the ecological vegetation classes occurring in and adjacent to the proposal footprint is included in Section 7.1.

Directly adjacent to the south of the proposal footprint is the Red Cliffs substation as well as the operational Red Cliffs pumping station.

2.4 EXISTING LAND USE AND INFRASTRUCTURE

Land use in the study area consists largely of conservation usage as well as land dedicated to public infrastructure; including the existing transmission lines and the Red Cliffs substation (Terminal Station).

The closest major residential area is the town of Red Cliffs which is located approximately five kilometres south west of the proposal and has a population of 5,060. The closest dwellings to the proposed operational footprint components within the study area are to the south, off Woomera Avenue, approximately 250 metres away.

Existing land use and infrastructure in the proposal footprint consists of:

- the existing 220 kV single circuit transmission line and transmission line towers
- the Red Cliffs substation (part of the facility boundary)
- the Kings Billabong Park.

2.5 ADJACENT AND SURROUNDING LAND USE

The land uses surrounding the proposal footprint are varied. The Red Cliffs substation (Terminal Station) is adjacent to the proposal and would be connected to it. The area directly surrounding the transmission line and the area to the north is used for conservation and recreation (including camping, water sports and four-wheel driving). To the west of the proposal footprint is low-density residential area on the outskirts of Red Cliffs and further to the west of the township is land used for agricultural purposes.

A summary of land uses is provided in Table 2.2.

Table 2.2 Summary of adjacent land uses

LAND USE	LOCATION
Conservation and Recreation	East and West
Utility Infrastructure	South
General Residential	South
Agricultural	South

3 PROPOSED DEVELOPMENT

3.1 DESCRIPTION OF PROPOSAL

The proposal comprises the upgrade of an existing TransGrid 220 kV single circuit transmission line between the NSW/Victorian border and the Red Cliffs substation in Victoria to a 220 kV double circuit transmission line. The construction aspects of the proposal are outlined below.

3.1.1 KEY COMPONENTS

The proposal specifically is comprised of:

- construction of about 1.3 kilometres of new double circuit 220 kV transmission line
- four new transmission line pole locations. At two of these locations, two poles would be installed. At the remaining two locations, only a single pole would be installed. The poles would be constructed on the eastern side of the existing line. The poles would be in approximately the same locations to the current line tower structures and have been positioned to avoid known ecological and cultural heritage constraints as far as practicable
- the establishment of a formal 50-metre-wide corridor for the new transmission line
- the decommissioning and removal of the existing transmission line and associated infrastructure including towers
- vegetation removal required to maintain appropriate clearances between ground vegetation and transmission lines. Vegetation above four metres in height, within a 50-metre corridor below transmission lines would require ongoing maintenance throughout the operation to ensure electrical safety clearances and protection zones are maintained. The required clearance of vegetation within the corridor would be undertaken in accordance with TransGrid maintenance guides
- upgrade of access tracks for use during construction and operation. Existing access tracks would be used, but where necessary would be widened to six metres, with wider turning radius at sharp bends to enable semi-trailers to access
- establishment of small sections of new access tracks.

The connection of the new transmission line to the Red Cliffs substation and disconnection of existing transmission line, would be undertaken as a separate scope of works by AusNet.

The new line would also connect to a new line on the NSW side of the border (part of the NSW – Western Section of EnergyConnect). The planning approvals for this component are being progressed separately under NSW planning processes.

3.1.2 *DECOMMISSIONING*

Decommissioning of the existing TransGrid 220 kV single circuit transmission line would need to occur once the new transmission line is established and operational. The decommissioning process would consist of:

- an outage for both commissioning of the new transmission line and decommissioning of the existing 220 kV transmission line allowing for:
 - the existing 220 kV TL 0X1 to be decommissioned
 - the eastern side circuit in the new 220 kV TL to be energised
- pulleys and safety measures to be installed in the existing 220 kV transmission line 0X1
- cables to be de-strung, pulled and rewound onto reels
- all stringing accessories (pulleys, suspension and strain chains) to be removed from the existing 220kV transmission line 0X1
- all towers would be disassembled and removed to a laydown area for salvage, recycling and disposal as is appropriate.

3.1.3 *CONSTRUCTION STAGING*

Over the approximate 18-month construction period, the proposal will require staging for specific elements of the construction and decommissioning. Each stage is expected to take between one to a few weeks and would include the following key processes:

- widening of access tracks, trimming and removal of vegetation
- creation of monopole foundation pads
- assembly and erection of monopole structures
- stringing of conductors
- energising EnergyConnect transmission line
- de-energisation and de-stringing of existing 220 kV TL 0X1
- deconstruction of existing 220 kV TL 0X1 towers

remediation of decommissioned tower pads and impacted vegetation outside of EnergyConnect 50 metre wide corridor.

3.2 ASSESSMENT PROCESS

To inform the planning approvals a number of specialist technical assessments of the proposal have been conducted. These include:

- Biodiversity assessment
- Historic Archaeological due diligence
- Cultural Heritage Management Plan
- Landscape and Visual Amenity impact assessment
- Contaminated Land assessment (Preliminary site investigation)
- Geotechnical memorandum
- Hydrology and Flooding impact assessment
- Bushfire Risk assessment and management plan.

These assessments are summarised within this Planning Report.

4 REGULATORY FRAMEWORK

4.1 COMMONWEALTH LEGISLATION

The key Commonwealth legislation that applies to the proposal footprint is outlined in Table 4.1.

Table 4.1 Commonwealth legislation

LEGISLATION	SUMMARY
<p><i>Environment Protection and Biodiversity Conservation Act 1999</i></p>	<p>The <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cwlth) (EPBC Act) protects Matters of National Environmental Significance (MNES) including nationally threatened species and ecological communities, wetlands of international importance, and migratory species. The Commonwealth Minister for the Environment is responsible for administering the EPBC Act. Under the EPBC Act, an action (i.e. project, an activity) will require approval from the Minister if the action will have or is likely to have a significant impact on a MNES.</p> <p>Impact assessments have been completed for all EPBC Act listed species, with the potential to occur. As a result of the field data and impact assessments, significant impact to any EPBC Act listed flora fauna or ecological communities is considered highly unlikely.</p> <p>No impacts to other MNES would occur as a result of the proposal.</p> <p>Based on these findings no EPBC referral is proposed. Consultation with Department of Agriculture, Water and the Environment (DAWE) has been undertaken separately for the proposal.</p>
<p><i>Native Title Act 1993</i></p>	<p>The <i>Native Title Act 1993</i> (Cwlth) (Native Title Act) recognises and protects traditional rights and interests to land and waters of Aboriginal and Torres Strait Islander people. The Native Title Act gives statutory recognition and protection of native title. It sets out a procedure for making a claim for a determination of native title, provides a regime for governments to do things in relation to land validly, notwithstanding the existence of native title, as well as validating some acts done on land in the past.</p> <p>The Kings Billabong Park is subject to a registered native title claim made by the First Peoples of the Millewa-Mallee Native Title Claim Group (VID630/2015) (Claim). The Claim was accepted for registration on 13 June 2016 and is currently before the Federal Court.</p> <p>Contingent on claimant outcomes, future notice under the Native Title Act may be required for any development activities in areas subject to Native Title.</p>

4.2 VICTORIAN LEGISLATION

The key Victorian legislation that applies to the proposal footprint is outlined in Table 4.2.

Table 4.2 Commonwealth legislation

LEGISLATION	SUMMARY
<p><i>Environment Effects Act 1978</i></p>	<p><i>The Environment Effects Act 1978 (EE Act)</i> provides for assessment of some proposed projects (works) that may have a significant effect on the environment. Assessment under the EE Act will inform the approval decisions, but will not result in an approval in its own right. The Minister for Planning administering the EE Act decides whether an EES should be prepared.</p> <p>A self-assessment for the proposal has been undertaken and determined that the proposal did not meet the <i>Ministerial guidelines for assessment of environmental effects under the Environment Effects Act 1978</i>, DELWP 2006 requirements and does not require referral to the Minister for Planning.</p>
<p><i>Planning and Environment Act 1987</i></p>	<p>The P&E Act provides the legal framework for the operation of Victoria’s planning system. The P&E Act sets out procedures for preparing and amending the Victorian Planning Provisions (VPPs) and planning schemes, obtaining permits under schemes, settling disputes, enforcing compliance with planning schemes and other administrative procedures.</p> <p>The main functions of the P&E Act are to:</p> <ul style="list-style-type: none"> — set the broad objectives for planning in Victoria — set the main rules and principles for how the Victorian planning system works — set up the key planning procedures and statutory instruments in the Victorian planning system; and — define the roles and responsibilities of the Minister, councils, governments, government departments, the community and other stakeholders in the planning system. <p>The objectives of the P&E Act, of relevance to the proposal are:</p> <ul style="list-style-type: none"> — ‘provide for the fair, orderly, economic and sustainable use, and development of land’ — ‘facilitate appropriate development in accordance with the objectives’ — ‘balance the present and future interests of all Victorians. <p>Under the P&E Act, the proposal will require planning approval for:</p> <ul style="list-style-type: none"> — use — buildings and works — native vegetation removal.

LEGISLATION	SUMMARY
<p><i>Aboriginal Heritage Act 2006</i></p>	<p>The <i>Aboriginal Heritage Act 2006</i> (Aboriginal Heritage Act) and <i>Aboriginal Heritage Regulations 2018</i> provides the framework for protections to Aboriginal Heritage throughout Victoria. The <i>Aboriginal Heritage Regulations 2018</i> require a Cultural Heritage Management Plan (CHMP) to be prepared in circumstances involving both:</p> <ul style="list-style-type: none"> — activities to be completed on land within an area of Aboriginal cultural heritage sensitivity, as described in the <i>Aboriginal Heritage Regulations 2018</i> (Part 2, Division 3), and — activities considered to be ‘high impact’ under the <i>Aboriginal Heritage Regulations 2018</i> (Part 2, Division 5). <p>Section 52(3) of the Aboriginal Heritage Act provides that no statutory authorisation can be given before a CHMP is approved.</p> <p>A CHMP has been prepared and approved for the proposal in parallel to this process. An approved CHMP is required prior to construction.</p>
<p><i>Water Act 1989</i></p>	<p>Under the <i>Water Act 1989</i> (Water Act) a licence is required to construct, alter, operate, remove or decommission any works on a waterway. The purpose is to protect and rehabilitate rivers and creeks to ensure that any works undertaken on designated waterways do not adversely affect the health of those waterways.</p> <p>Under the Water Act, the designated waterways, regional drainage and floodplain management authority for the Catchment is the Mallee Catchment Authority.</p> <p>The proposal intersects designated waterways within Kings Billabong Park. A works on waterways permit from Mallee Catchment Management Authority is required prior to construction.</p>
<p><i>Environment Protection Act 2017</i></p>	<p>The <i>Environment Protection Act 2017</i> (EP Act) aims to prevent pollution and environmental damage by setting environmental quality objectives and establishing programs to meet them. This EP Act focuses on preventing waste and pollution impacts rather than managing those impacts after they have occurred. Central to the EP Act is the general environmental duty (GED). Under the GED, businesses must understand the risk from their activities and how to address them. The extent of measures undertaken to address impacts depends on how much risk the activities pose to human health and the environment.</p> <p>The EP Act establishes the powers, duties and functions of the EPA. These include the administration of the EP Act and any regulations and orders made pursuant to it, recommending Environmental Reference Standards (ERS), State Environment Protection Policy (SEPPs), issuing works approvals, licences, permits, pollution abatement notices and implementing National Environment Protection Measures.</p> <p>Under the EP Act, the EPA also administer works approvals and licencing system that allow proponents to conduct works or make changes to scheduled premises. Works approvals and licences are typically required to undertaking works related to constructing new plant, installing new plant equipment and running certain activities at a licensed premises.</p> <p>Liaison with the EPA will be required to enable construction activities outside of recommended published guidelines prior to construction.</p>

LEGISLATION	SUMMARY
<i>Flora and Fauna Guarantee Act 1988</i>	<p>The <i>Flora and Fauna Guarantee Act 1988</i> (FFG Act) provides a framework for the conservation and management of Victoria’s native species, and the processes that threaten native flora and fauna are listed in the schedules of the Act.</p> <p>A permit from DELWP is required to ‘take’ (to kill, injure, disturb or collect) listed flora species from public land prior to construction.</p>
<i>Wildlife Act 1975</i>	<p>The <i>Wildlife Act 1975</i> (Wildlife Act) is the primary legislation in Victoria for the protection of wildlife. The Act requires that wildlife research (i.e. fauna salvage and relocation) is regulated through a permit system, which is managed by DELWP.</p> <p>Authorisation for fauna removal/relocation must be obtained under the Wildlife Act through a licence granted by DELWP. Any persons involved in fauna removal, salvage capture or relocation of fauna during mitigation measures must hold a current Management Authorisation under the <i>Wildlife Act</i>.</p> <p>If vegetation containing fauna habitat is to be removed during construction and maintenance, a qualified fauna spotter catcher with accreditation under the Wildlife Act must be present during habitat removal.</p>
<i>Heritage Act 2017</i>	<p>The <i>Heritage Act 2017</i> (Heritage Act) regulates the protection and conservation of places of heritage significance. The Heritage Act establishes the Victorian Heritage Register (VHR) and the Victorian Heritage Inventory (VHI), for which consents or permits must be obtained before any historic site is disturbed.</p> <p>The proposal does not contain any items listed on the Victorian Heritage Inventory or Register. If items that meet the listing criteria are identified within the proposal during construction, permits and consents would be required.</p>
<i>Catchment and Land Protection Act 1994</i>	<p>The <i>Catchment and Land Protection Act 1994</i> (CaLP Act) establishes a framework for the management and protection of land and water resources in Victoria. The CaLP Act creates a system of controls and ensures development does not contribute to land degradation through earthworks or the introduction of pest animals or weeds.</p> <p>If the transport and disposal of declared noxious weeds or soil containing declared noxious weeds is required during construction a permit under the CaLP Act would be required.</p>
<i>National Parks Act 1975</i>	<p>Kings Billabong Park is managed by Parks Victoria under Schedule Three (‘other parks’) of the <i>National Parks Act 1975</i> (NP Act). TransGrid proposes to enter an agreement under section 27 of the Act by which Parks Victoria consents to TransGrid’s activities within Kings Billabong Park.</p>

5 STRATEGIC FRAMEWORK

There are a number of strategies and plans on a national and state level that aim to improve the national energy network and its transition to renewables as well as the development of regional areas. Several of these are applicable to the proposal due to its upgrade of transmission lines and location in the regional area of Mildura.

5.1 NATIONAL STRATEGIES

5.1.1 INTEGRATED SYSTEM PLAN 2020 (AUSTRALIAN ENERGY MARKET OPERATOR)

The Integrated System Plan (ISP) identifies investment choices and recommends essential actions to optimise consumer benefits during Australia's transition to renewable energy. The plan aims to *"minimise costs and the risk of events that can adversely impact future power costs and consumer prices, while also maintaining the reliability and security of the power system"*.

A new interconnector between SA, NSW and an added connection into Victoria (EnergyConnect) has been identified as a priority project in the 2020 ISP. This is because it is expected to deliver positive net market benefits and support the energy market transition to a lower carbon emissions future as soon as it can be built. The Australian Energy Market Operator (AEMO) estimates that the combined supply and network investments outlined in the 2020 ISP (such as EnergyConnect) would deliver \$11 billion in net market benefits across the National Energy Market (NEM). Moreover, the 2020 ISP confirms EnergyConnect as a 'no regret' actionable ISP project as it would 'increase transfer capacity between SA and NSW by 750 MW, to achieve fuel cost savings and unlock already stranded renewable investments' (AEMO, 2020).

5.2 VICTORIAN STRATEGIES

5.2.1 RENEWABLE ENERGY ACTION PLAN

The Renewable Energy Action Plan establishes the strategy for Victoria ensuring a renewable, affordable and reliable energy network whilst reaching net zero emissions energy sector by 2050. Key to the plan is using large scale renewable energy technology and ensuring grid stability. The planning includes a number of key actions relevant to EnergyConnect:

- supporting local energy projects across Victoria
- delivering a more flexible approach to grid connections
- exploring innovative smart grid, microgrid and storage models.

5.2.2 LODDON MALLEE NORTH REGIONAL GROWTH PLAN

This regional growth plan covers the municipalities of Buloke, Campaspe, Gannawarra, Mildura and Swan Hill. The plan identifies opportunities for supporting regional infrastructure and identifies important economic, environmental, social and cultural resources to be preserved, maintained or developed. The plan identifies several actions relevant to future energy land use strategies:

- identify key regional priorities and land use requirements for improved utilities, energy and telecommunications infrastructure and support implementation of these priorities
- strategically upgrade power supply in rural areas to promote economic growth and support industry to adapt to the impacts of climate change
- identify the potential economic, social and environmental benefits of utilities infrastructure investment and prioritise investment where it will achieve multiple benefits.

5.3 NEW SOUTH WALES STRATEGIES

5.3.1 FAR WEST REGIONAL PLAN 2036 (NSW)

The Far West Regional Plan 2037 (DPIE, 2017) sets out the NSW Government’s vision, goals and land use priorities over the next 20 years for the Far West region of NSW. The plan identifies a number of directions to achieve the goal in diversifying the economy with the efficient use of infrastructure and infrastructure networks. This includes:

- protecting productive agricultural land and planning for greater land use compatibility
- diversifying energy supply through renewable energy production. This includes actions to identify areas and project sites with renewable energy potential, and infrastructure corridors with access to the electricity network to inform land use planning. The Far West Region has capacity for high renewable energy generation, which is consistent with the NSW Government’s Renewable Energy Action Plan (2013) and the Renewable Energy Zones (REZ) identified in the AEMO’s 2020 ISP (refer section 5.1.1)
- promoting tourism opportunities in the region.

The Far West Regional Plan also recognises the southern area of the Far West Region for its diverse agriculture and landscapes, its natural features and association with the Murray and Darling Rivers. The protection of the environmental assets of the region is identified as a key priority within the Far West Regional Plan, including existing conservation areas, river systems, lagoons, native vegetation of high conservation value.

6 PLANNING ASSESSMENT

6.1 PLANNING POLICY AND CONTROLS

The Mildura Planning Scheme (MPS) establishes policies for the use and development of land and provides a framework within which land use planning decisions can be made. A summary of the relevant State and local planning policies is provided below. These have been assessed and applied to the proposal.

6.1.1 PLANNING POLICY FRAMEWORK

The Planning Policy Framework (PPF) sets the overall context for spatial planning and decision making for Victoria. It seeks to ensure that the ‘objectives of planning in Victoria are fostered through appropriate land use and development planning policies and practices’. As demonstrated in the following tables, the proposal meets the requirements of the PPF as set out in the Victoria Planning Provisions (VPPs).

Table 6.1 Clause 11: Settlement

PLANNING POLICY FRAMEWORK – CLAUSE 11: SETTLEMENT
<p>Clause 11 of the PPF outlines the objectives and strategies associated with ‘Settlement’.</p> <p>Clause 11 states that, <i>“Planning is to anticipate and respond to the needs of existing and future communities through provision of zoned and serviced land for housing, employment, recreation and open space, commercial and community facilities and infrastructure. Planning is to facilitate sustainable development that takes full advantage of existing settlement patterns and investment in transport, utility, social, community and commercial infrastructure and services.”</i></p> <p>Clause 11 aims to promote sustainable growth and development (11.01-1S), Support stronger relationships between the region and communities of interest in southern New South Wales, South Australia and adjoining Victorian regions (11.01-1R Settlement – Loddon Mallee North), maintain access to an adequate supply of well-located land for energy generation, and infrastructure and industry (11.02-1S Supply of urban land).</p>
<p>Assessment:</p> <p>The proposal supports c11.01-1S, c11.01-1R, and c11.02-1S through developing a stronger energy network connection with other states such as New South Wales and creating a more reliable and sustainable energy supply for Victoria.</p>

Table 6.2 Cause 12: Environment and landscape values

PLANNING POLICY FRAMEWORK – CLAUSE 12: ENVIRONMENTAL AND LANDSCAPE VALUES
<p>Clause 12 of the PPF outlines the objectives and strategies associated with ‘Environmental and landscape values’.</p> <p>Clause 12 states that, <i>“Planning should strengthen the resilience and safety of communities by adopting a best practice environmental management and risk management approach. Planning should identify and manage the potential for the environment and environmental changes to impact on the economic, environmental or social wellbeing of society. Planning should ensure development and risk mitigation does not detrimentally interfere with important natural processes.”</i></p> <p>Clause 12 aims to assist the protection and conservation of Victoria’s biodiversity (12.01-1S Protection of biodiversity), ensure that there is no net loss to biodiversity as a result of the removal, destruction or lopping of native vegetation (12.01-2S Native vegetation management), and protect and enhance river corridors, waterways, lakes and wetlands (12.03-1S River corridors, waterways, lakes and wetlands).</p>
<p>Assessment:</p> <p>The proposal intends to avoid and minimise impacts to native vegetation and biodiversity where possible. Where vegetation removal is required <i>Guidelines for the removal, destruction or lopping of native vegetation</i> (Department of Environment, Land, Water and Planning, 2017) will be followed. The proposal will also be designed to minimise any impacts on the Murray River.</p>

Table 6.3 Clause 13: Environmental risks and amenity

PLANNING POLICY FRAMEWORK – CLAUSE 13: ENVIRONMENTAL RISKS AND AMENITY
<p>Clause 13 of the PPF outlines the objectives and strategies associated with ‘Environmental Risks and Amenity’.</p> <p>Clause 13 states that, <i>“Planning should strengthen the resilience and safety of communities by adopting a best practice environmental management and risk management approach. Planning should identify and manage the potential for the environment and environmental changes to impact on the economic, environmental or social wellbeing of society. Planning should ensure development and risk mitigation does not detrimentally interfere with important natural processes.”</i></p> <p>Clause 13 aims to strengthen the resilience of settlements and communities to bushfire through risk-based planning that prioritises the protection of human life (c13.02-1S Bushfire Planning) and assist the protection of floodplain area of environmental significance or of importance to river health (c13.03-1S Floodplain management).</p>
<p>Assessment:</p> <p>Located within a bushfire prone area and within the Murray River floodplain, the proposal seeks to achieve the objectives of the clauses through developing a bushfire management plan as well as through developing a CEMP that includes a soil and water management procedures developed in line relevant Environment Protection Authority (EPA) guidelines.</p>

Table 6.4 Clause 15: Built environment and heritage

PLANNING POLICY FRAMEWORK – CLAUSE 15: BUILT ENVIRONMENT AND HERITAGE
<p>Clause 15 of the PPF outlines the objectives and strategies associated with ‘Built environment and heritage’.</p> <p>Clause 15 states that, <i>“Planning should ensure all land use and development appropriately responds to its surrounding landscape and character, valued built form and cultural context. Planning should protect places and sites with significant heritage, architectural, aesthetic, scientific and cultural value.”</i></p> <p>Clause 15 aims to encourage land use and development that is energy and resource efficient, supports a cooler environment and minimises greenhouse gas emissions (c15.02-1S Energy and resource efficiency), ensure the conservation of places of heritage significance (c15.03-1S - Heritage conservation) and ensure the protection and conservation of places of Aboriginal cultural heritage significance (c15.03-2S Aboriginal cultural heritage)</p>
<p>Assessment:</p> <p>The proposal aims to achieve the objectives of the clauses through creating a more reliable energy network and allowing for a greater use of renewable energy. The proposal will also protect and conserve aboriginal places of heritage significance where possible through carrying out the recommended measures contained in a detailed CHMP approved in accordance with the <i>Aboriginal Heritage Act 2006</i>.</p>

Table 6.5 Clause 17: Economic development

PLANNING POLICY FRAMEWORK – CLAUSE 17: ECONOMIC DEVELOPMENT
<p>Clause 17 of the PPF outlines the objectives and strategies associated with ‘Economic development’.</p> <p>Clause 17 states that, <i>“Planning is to provide for a strong and innovative economy, where all sectors are critical to economic prosperity.”</i></p> <p>Clause 17 aims to strengthen and diversify the economy (c17.01-1S Diversified economy).</p>
<p>Assessment:</p> <p>The proposal aims to create further support for the existing energy industry and allow for further development of the renewable energy industry. The proposal’s status as a priority project in AEMO’s ISP (see section 5.1.1) confirms that the proposal would be a key facilitator for the energy market’s transition to lower carbon emissions future.</p>

Table 6.6 Clause 19: Infrastructure

PLANNING POLICY FRAMEWORK – CLAUSE 19: INFRASTRUCTURE
<p>Clause 19 of the PPF outlines the objectives and strategies associated with ‘Infrastructure’.</p> <p>Clause 19 states that, <i>“Planning for development of social and physical infrastructure should enable it to be provided in a way that is efficient, equitable, accessible and timely.”</i></p> <p>Clause 19 aims to facilitate appropriate development of energy supply infrastructure (19.01-1S Energy supply), to promote the provision of renewable energy in a manner that ensures appropriate siting and design considerations are met and particularly in the area of Loddon Mallee North (19.01-2S Renewable energy and 19.01-2R – Loddon Mallee North).</p>
<p>Assessment:</p> <p>The proposal provides further support for the existing energy industry and will facilitate the further provision of renewable energy. The proposal’s status as a priority project in AEMO’s ISP (see Section 5.1.1) confirms that the proposal would be a key facilitator for the energy market’s transition to lower carbon emissions future.</p>

6.1.2 LOCAL PLANNING POLICY FRAMEWORK

The Municipal Strategic Statement (MSS) is a succinct expression of the overarching strategic policy directions of the Mildura municipality. It highlights the planning issues that are important to the municipality and provides context for the local policies in the PPF. The PPF, Local Planning Policy Framework (LPPF) and the MSS work together to form the strategic basis of a planning scheme

Table 6.7 Clause 21.02: Key influences and issues

PLANNING STRATEGIC STATEMENT – CLAUSE 21.02: KEY INFLUENCES AND ISSUES
Clause 21.02 of the LPPF outlines the key planning influences and issues for Mildura. Clause 21.02 identifies a key influences and issues to be the need for power and communications infrastructure within the municipality remaining capable of serving foreseeable demand (c21.02-1 Infrastructure)
Assessment: The proposal would act as a key measure for ensuring that power demand in the municipality is met for the foreseeable future through the upgrade of the existing transmission line.

Table 6.8 Clause 21.03: Vision and strategic framework

PLANNING STRATEGIC STATEMENT – CLAUSE 21.03 VISION AND STRATEGIC FRAMEWORK
Clause 21.03 of the LPPF outlines the key visions and strategies of the MPS. Clause 21.03 lays out the vision for Mildura to be the centre of Australia’s solar industry (c21.03-1 Economic Development).
Assessment: The proposal aims to increase Australia’s renewable energy capacity. The proposal’s status as a priority project in AEMO’s ISP (see Section 5.1.1) confirms that the proposal would be a key facilitator for the energy market’s transition to lower carbon emissions future.

Table 6.9 Clause 21.05: Environment

PLANNING STRATEGIC STATEMENT – CLAUSE 21.05 ENVIRONMENT
<p>Clause 21.05 of the LPPF outlines the objectives and strategies associated with local environmental content to support Clause 12 (environmental and Landscape Values) and Clause 13 (Environmental Risk) of the State Planning Policy Framework.”</p> <p>Clause 21.05-1 states that the <i>“Council recognises the importance of managing the Murray River and is committed to working with other authorities, agencies and organisations to develop and implement appropriate policy and management controls.”</i></p> <p>Clause 21.05-1 seeks to improve river and wetland health within the Rural City of Mildura.</p> <p>Clause 21.05-2 states that the <i>“The conservation of the remaining Mallee flora and fauna is a high priority.”</i></p> <p>Clause 21.05-2 seeks to protect flora and fauna within the Rural City of Mildura.</p> <p>Clause 21.05-3 states that <i>“The Murray River has a history of flooding of low lying areas. Flooding has the potential to cause significant property and agricultural damage. Floodplains should be protected from inappropriate development to ensure their capacity to convey and store floodwaters is unhindered.”</i></p> <p>Clause 21.05-3 seeks to reduce the impacts of flooding within the Rural City of Mildura.</p> <p>Clause 21.05-4 states that <i>“there are hundreds of smaller conservation and other publicly owned reserves scattered across the Mallee that are vitally important in conserving biodiversity.”</i></p> <p>Clause 21.05-4 seeks to protect the environmental, landscape, cultural heritage and archaeological value of public land.</p>
<p>Assessment:</p> <p>The proposal aims to ensure that any potential impacts to sensitive environmental values are minimised through the use of a CEMP. The CEMP will put in place measures for the implementation of erosion and sedimentation control in accordance with the EPA best practice guidelines including <i>Construction Techniques for Sediment Pollution Control</i> (1991) (EPA 1991) and <i>Environmental Guidelines for Major Construction Sites</i> (1996) (EPA 1996).</p>

Table 6.10 Clause 21.07: Built environment and heritage

PLANNING STRATEGIC STATEMENT – CLAUSE 21.07 BUILT ENVIRONMENT AND HERITAGE
<p>Clause 21.07 of the LPPF outlines the objectives and strategies associated with local built environment and heritage to support Clause 15 (Built Environment and Heritage).</p> <p>Clause 21.07-2 states that <i>“the municipality and the region has in excess of 3,800 known Aboriginal places of cultural significance...”</i></p> <p>Clause 21.07-2 seeks to <i>“acknowledge, respect, protect and appropriately manage Aboriginal places, objects and human remains.”</i></p>
<p>Assessment:</p> <p>The proposal will protect and conserve Aboriginal places of heritage significance where possible through carrying out the recommended measures contained in a detailed CHMP approved in accordance with the <i>Aboriginal Heritage Act 2006</i>.</p>

6.1.3 LAND USE

Clause 73.03 Land Use Terms of the Victoria Planning Provisions (VPP) defines land use associated with the proposal as a utility installation. The table below outlines the definition of a utility installation.

Table 6.11 Extract from Clause 73.03 (Land Use Terms) of the MPS

CATEGORY	DESCRIPTION
Land use term:	Utility Installation
Definition:	<p><i>“Land used:</i></p> <ul style="list-style-type: none"> <i>a. for telecommunications;</i> <i>b. to transmit or distribute gas or oil;</i> <i>c. to transmit, distribute or store power, including battery storage;</i> <i>d. to collect, treat, transmit, store, or distribute water; ore. to collect, treat, or dispose of storm or flood water, sewage, or sullage.</i> <p><i>It includes any associated flow measurement device or a structure to gauge waterway flow.’</i></p>

6.1.4 ZONES

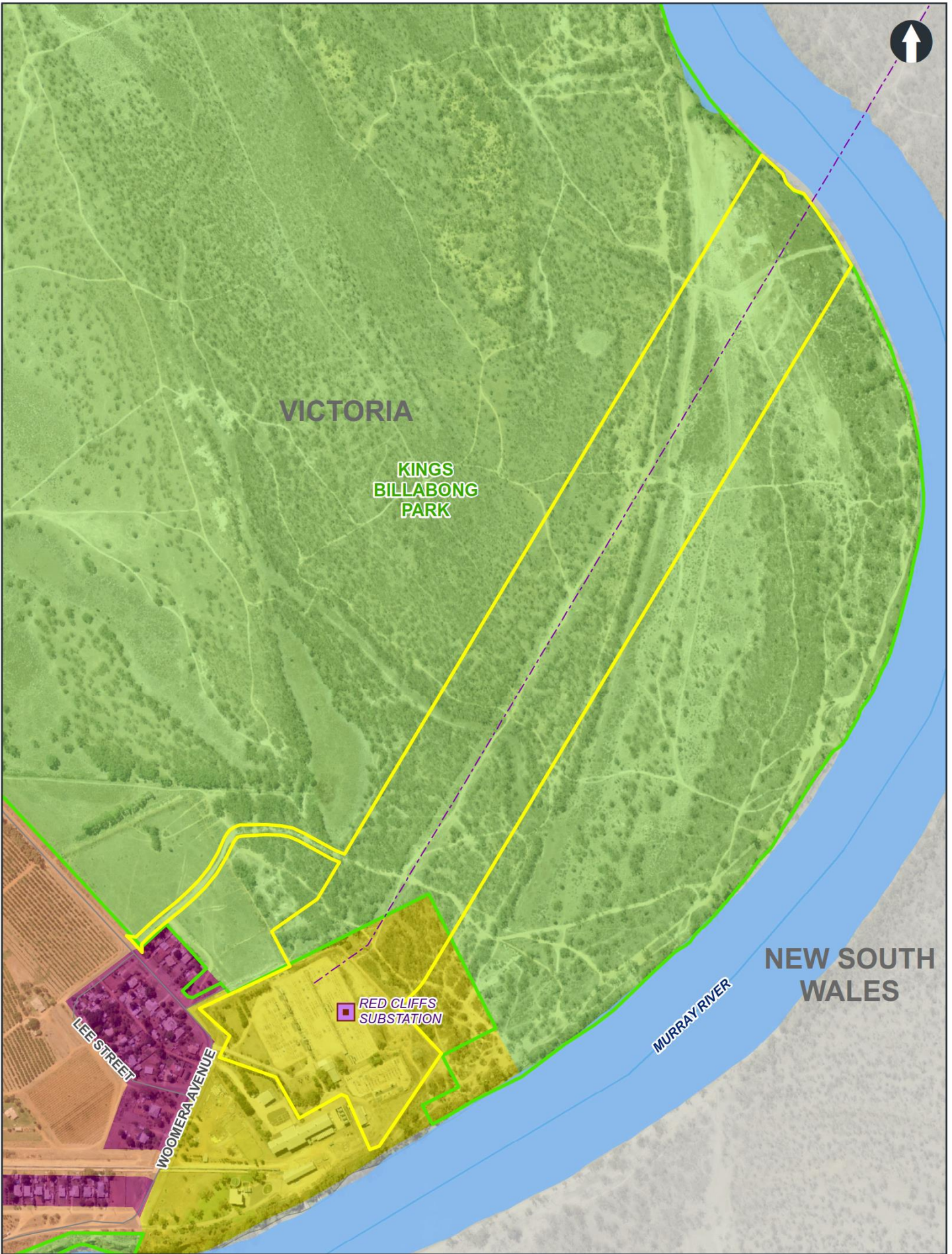
Zones are the primary method of organising land and apply to all land in Victoria. Land is zoned for particular uses, such as residential, commercial and industrial.

The zone that the proposal sits within is shown in Figure 6.1 and assessed in Table 6.12 below.

Table 6.12 Planning zones

PLANNING ZONE	PURPOSE	PERMIT REQUIREMENTS	SUMMARY
<p>Clause 36.03 Public Conservation and Resource Zone (PCRZ)</p>	<p>The purpose of c36.03 is to protect and conserve the natural environment and natural processes for their historic, scientific, landscape, habitat or cultural values; to provide facilities which assist in public education and interpretation of the natural environment with minimal degradation of the natural environment or natural processes; and to provide for appropriate resource based uses.</p>	<p>Use</p> <p>In accordance with c36.03-1 (Table of Uses), a utility installation is a Section 1 Use (Permit not required) provided it is conducted by or on behalf of a public land manager or Parks Victoria under the relevant provisions of the <i>Local Government Act 1989, the Reference Areas Act 1978, the National Parks Act 1975, the Fisheries Act 1995, the Wildlife Act 1975, the Forests Act 1958, the Water Industry Act 1994, the Water Act 1989, the Marine Act 1988, the Port of Melbourne Authority Act 1958 or the Crown Land (Reserves) Act 1978</i> or specified in an Incorporated plan in a schedule to this zone.</p> <p>Building and Works</p> <p>In accordance with c36.03-2, a permit is required to construct a building or construct or carry out works.</p> <p><u>Discussion</u></p> <p>The proposal is not being conducted by or on behalf of Parks Victoria (public land manager for the Kings Billabong Park). Accordingly, a planning permit is required for the use and development of the land for a utility installation.</p> <p>In accordance with c36.03-3, an application for a permit by a person other than the public land manager must be accompanied by the written consent of the public land manager, indicating that the public land manager consents generally or conditionally either:</p> <ul style="list-style-type: none"> — to the application for permit being made — to the application for permit being made and to the proposed use or development. <p>Where there is no public land manager, an application for a permit must be accompanied by the written consent of the Secretary to the DELWP.</p> <p>TransGrid has obtained written consent from DELWP on behalf of Parks Victoria to lodge an application for the use and development of the proposal in Kings Billabong Park (Appendix C).</p>	<p>A planning permit is required for the use and development of the land for the proposal.</p> <p>Written consent from DELWP on behalf of Parks Victoria is required indicating that they generally or conditionally consent to use and development of the land for the proposal.</p>

<p>Clause 37.01 Special Use Zone (SUZ) Schedule 5</p>	<p>The purpose of the SUZ is to recognise or provide for the use and development of land for specific purposes as identified in a schedule to this zone.</p>	<p>Use</p> <p>Under c37.07-1 a permit is not required for any use listed in Section 1 of the Schedule to this zone.</p> <p>In accordance with Section 1 of Schedule 5 Table of uses, the use of land for a utility installation does not require a permit. A condition to a permit not being required is that the use be in accordance with a development plan prepared to the satisfaction of the responsible authority.</p> <p>Building and Works</p> <p>A permit is required to construct a building or construct or carry out works unless the schedule to this zone specifies otherwise. Any requirement in the schedule to this zone must be met.</p> <p>Under c37.01-4 a permit is not required to construct a building or to construct or carry out works in accordance with a development plan, prepared to the satisfaction of the Responsible Authority.</p> <p><u>Discussion</u></p> <p>Development and use within the SUZ relates to the construction of two side by side transmission line monopoles to facilitate electricity transmission to the Red Cliffs sub-station. Mildura Rural City Council approved a Development Plan pursuant to c37 of the MPS in December 2000 for the Murraylink underground high voltage direct current transmission cable between Red Cliffs and Berri in South Australia. Given the Development Plan was approved (2000) it does not consider the EnergyConnect proposal, therefore the current proposal is not ‘in accordance’ with the endorsed Development Plan. Accordingly, a planning permit for use and development is required.</p>	<p>A planning permit is required for the use and development of the land for the proposal pursuant to the SUZ.</p>
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VICTORIA

KINGS
BILLABONG
PARK

NEW SOUTH
WALES

RED CLIFFS
SUBSTATION

LEE STREET

WOOMERA AVENUE

MURRAY RIVER

0 100 200 300 M

Figure 6.1

- | | | |
|---|---------------------------------------|---------------------------------------|
| Proposal study area | Planning zones | Public Conservation and Resource Zone |
| Red Cliffs substation | Farming zone | Special Use Zone - Schedule 5 |
| Existing transmission line infrastructure | General Residential Zone - Schedule 1 | |
| Park/Conservation Reserve | | |

Planning zones

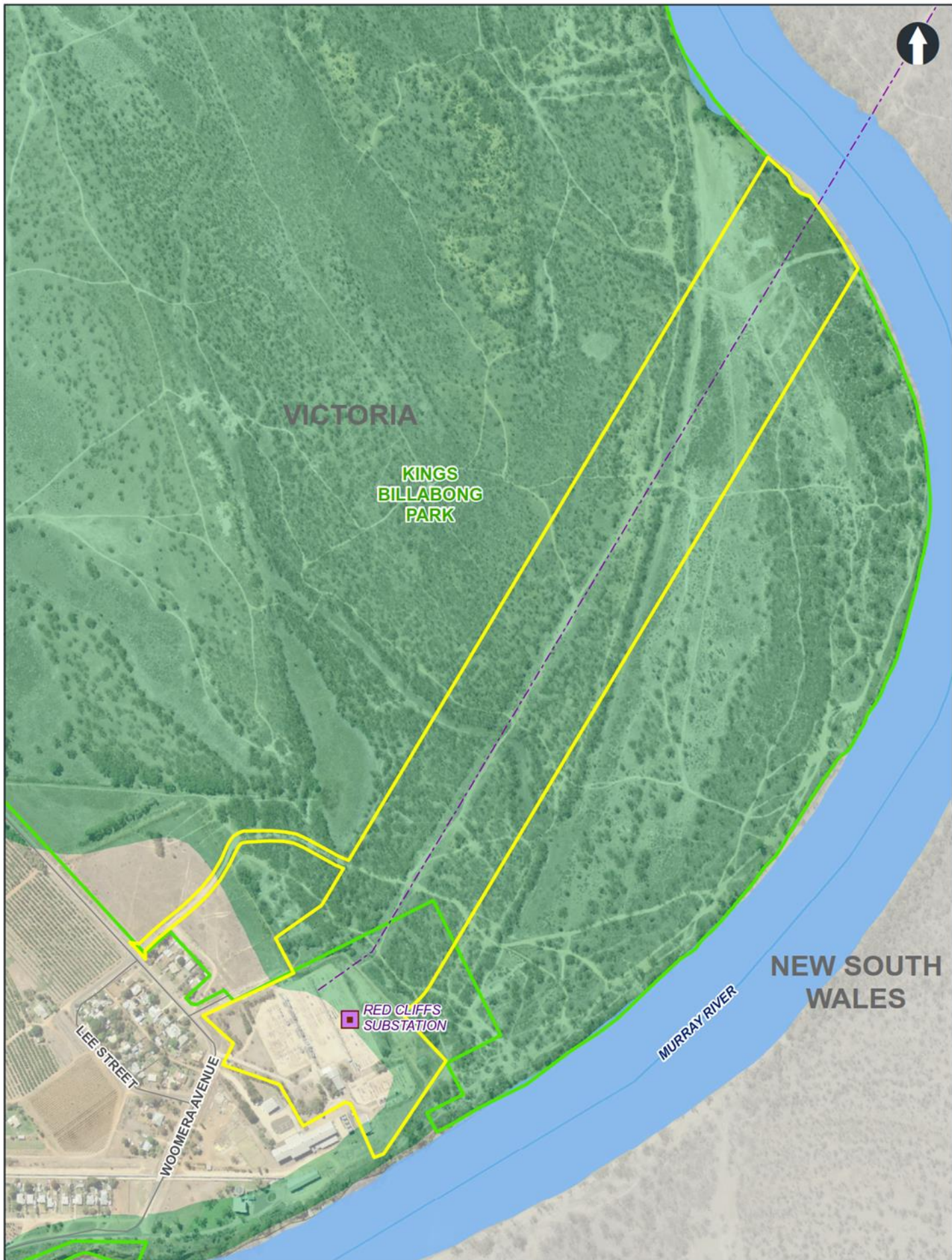
6.1.5 OVERLAYS

Table 6.13 Planning overlays

PLANNING OVERLAY	PURPOSE	PERMIT REQUIREMENTS	SUMMARY
<p>Clause 42.01 Environmental Significance Overlay Schedule 1 (ESO1) Murray River Corridor</p>	<p>The purpose of c42.01 is to identify areas where the development of land may be affected by environmental constraints and to ensure that development is compatible with identified environmental values.</p> <p>Schedule 1 relates to the Murray River Corridor which seeks to protect the environs of the Murray River recognising its importance for nature conservation, flooding, economic development, recreation and tourism; and, but not limited to, restrict inappropriate use and development on land adjoining and near the River.</p>	<p>Building and Works</p> <p>In accordance with c42.01-2, a permit is required to construct a building or carry out works and to remove, destroy or lop any vegetation, including dead vegetation unless the schedule to the overlay states that a permit is not required.</p> <p>In accordance with Schedule 1 to the ESO, a permit is not required for the removal, destruction or lopping of vegetation for public works, including public roads and water authority works.</p> <p><u>Discussion</u></p> <p>TransGrid are considered a public authority under the <i>National Parks Act 1975</i> and so is afforded an exemption from permit requirements for vegetation removal under the ESO. This exemption does not remove the permit requirement to remove, destroy or lop vegetation under c52.17 and would therefore only apply for the removal of non-native vegetation.</p> <p>Relevant environmental assessments including a biodiversity assessment (see Section 7.1) and a surface water assessment (see Section 7.6) have been conducted to ensure that the environmental objectives of ESO1 have been met.</p>	<p>A planning permit is required to construct a building or carry out works.</p>

PLANNING OVERLAY	PURPOSE	PERMIT REQUIREMENTS	SUMMARY
<p>Clause 43.01 Heritage Overlay (HO168) Red Cliffs Main Pumping Station</p>	<p>The purpose of c43.01 is to conserve and enhance heritage places of natural or cultural significance; conserve and enhance those elements which contribute to the significance of heritage places; ensure that development does not adversely affect the significance of heritage places; and to conserve specified heritage places by allowing a use that would otherwise be prohibited if this will demonstrably assist with the conservation of the significance of the heritage place.</p>	<p>Buildings and Works</p> <p>In accordance with c43.01, a permit is required to construct a building or construct or carry out works within the Heritage Overlay.</p> <p><u>Discussion</u></p> <p>Red Cliffs Main Pumping Station is currently listed on the MPS Heritage Overlay as HO168. This site, as mapped on the Heritage Overlay, extends over a parcel of land (SPI 1\TP12019) located at the southern end of the proposal footprint. Site assessments and Mildura Rural City Council liaison has identified, that there is an error in the mapped location of this site on the Heritage Overlay and that a permit from Mildura Rural City Council would not be required as works would not impacts the actual heritage structure.</p>	<p>Mapping of the Heritage Overlay is incorrect and a planning permit is not required to construct a building or carry out works.</p>

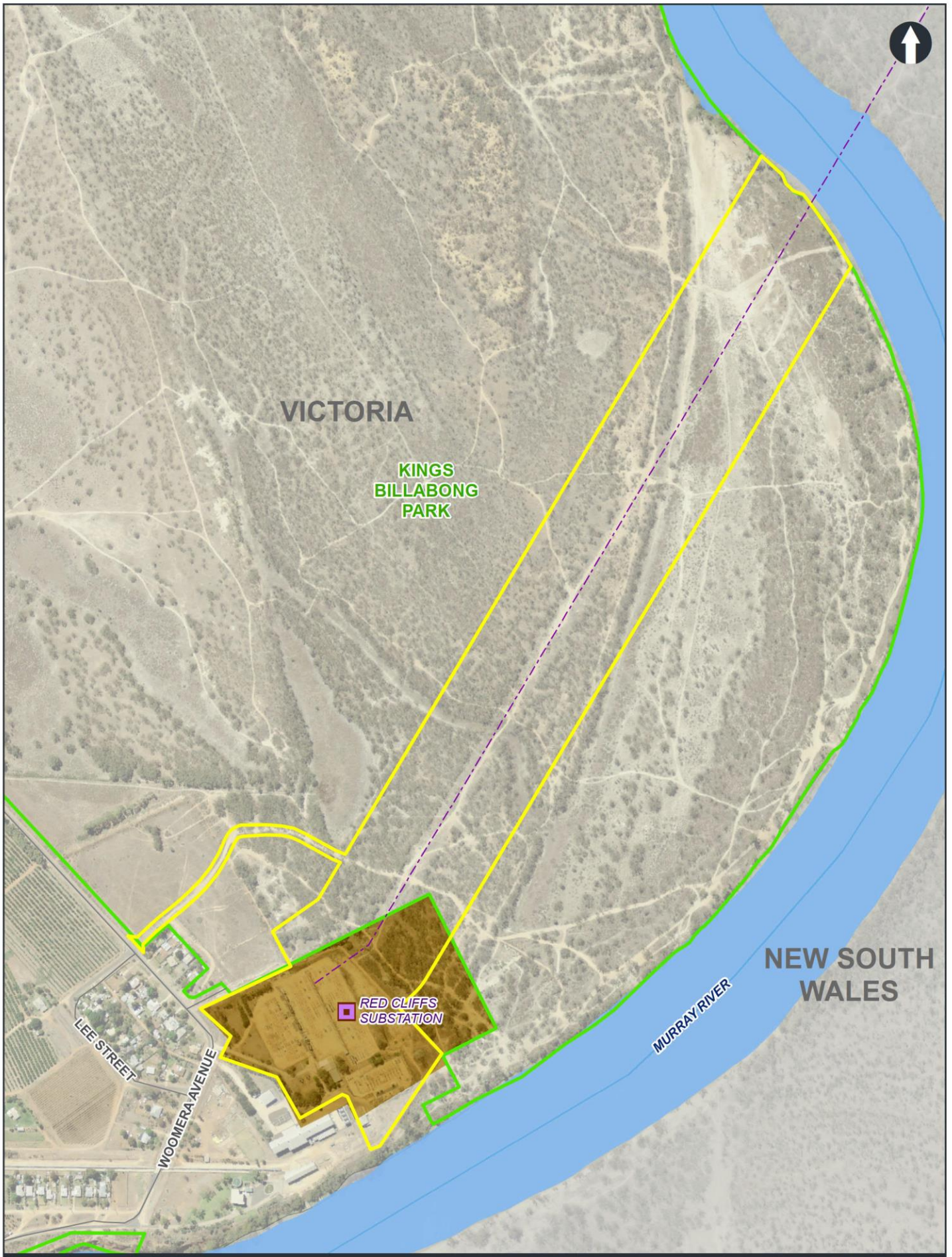
PLANNING OVERLAY	PURPOSE	PERMIT REQUIREMENTS	SUMMARY
<p>Clause 44.04 Land Subject to Inundation Overlay (LSIO)</p>	<p>The purpose of c44.04 is to identify land in a flood storage or flood fringe area affected by the 1 in 100 year flood or any other area determined by the floodplain management authority; to ensure that developments maintain the free passage and temporary storage of floodwaters, minimises flood damage, are compatible with the flood hazard and local drainage conditions and will not cause any significant rise in flood level or flow velocity; and, but not limited to, to ensure that developments maintain or improve river and wetland health, waterway protection and flood plain health.</p>	<p>Buildings and Works</p> <p>In accordance with c44.04-2, a permit is required to construct a building or to construct or carry out works in an LSIO, this includes the erection of power lines which involve the construction of towers or poles.</p> <p>In accordance with c44.03-6 (Referral of Applications), an application must be referred to the relevant floodplain management authority under s55 of the P&E Act unless in the opinion of the responsible authority the proposal satisfies requirements or conditions previously agreed in writing between the responsible authority and the floodplain management authority.</p> <p><u>Discussion</u></p> <p>The proposal has been designed to respond to inundation management objectives. This has been achieved through the use of monopoles, instead of a traditional lattice tower structure, which has reduced the proposal footprint of the proposal. This would minimise water passage and floodwater storage impacts and is compatible with the flood hazard and local drainage conditions as to not cause any significant rise in flood level or flow velocity. Potential impacts to water quality of adjoining waterbodies as a result of the proposal are considered low and would be managed through a CEMP in accordance with relevant EPA guidelines.</p>	<p>A planning permit is required to construct a building or to construct or carry out works.</p>
<p>45.03 Environmental Audit Overlay</p>	<p>The purpose of c45.03 is to ensure that potentially contaminated land is suitable for a use which could be significantly adversely affected by any contamination.</p>	<p>Buildings and Works</p> <p>A preliminary risk screen assessment and environmental audit statement under art 8.3 of the <i>Environment Protection Act 2017</i> is required for development of building or works associated with a sensitive use (residential use, childcare centre, pre-school centre, primary school, secondary school or children's playground).</p> <p><u>Discussion</u></p> <p>A utility installation is not a sensitive use, as such the requirements of c 45.03 do not apply.</p>	<p>A preliminary risk screen assessment and environmental audit statement are not required.</p>



- Proposal study area
- Park/Conservation Reserve
- Red Cliffs substation
- Environmental Significance Overlay - Schedule 1
- Existing transmission line infrastructure

Figure 6.2

Environmental Significance Overlay



0 100 200 300 M

- Proposal study area
- Park/Conservation Reserve
- Red Cliffs substation
- Heritage Overlay (HO168)
- Existing transmission line infrastructure

Figure 6.3
Heritage Overlay



0 100 200 300 M

- Proposal study area
- Park/Conservation Reserve
- Red Cliffs substation
- Land Subject to Inundation Overlay
- Existing transmission line infrastructure

Figure 6.4

Land Subject to Inundation Overlay

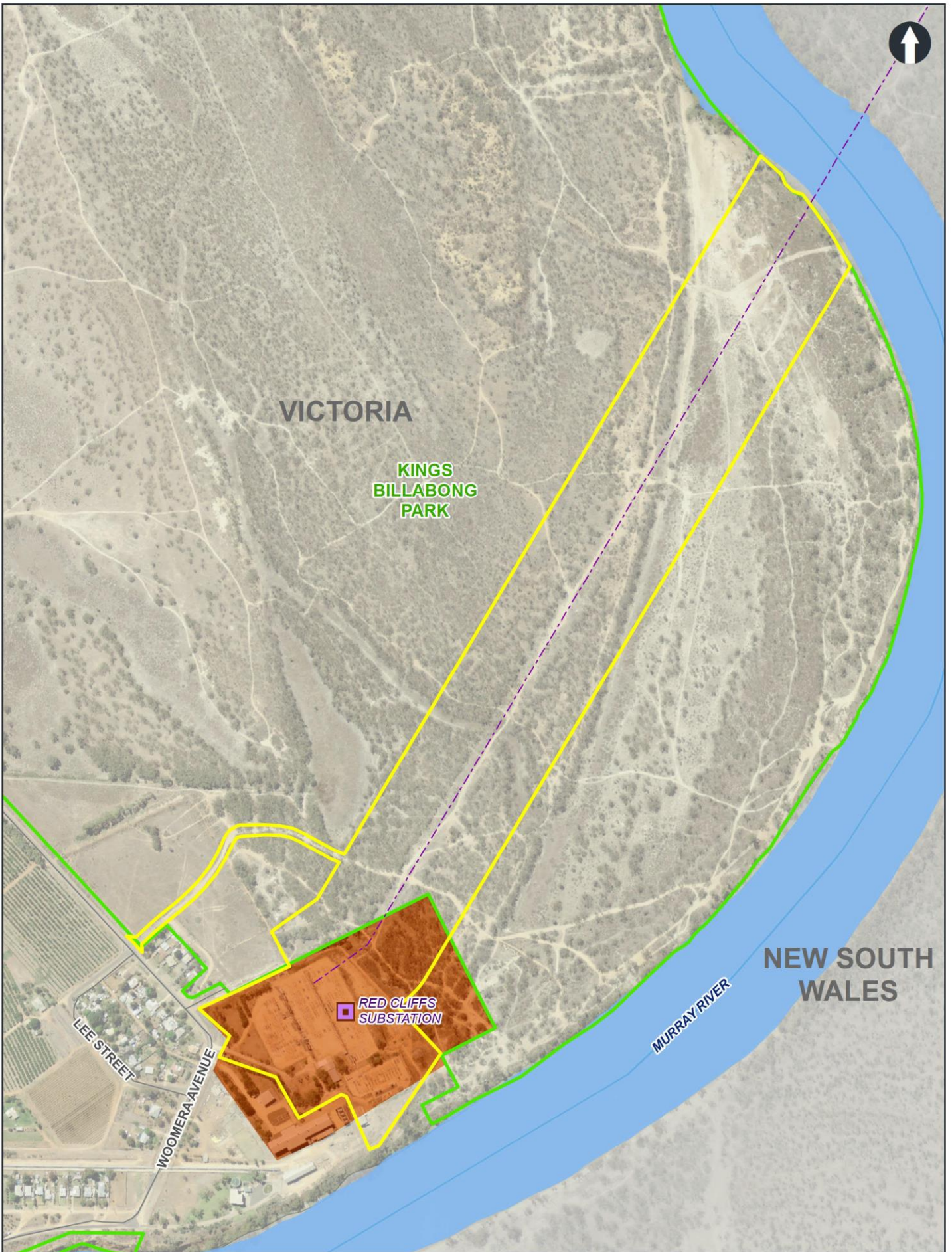


Figure 6.5

Environmental Audit Overlay

- Proposal study area
- Park/Conservation Reserve
- Red Cliffs substation
- Environmental Audit Overlay
- Existing transmission line infrastructure

6.1.6 PARTICULAR PROVISIONS

Particular provisions are specific planning requirements for a range of identified uses and developments. They apply consistently across the State and are common to all planning schemes.

Table 6.14 Particular provisions applicable to the proposal

PROVISION	PURPOSE	PERMIT REQUIREMENTS	SUMMARY
Clause 52.17 Native Vegetation	The purpose of c52.17 is to ensure that there is no net loss to biodiversity as a result of the removal, destruction or lopping of native vegetation. This is achieved by applying the three-step approach (avoid, minimise and provide an offset) in accordance with the <i>Guidelines for the removal, destruction or lopping of native vegetation</i> (DELWP 2017) (Guidelines); and, but not limited to, to manage the removal, destruction or lopping of native vegetation to minimise land and water degradation.	<p>Removal of Native Vegetation</p> <p>In accordance with c52.17-1, a planning permit is required to remove, destroy or lop native vegetation, including dead native vegetation.</p> <p>This does not apply if the table to c52.17-7 specifically states that a permit is not required or to the removal, destruction or lopping of native vegetation specified in the schedule to this clause.</p> <p>The Schedule provides an exemption from needing a permit for the removal of native vegetation associated with a utility installation to the minimum extent necessary:</p> <ul style="list-style-type: none"> — to maintain the safe and efficient function of a Minor Utility Installation; or — by or on behalf of a utility service provider to maintain or construct a utility installation in accordance with the written agreement of the Secretary to the Department of Environment, Land, Water and Planning (as constituted under Part 2 of the Conservation, Forest and Lands Act 1987). <p>As neither of these circumstances apply then the exemption does not apply to the proposal.</p> <p>An application to remove, destroy or lop native vegetation must be supported by an ecological assessment that takes consideration the steps required to avoid, minimise and offset the loss of vegetation.</p> <p><u>Discussion</u></p> <p>An “avoid and minimise” design approach has been adopted and has culminated in the use of the existing transmission corridor as much as practically possible. Native vegetation impact has been incorporated into the design after thorough consideration of constructability issues and undertaken in consultation with the proposal ecologist and TransGrid.</p>	A planning permit is required to remove, destroy or lop native vegetation.

PROVISION	PURPOSE	PERMIT REQUIREMENTS	SUMMARY
		<p>The removal of 5.419 hectares of vegetation, consisting of the full removal of 2.042 hectares and partial removal of 3.377 hectares of vegetation would be required for the proposal.</p> <p>A flora and fauna assessment (see Section 7.1) has been conducted to ensure that the requirements of c52.17 have been met.</p> <p><u>Vegetation offset requirements are identified in the flora and fauna impact assessment.</u></p>	

6.1.7 GENERAL PROVISIONS

The general provisions also apply in addition to the requirements of a zone or overlay. Those considered relevant to the proposal are outlined below.

Table 6.15 Particular provisions applicable to the proposal

PROVISION	PURPOSE	PERMIT REQUIREMENTS	SUMMARY
<p>Clause 63 Existing Use Rights</p>	<p>Clause 63 of the VPPs outlines the approach to existing use rights in Victoria. Existing use rights can apply in some circumstances even where a planning scheme prohibits or triggers a permit for an existing land use.</p>	<p>Relying on Existing Use Rights</p> <p>In accordance with c63.01, existing use rights will accrue in a number of circumstances where:</p> <ul style="list-style-type: none"> — the land has been continuously used for the particular purpose for a period of greater than 15 years, and such use has not stopped for a continuous period of two years, or has stopped for two or more periods which together total two years in any three year period; or — the use is a lawful continuation by a utility service provider or other private body of a use previously carried on by a Minister, government department or public authority, even where the continuation of the use is no longer for a public purpose. <p>In accordance with c63.02, the use of land can be defined in order to assess the extent of any existing use right. The use is defined by the purpose of the ‘actual’ use at the relevant date and not by the definition in the VPPs or in Section 1, 2 or 3 of the table of uses contained within the zone.</p>	<p>Existing use rights may apply to the proposal, however TransGrid do not seek to rely upon existing use rights for the purpose of this application.</p>

PROVISION	PURPOSE	PERMIT REQUIREMENTS	SUMMARY
		<p><u>Discussion</u></p> <p>As the proposal is not being conducted by or on behalf of the public land manager, a utility installation defaults to a Section 2 Use in accordance with the PCRZ.</p> <p>Clause 63.05 of the MPS sets out provisions for existing uses and states that a use in Section 2 or 3 of a zone for which an existing use right is established may continue provided:</p> <ul style="list-style-type: none"> — no building or works are constructed or carried out without a permit. A permit must not be granted unless the building or works complies with any other building or works requirement in this scheme — any condition or restriction to which the use was subject continues to be met. This includes any implied restriction on the extent of the land subject to the existing use right or the extent of activities within the use — the amenity of the area is not damaged or further damaged by a change in the activities beyond the limited purpose of the use preserved by the existing use right. <p>TransGrid does not seek to exercise existing use rights for this application but does note that aerial photography indicates that the current use has operated from the site for more than 15 years.</p> <p>In accordance with c63, the use could continue provided that any conditions or restrictions on the current use are met and subject to obtaining a permit for new buildings and works.</p>	

6.1.8 DECISION GUIDELINES

In accordance with the provisions of c65.01, before deciding on an application or approval of a plan, the responsible authority must also consider relevant decision guidelines. Table 6.16 below outlines the assessment of the proposal against this Clause.

Table 6.16 Clause 65 decision guidelines assessment

DECISION GUIDELINE	ASSESSMENT
The matters set out in Section 60 of the Act	The report has been written in accordance with the requirements of the P&E Act and addresses the requirements of the MPS.
The Municipal Planning Strategy and the Planning Policy Framework	Refer to Section 6.1.1 and 6.1.2 of this report for discussion of PPF, LPPF and MSS.
The purpose of the zone, overlay or other provision.	Refer to Section 6.1.4 and 6.1.5 of this report for discussion of zones, overlays and other provisions.
Any matter required to be considered in the zone, overlay or other provision.	N/A
The orderly planning of the area.	The proposal supports the provision of orderly infrastructure in the area and secures power supply to the National Energy Market through developing a stronger energy network connection with other states such as New South Wales and creating a more reliable and sustainable energy supply for Victoria.
The effect on the amenity of the area.	The proposal would not have an increased impact on the amenity of the reserve as it is to be installed adjacent to the existing infrastructure (which will be decommissioned and removed). However, the removal of vegetation may impact the local landscape character.
The proximity of the land to any public land.	The proposal lies directly within public land.
Factors likely to cause or contribute to land degradation, salinity or reduce water quality.	The proposal would not have any adverse impacts to land degradation, salinity or reduce the water quality of the area.
Whether the proposed development is designed to maintain or improve the quality of stormwater within and existing on the site.	N/A

DECISION GUIDELINE	ASSESSMENT
The extent and character of native vegetation and the likelihood of its destruction.	<p>There are a number of threatened flora species recorded or that have a moderate and high likelihood of occurrence. A review of the Ecological Vegetation Class (EVC) in the areas predict the removal of 5.419 hectares of vegetation, consisting of the full removal of 2.042 hectares and partial removal of 3.377 hectares of vegetation. Including the following EVC:</p> <ul style="list-style-type: none"> — Grassy Riverine Forest EVC 106 — Lignum Swampy Woodland EVC 823 — Sub-Saline Depression Shrubland EVC 820 — Lignum Shrubland EVC 808 — Riverine Chenopod Woodland EVC 103 — Intermittent Swampy Woodland EVC 813 — Semi-Arid Chenopod Woodland EVC 98 <p>This is discussed in further detail in Section 7.1.</p>
Whether native vegetation is to be or can be protected, planted or allowed to regenerate.	Through a thorough ecology field assessment, and resulting design drawings, it is believed that to the maximum extent possible, vegetation removal has been avoided. Allowance for regeneration is provided following construction.
The degree of flood, erosion or fire hazard associated with the location of the land and the use, development or management of the land so as to minimise any such hazard.	<p>There is little to no risk of flood or erosion occurring as a result of the proposal.</p> <p>The proposal would not increase the risk of fire hazard in the area.</p>
The adequacy of loading and unloading facilities and any associated amenity, traffic flow and road safety impacts.	N/A

6.1.9 SUMMARY OF PLANNING PERMIT REQUIREMENTS

Table 6.17 summaries the key planning permit requirements for the proposal.

Table 6.17 Summary of planning permit requirement

PLANNING PROVISION	SUMMARY OF PLANNING PERMIT REQUIREMENTS
Clause 36.03 Public Conservation and Resource Zone (PCRZ)	<p>A planning permit is required for the use and development of the land for the proposal.</p> <p>Written consent from Parks Victoria is required indicating that they generally or conditionally consent to use and development of the land for the proposal.</p>
Clause 37.01 Special Use Zone (SUZ) Schedule 5	A planning permit is required for the use and development of the land for the proposal.
Clause 42.01 Environmental Significance Overlay Schedule 1 (ESO1)	A planning permit is required to construct a building or carry out works.

Clause 44.04 Land Subject to Inundation Overlay (LSIO)	A planning permit is required to construct a building or to construct or carry out works.
Clause 52.17 Native Vegetation	A planning permit is required to remove, destroy or lop native vegetation.

7 ENVIRONMENTAL ASSESSMENT

This section summarises the technical assessments to inform primary and secondary consents as well as guidance to the development of the proposal Construction Environmental Management Plan (CEMP). Copies of technical reports are provided in Appendix D to Appendix J with a draft CEMP provided as Appendix K.

7.1 BIODIVERSITY

The study area is largely comprised of native vegetation, and despite being dissected by numerous tracks and being impacted by previous clearing for the existing transmission line, is in good condition. Seven EVCs were recorded across the proposal study area which covers a total area of 26.191 ha. No scattered trees were recorded although 39 large trees were mapped.

Vegetation clearance impacts have been classified into two criteria – full and partial clearance. Full clearance is the total removal of vegetation for works associated with construction activities. Partial clearance refers to vegetation removal to achieve minimum clearances from conductors, the partial clearance only applies to vegetation with growth height of greater than four metres in height in the transmission line corridor. The removal of 5.419 hectares of vegetation, consisting of the full removal of 2.042 hectares of vegetation and partial removal of 3.377 hectares of vegetation will be required for the proposal. The breakdowns against each EVC are detailed below in Section 7.1.1.

Nineteen flora species of conservation significance were recorded. Ten of these are FFG Act listed and the remainder are advisory list species only. No EPBC Act listed flora were recorded. There are a number of FFG Act and advisory list species that were not recorded but may still occur (likely in low numbers if present) in the study area.

Three fauna species of conservation significance were recorded: Brown Treecreeper, Lace Monitor, and Yellow-faced Whip-snake. An additional 34 fauna species may occur at least periodically although were not recorded in current surveys. This includes two species listed as vulnerable under the EPBC Act and two listed as migratory.

No EPBC Act or FFG Act listed communities were recorded within the study area.

Through a collaborative process with project designers, avoid and minimise measures have been incorporated into the design through the siting of monopole pads and temporary proposal footprints. Transmission poles were specifically designed to be located in positions that avoided and minimised impacts to native vegetation and threatened species identified during field surveys as far as practicable. During the construction, implementation of no-go zones will also avoid and minimise impacts to native vegetation outside of the proposal footprint (see Appendix D).

7.1.1 NATIVE VEGETATION

The vegetation in the study area is best described as remnant patches of native vegetation. Much of the study area supports a natural overstorey, although some areas have been cleared of this overstorey (i.e. under the existing transmission line) and some areas are naturally mostly treeless.

GRASSY RIVERINE FOREST EVC 106

This EVC was mapped along the banks of the Murray River at the northern extent of the study area. It is described in the Robinvale Plains Bioregion EVC benchmarks (DSE 2004a) as:

“Occurs on the floodplain of major rivers, in a slightly elevated position where floods are infrequent, on deposited silts and sands, forming fertile alluvial soil. River Red Gum forest to 25 m tall with a ground layer dominated by tussock-forming graminoids. Occasional tall shrubs present.”

One patch of 0.115 hectares of this EVC was mapped within the study area in a narrow band along the Murray River. It supported a number of large old River Red Gums in the canopy and an understorey of mixed grasses, sedges and herbs, including *Phragmites australis*, *Cyperus gymnocaulos*, Native Couch *Cynodon dactylon* var. *pulchellus* and *Atriplex semibaccata*. Tangled Lignum *Muehlenbeckia florulenta* was also present, particularly on the boundary with the adjacent EVC: Lignum Swampy Woodland. A high number and cover of introduced grasses and other weeds was recorded in this EVC when compared to other EVCs at the study area, including *Vulpia* sp. *Hordeum* sp. and *Rumex* sp. Of the total mapped area within the study area, partial clearance of 0.009 hectares would be required for the construction of the proposal.

LIGNUM SWAMPY WOODLAND EVC 823

This EVC is to the north of the study area, close to the River but behind the Grassy Riverine Forest. It is described in the benchmarks in the following way:

“Understorey dominated by Lignum, typically of robust character and relatively dense (at least in patches), in association with a low Eucalypt and/or Acacia woodland to 15 m tall. The ground layer includes a component of obligate wetland flora that is able to persist even if dormant over dry periods.”

Two patches of this EVC were mapped on site for a total of 1.696 hectares. They supported an understorey dominated by Tangled Lignum and other native species with several large, mainly dead hollow emergent trees. The few remaining living trees were mostly Black Box. A number of small native herbs and small shrubs were recorded in the gaps between lignum, including Nitre Goosefoot *Chenopodium nitriaceum*, Hedge Salt-bush *Rhagodia spinescens*, Nodding Salt-bush *Einadia nutans*, and Peppergrass *Lepidium pseudohyssopifolium*. Some weeds were recorded including Cat's Ear *Hypochaeris radicata*, as well as *Vulpia* sp and *Hordeum* sp. Of the total mapped area within the study area, partial clearance of 0.295 hectares and full clearance of 0.220 hectares would be required for the construction of the proposal.

SUB-SALINE DEPRESSION SHRUBLAND EVC 820

The next EVC inland from those described above is Sub-saline Depression Shrubland, occurring at a point of low elevation within the landscape. It is described in the EVC benchmarks (DSE 2004a) as:

A low open shrubland/herbland dominated by chenopods and succulents and occurring on the highest terraces of the former (i.e. pre1750) Murray River floodplain in far North-West Victoria. It occupies semi-saline treeless pans in low-lying areas within Riverine Chenopod Woodland on very heavy and mildly saline clay soils.”

Three patches of this EVC totalling 1.819 hectares was mapped within the study area. It was absent of canopy layer and consisted mainly of Streaked Copperburr *Sclerolaena tricuspis*, Prickly Saltwort *Salsola tragus* and Tangled Lignum, with some *Sarcozona praecox* and other smaller chenopods and succulents. Of the total mapped area within the study area, full clearance of 0.282 hectares would be required for the construction of the proposal.

LIGNUM SHRUBLAND EVC 808

This EVC also occurs on low elevation within the study area, it is described in the benchmarks (DSE 2004a) as:

“Relatively open shrubland of species of divaricate growth form. The ground-layer is typically herbaceous or a turf grassland, rich in annual/ephemeral herbs and small chenopods. Characterised the open and even distribution of relatively small Lignum shrubs. Occupies heavy soil plains along Murray River, low-lying areas on higher-level (but still potentially flood-prone) terraces.”

A total of 3.042 ha of this EVC were recorded within the study area. This EVC supported Tangled Lignum, as well as Blackseed Glasswort *Tecticornia pergranulata*, Streaked Copperburr, Prickly Saltwort and several other chenopods and herbs common across the study area. Of the total mapped area within the study area, partial clearance of 0.001 hectares and full clearance of 0.046 hectares would be required for the construction of the proposal.

RIVERINE CHENOPOD WOODLAND EVC 103

The next EVC to the south west (inland) and elevated above the swampy floodplain of the previous EVCs is Riverine Chenopod Woodland EVC 103. It is the dominant EVC across the study area with 16.953 hectares mapped. It is described in the benchmarks (DSE 2004a) as:

“Eucalypt woodland to 15 m tall with a diverse shrubby and grassy understorey occurring on most elevated riverine terraces. Confined to heavy clay soils on higher level terraces within or on the margins of riverine floodplains (or former floodplains), naturally subject to only extremely infrequent incidental shallow flooding from major events if at all flooded.”

It supported a canopy almost entirely dominated by Black Box with a shrubby and chenopod understorey, including species such as Old-man Saltbush *Atriplex nummularia*, Sticky Hop-bush *Dodonaea viscosa*, Inland Pigface *Carpobrotus modestus*, Spreading Emu-bush *Eremophila divaricata* subsp. *divaricata*, and Hedge Saltbush.

Within the existing powerline corridor, the canopy has been cleared however the understorey remains in good condition. Very few weeds were observed in this EVC. Of the total mapped area within the study area, partial clearance of 2.758 hectares and full clearance of 1.475 hectares would be required for the construction of the proposal.

INTERMITTENT SWAMPY WOODLAND EVC 813

This EVC was mapped along a dry creek bed or billabong running through the middle of the study area. It is described in the benchmarks (DSE 2004a) as:

“Eucalypt woodland to 15 m tall with a variously shrubby and rhizomatous sedgy - turf grass understorey, at best development dominated by flood stimulated species in association with flora tolerant of inundation. Flooding is unreliable but extensive when it happens. Occupies low elevation areas on river terraces (mostly at the rear of point-bar deposits or adjacent to major floodways) and lacustrine verges (where sometimes localised to narrow transitional bands). Soils often have a shallow sand layer over heavy and frequently slightly brackish soils.”

A total of 1.375 hectares of this EVC was mapped within the study area. It supports a canopy of River Red Gums and Black Box. At the time of assessment, the sparse understorey was dominated by Common Blown-grass *Lachnagrostis filiformis* s.l with Nodding Salt-bush and other small shrubs, chenopods and herbs. The River Red Gums in the canopy have largely died back and remain as stags, likely due to lack of water, indicating a change in the flooding regime of the creek line. Small treeless areas in the centre of the dry creek bed were mapped as separate patches/habitat zones of this EVC and scored separately. Of the total mapped area within the study area, partial clearance of 0.314 hectares and full clearance of 0.016 hectares would be required for the construction of the proposal.

SEMI-ARID CHENOPOD WOODLAND EVC 98

This EVC was mapped in the south west of the study area around the substation. It is described in the benchmarks (DSE 2004a) as:

“Sparse, low non-eucalypt woodland to 12 m tall of the arid zone with a tall open chenopod shrub-dominated understorey or a treeless, tall chenopod shrubland to 3 m tall. This EVC may occur as either a woodland (typically with a very open structure but tree cover >10%) or a shrubland (tree cover <10%) with trees as an occasional emergent.”

A total of 1.191 hectares of this EVC was recorded within the study area, with some patches supporting canopy and the remainder comprised of modified or regenerating understorey only. The patches of this EVC within the substation fence were assessed from outside the fence only. As such, full lifeform checklists could not be undertaken for the patches of this EVC which supported canopy, as they occurred within the fence only. However, the canopy was predominantly Belah *Casuarina pauper*, with a shrub and chenopod-dominated understorey. The cleared/recolonising Semi-arid Chenopod Woodland to the west of the substation (outside of the study area) was used to indicatively assess the

understorey. In this area, understorey species were similar to the cleared Riverine Chenopod Woodland in the existing corridor, although less diverse and with a higher cover of weeds, indicative of past disturbance. Of the total mapped area within the study area, full clearance of 0.002 hectares would be required for the construction of the proposal.

7.1.2 FLORA AND FAUNA GUARANTEE ACT

No FFG Act listed communities have been assessed as occurring within the study area and having the potential to be impacted by the proposal. The flora and fauna with the potential to occur and be impacted are addressed in the following sections. This excludes MNES which have an FFG Act status as they are addressed in the previous section.

Three FFG listed flora species were recorded within the study area. The numbers of each species likely to be impacted are provided in Table 7.1.

Table 7.1 FFG listed flora recorded in study area

SCIENTIFIC NAME	COMMON NAME	FFG ACT	STATUS	APPROX. COUNT IN STUDY AREA	APPROX COUNT IN AREA TO BE FULLY CLEARED	APPROX COUNT IN AREA TO BE CLEARED ABOVE 4 m ¹
<i>Asperula gemella</i>	Twin-leaf Bedstraw	Listed	Endangered	1	1	0
<i>Atriplex limbata</i>	Spreading Saltbush	Listed	Vulnerable	551	15	201
<i>Atriplex rhagodioides</i>	Silver Saltbush	Listed	Vulnerable	1	0	1
<i>Calotis cuneifolia</i>	Blue Burr-daisy	Listed	Endangered	85	1	0
<i>Dianella porracea</i>	Riverine Flax-lily	Listed	Critically endangered	31	3	9
<i>Eragrostis lacunaria</i>	Purple Love-grass	Listed	Endangered	7	1	0
<i>Eragrostis setifolia</i>	Bristly Love-grass	Listed	Endangered	19	0	5
<i>Eremophila maculata subsp. maculata</i>	Spotted Emu-bush	Listed	Rare	1	0	0
<i>Malacocera tricornis</i>	Goat Head	Listed	Vulnerable	80	0	12
<i>Minuria integerrima</i>	Smooth Minuria	Listed	Vulnerable	8	0	2
<i>Roepera angustifolia</i>	Scrambling Twin-leaf	Listed	Endangered	5	2	10

¹ FFG species in *approx count in area to be cleared above 4 m* column do not exceed 4 m in height and therefore would not require clearing for maintenance purposes.

SCIENTIFIC NAME	COMMON NAME	FFG ACT	STATUS	APPROX. COUNT IN STUDY AREA	APPROX COUNT IN AREA TO BE FULLY CLEARED	APPROX COUNT IN AREA TO BE CLEARED ABOVE 4 m ¹
<i>Sarcozona praecox</i> ²	Sarcozona	Listed	Endangered	133,081	11,477	21,399
<i>Swainsona microphylla</i>	Small-leaf Swainson-pea	Listed	Endangered	15	1	0

Under the FFG Act, a permit from DELWP is also required to ‘take’ (to kill, injure, disturb or collect) listed flora species that are members of protected taxa from public land. A permit to ‘take’ under the FFG Act will be required for the *Asperula gemelli*, *Atriplex limbata*, *Calotis cuneifolia*, *Dianella porracea*, *Eragrostis lacunaria*, *Roepera angustifolia*, *Sarcozona praecox* and *Swainsona microphylla* within areas that would be fully cleared prior to commencement of construction.

7.2 BUSHFIRE RISK

A Bushfire Management Statement has been developed to meet the requirements of the MPS Bushfire Management Overlay (BMO). The proposal footprint is not covered by the BMO, however the Bushfire Management Statement has been developed in response to clauses 44.06 and 53.02 of the MPS. The Bushfire Management Statement is also accompanied by:

- a bushfire hazard landscape assessment including a plan that describes the bushfire hazard of the general locality more than 150 metres from the site. Photographs or other techniques may be used to assist in describing the bushfire hazard
- a bushfire hazard site assessment including a plan that describes the bushfire hazard within 150 metres of the proposed development. The description of the hazard must be prepared in accordance with Sections 2.2.3 to 2.2.5 of A.S.3959 – 2018 ‘Construction of Buildings in Bushfire Prone Areas’ excluding paragraph (a) of section 2.2.3.2. Photographs or other techniques may be used to assist in describing the bushfire hazard.

7.2.1 BUSHFIRE HAZARD LANDSCAPE ASSESSMENT

The Kings Billabong Park dominates the landscape for a substantial area to the North West of the proposal study area and for a small portion of land immediately to the East. The landscape beyond the proposal study area assessed in the site assessment contains generally the same vegetation communities recorded within the proposal study area. These vegetation communities do provide a bushfire hazard.

The land is generally level with no notable slope aspects.

The Murray River is immediately to the North, approximately 300 metres to the East and to the south (beyond the Red Cliffs substation) of the proposal study area. Typical river widths in the area are greater than 160 metres.

A small residential community is located to the South West, off Woomera Avenue, and agricultural lands are dominant in the lands further South West of the proposal study area.

² Estimated based on average number counted in four 10 x 10 m quadrats and extrapolated across the area of the EVC, and area of Riverine Chenopod Woodland EVC to be impacted in each impact category

7.2.1.1 VEGETATION AND TOPOGRAPHY

Vegetation is classified from Table 2.3 – Classification of Vegetation from AS3959 – 2018 – ‘Construction of Buildings in Bushfire Prone Areas’. All the vegetation is classed as bushfire prone and a high bushfire hazard.

The vegetation has been assessed for the extent of the proposal study area and is described within Section 7.1.1. The land within the proposal study area forms the flood plain to the Murray River and is level with no notable slope aspects.

7.2.1.2 BUSHFIRE HISTORY

The Victoria Department of Environment, Land, Water & Planning Spatial Datamart (accessed October 2020) identifies that the last bushfire to impact the vegetation immediately adjacent to the west of proposal study area was in 2001 with fires occurring further to the west of the proposal study area in Kings Billabong Park in 2004 and 2018.

7.2.1.3 REFUGE OPTIONS

A safe refuge is available within the Woomera Avenue road reserve on the southern side, opposite the Red Cliffs substation (Terminal Station) compound to the south-western side of the proposal study area.

7.2.1 PROPOSED MANAGEMENT MEASURES FOR RISK MANAGEMENT

The following management protocols would be implemented by the appointed contractor and TransGrid to minimise bushfire risks associated with the proposal:

Construction phase:

- a Fire Safety Management Plan would be developed for the proposal, including the TransGrid Fire Risk Assessment and Control Measures (FRACM) requirements, as part of the proposal response plan. The purpose of the plan would be to ensure the safety and protection of all personnel, infrastructure, plant and equipment from the direct effects of fire resulting from proposal activities and/or from any threat of bushfire which might occur
- work practices within the control of the contractor would be controlled by the application of the Fire Safety Work Instruction and the TransGrid FRACM. Bushfire Threats would be managed by the implementation of an Emergency Response Plan with preparation and prevention measures detailed in the Fire Safety Management plan
- a Permit to Work system would be adopted during construction and commissioning phases. A Permit to Work would be required for high risk activities which have the potential to create fire, such as hot works
- all hot works would be completed in accordance with the Welding and Cutting, Spray Painting and Abrasive Blasting Work Instruction and be in compliance with TransGrid Hot Work and Fire Risk Work protocols (FRACM).

Operations phase:

- the proposal would be designed, operated and maintained in accordance with TransGrid’s Bushfire Risk Management Plan. This includes reduction in fuel loads in the transmission line corridor and inspections of infrastructure.

7.3 LANDSCAPE AND VISUAL AMENITY

7.3.1 LANDSCAPE IMPACT

The landscape and visual study area includes landscapes of local and regional landscape sensitivity which would be directly impacted by the removal of vegetation and changes to the character of recreational areas as a result of the proposal. Overall, these impacts would be low during construction and operation of the proposal. This is due to the relatively small area of direct impact with the proposal replacing and being located alongside an existing transmission line corridor, and within the context of other existing electricity infrastructure.

The proposal would require some vegetation clearing and trimming but minimal landform changes. The proposal avoids impacts upon the important landscape features, by being set back from the river edge and the distinctive red cliffs. Those

visual impacts which have been identified have a low landscape impact during construction, and low landscape impact during operations. There would be no direct impact upon the regionally sensitive landscapes of the Red Cliffs Scenic Reserve, and therefore a negligible landscape impact during operation.

7.3.2 VISUAL IMPACT

Overall, the visual impacts of the proposal are relatively low and have a relatively small influence as there are a relatively small number of receptor locations.

During construction there would be negligible to low visual impacts from the Red Cliffs Scenic Reserve. The low impact would be experienced from the viewing platform where the view is of greater sensitivity and the vantage point provides greater visibility of the proposal. There would also be low visual impact experienced in views from the recreational areas and tracks within the Kings Billabong Park, in views from vessels within the Murray River and in views from the air. This low impact is mainly due to the removal of vegetation at each structure location and scale of the machinery and transmission line structures, which would be seen rising above the vegetation which surrounds the transmission line corridor. These impacts would be temporary and for a reasonably short duration.

During operations there would be a low visual impact in views from the Red Cliffs Scenic Reserve lookout, from within the Kings Billabong Park and from the Murray River. This impact would be due to the larger scale of the transmission line structures, which would be taller and have a greater visual mass.

7.3.2.1 SUMMARY OF ASSESSMENT

Visual and landscape impacts from the construction and operation of the project would be low due to presence of existing transmission line infrastructure. While the impacts are low, the assessment proposes mitigations that are aligned with the avoid and minimise principals described in Section 7.1 to: seek opportunities to retain existing trees during the detailed design and construction phase, utilise existing access tracks to minimise vegetation removal, minimise ground disturbance to existing landforms and to maintain access to recreational areas during construction.

7.4 HERITAGE

7.4.1 ABORIGINAL CULTURAL HERITAGE

A Cultural Heritage Management Plan (CHMP) has been prepared and endorsed for the proposal. The endorsement was provided by the First People of the Millewa-Mallee Aboriginal Corporation on the 26 May 2021 (CHMP No. 17314).

The CHMP included desktop, visual inspections and intrusive investigations. The results of the investigations are detailed below.

7.4.1.1 DESKTOP ASSESSMENT

The Desktop Assessment has established that three previously recorded Aboriginal places are present within the proposal study area. These recorded places include:

- VAHR 7329-0049 – a stone artefact scatter/earth feature comprising <10 stone artefacts, fragments of burnt clay and freshwater mussel over a 100 x 30 m area in the central north part of the proposal footprint. The site was located on a rise 430 m from the Murray River and was exposed on erosion scars and a vehicle track
- VAHR 7329-0051 – a stone artefact scatter/shell midden/earth feature comprising an unspecified number of stone artefacts, burnt clay and freshwater mussel over a 1,250 x 200 m area, which partially extends into the north western part of the proposal footprint. The site was located on the banks of the Murray River and adjoining floodplain and had been disturbed by vehicle tracks. Some in situ cultural material was observed eroding from the bank of the Murray River, while elsewhere material was located in an eroded context

- VAHR 7329-0293 – an earth feature/shell midden/scarred tree. The shell midden/earth feature comprises a large scatter of shell and burnt clay fragments over a 440 x 40 m area which partially extends into the southern part of the proposal footprint. Where it was observed eroding from the riverbank, the shell midden material was considered to be in situ, and was dated to 3,710–3,555 cal. years BP. The scarred tree component was on a Black Box and occurs outside of the proposal footprint.

7.4.1.2 STANDARD ASSESSMENT

Aboriginal cultural heritage in the form of 37 surface stone artefacts, four scarred trees, two exposures of shell, and a number of burnt clay balls and burnt stone fragments were identified in the proposal footprint during the Standard Assessment. This cultural material was identified across all five landforms within the proposal footprint. The effective survey coverage results indicate that stone artefact densities were relatively low, at an average of 1 per 4,790.84 m². The point bar and escarpment landforms each had the highest stone artefact densities, at 1 per 3,143.01 m² and 1 per 4,145.17 m² respectively.

The Standard Assessment identified that the proposal footprint contained Aboriginal cultural heritage, with potential to contain further Aboriginal cultural heritage, most likely in the form of stone artefacts, shell midden material, and hearths (burnt clay balls and burnt stone fragments). Although possible, it is unlikely that additional scarred trees would occur in the proposal footprint. The additional cultural heritage is expected to occur in surface and potentially deep subsurface contexts. The presence of burials, particularly in sandy deposits such as the point bars and escarpment cannot be ruled out. As indicated by the three hand augers undertaken during the Standard Assessment, the soil horizons on the elevated parts of the proposal footprint comprise sandy silt and silty sand, while the low-lying parts of the proposal footprint such as the meander scars contain clayey silt and silty clay soils. Furthermore, it is possible that Aboriginal cultural heritage could occur below the depth of disturbance in in situ deposits on the modified floodplain landform.

7.4.1.3 COMPLEX ASSESSMENT

Four excavation pits and six shovel test pits were excavated across the proposal footprint, targeting areas of higher cultural heritage sensitivity that would be impacted most by the activity. The Complex Assessment assessed a spatial area of 5.5 m² and a volume of 4.97 m³. One subsurface hearth of charcoal and burnt soil was identified in an excavation pit at a depth of 900–1000 mm during the Complex Assessment. No other cultural material was identified.

7.4.2 HISTORIC ARCHAEOLOGY

A desktop and visual site inspection for historic archaeology was conducted for the proposal study area. The assessment focused on the following:

- whether any known historical cultural heritage exists in the proposal study area
- the potential for as yet unidentified historical cultural heritage to exist in the proposal footprint; and
- legislative requirements in relation to historical heritage in light of the proposed works.

7.4.2.1 DESKTOP ASSESSMENT

RED CLIFFS MAIN PUMPING STATION

Evidence from the land use history and historical site review has found that one historical heritage site is present within the proposal footprint. This site, Red Cliffs Main Pumping Station, is currently listed on the MPS Heritage Overlay as HO168. This site, as mapped on the Heritage Overlay, extends over a parcel of land (SPI 1\TP12019) located at the southern end of the proposal footprint. This review has identified, however, that the mapped location of this site on the Heritage Overlay may be incorrect, and the overlay may instead apply to Crown allotments SPI 5A~B1\PP3102, 5B~B1\PP3102 and 5C~B1\PP3102. Discussions with Mildura Rural City Council confirmed that the location and extent of Heritage Overlay HO168 is incorrect and that a permit from Mildura Rural City Council would not be required as works would not impact the actual heritage listed structure.

The location of the proposed works at the southern end of the proposal footprint, would occur within the substation which contains no remaining structures relating to the Red Cliffs Main Pumping Station.

OLD KARADOC (RED CLIFFS) WOOL SHED AND EVIDENCE OF PASTORAL USE

The land use history and historical site review has found other historical heritage places, in the form of archaeological remains, may occur in the proposal footprint related to its earlier use as a pastoral property such as the Karadoc wool shed, which was thought to be extant in or near the proposal footprint prior to the Red Cliffs Main Pumping Station being constructed. Further research at the Public Records Office Victoria (PROV) indicate the Old Karadoc wool shed was located to the northwest of the Red Cliffs main pumping station, and was removed in the 1920's. The PROV records indicate the Karadoc wool shed sat outside the current heritage overlay (HO168) and sit outside of the proposal study area.

7.4.2.2 SITE INSPECTION

Site inspections of the proposal study area identified broken glass and metal fragments of potential heritage value. These objects are unlikely to meet the requirements for registration on the Victorian Heritage Register or Inventory.

Post site inspection discussions with Heritage Victoria have noted, no permit requirements for the proposal, and that an unexpected finds protocol would be adequate to manage potential heritage assets should they be identified during construction.

7.4.2.3 SUMMARY OF ASSESSMENT

A summary of the finding from the desktop assessment is below:

- One historical heritage site, the Red Cliffs Main Pumping Station, is recorded as present within the proposal study area that is currently listed on the MPS Heritage Overlay. This site, HO168, as mapped on the Heritage Overlay, extends over a parcel of land (SPI 1\TP12019) located at the southern end of the proposal footprint. This review has identified that the mapped location of HO168 on the heritage overlay is incorrect, and the overlay should instead apply to Crown allotments SPI 5A~B1\PP3102, 5B~B1\PP3102 and 5C~B1\PP3102. Consultation with the Mildura Rural City Council has confirmed this, and a permit is not required.
- A field inspection undertaken as part of this assessment identified archaeological remains in the form of a metal artefact near the boundary of the Red Cliffs Terminal Station, and an historical glass scatter outside of the proposal footprint. The artefacts would not qualify for registration on the Victorian Heritage Register or Inventory and are located outside of the proposal footprint. However, the scatter would be temporarily fenced during construction to avoid inadvertent harm.
- An unexpected finds protocol should be developed as a part of the Construction Environmental Management Plan (CEMP) to manage any heritage assets discovered during construction.
- A qualified historical archaeologist should monitor all initial soil stripping and excavation works associated with the proposal.
- If historical heritage places eligible for listing on the Heritage Inventory are discovered during construction, they will attract protections under the *Victorian Heritage Act 2017*, whether or not they are currently listed.

7.5 LAND CONTAMINATION

The purpose of the Phase 1 Preliminary Site Investigation (PSI) was to identify potential risks and recommend potential appropriate management during the construction of the proposal.

7.5.1 LAND CONTAMINATION ASSESSMENT

A desktop review for land contamination was prepared through a Phase 1 Preliminary Site Investigation (PSI). The assessment included the following:

- physical setting including topography, hydrogeology and geology
- groundwater database search
- EPA notices
- nearby completed environmental audit reports
- planning and zoning information
- cultural heritage overlays
- ecological constraints
- natural hazards
- historical aerial photographs
- acid sulfate soils
- waste management.

The Phase 1 PSI also included the preparation of a report documenting the findings of the investigation and provided recommendations if required.

Of note, the desktop review was performed using Lotsearch to undertake searches of relevant databases of publicly available information regarding historical and current site uses, regional information and site setting details, aerial imagery and regulatory information.

7.5.1.1 SUMMARY OF ASSESSMENT

Based on the findings of the PSI, the potential for contamination to be present at the site as a result of past/present land use activities is considered plausible. It is recommended that an intrusive soil assessment be undertaken prior to the construction works, so that any potential human health and/or environmental contamination risks can be assessed and managed accordingly, including a waste classification assessment (i.e. to enable future offsite disposal of material generated during construction activities).

7.6 SURFACE WATER

7.6.1 OVERVIEW

An assessment was conducted of impacts to flooding and hydrology during construction and operation of the proposal. It considers impacts to:

- flooding
- geomorphology
- water quantity
- water quality.

The assessment has considered primarily the Murray River. This waterway is subject to conditions of the Basin Plan 2012 which provides a coordinated approach to water use across the Murray–Darling Basin, and provides a framework to balance environmental, social and economic considerations for water use and water quality to an environmentally sustainable level.

7.6.2 *HYDROLOGY AND FLOODING IMPACTS*

7.6.2.1 CONSTRUCTION

For the construction phase, the proposal would have negligible impact on flood behaviour because the proposal works in the floodplain are insignificant compared to the extent of the floodplain and the construction program should be managed to minimise work within the floodplain. Access tracks across minor waterways would have localised impacts to peak flood levels which may in turn affect the geomorphic conditions of these minor waterways with creek realignments and erosion due to changes in velocity.

Water demands for dust suppression during construction would not be sourced from Victorian based supplies. These would be coordinated with the NSW Western Section EnergyConnect proposal component with sources from NSW.

Water quality impacts from construction of the proposal are anticipated to be short-term and limited in extent. The major sensitive elements in the proposal footprint is the Murray River and the associated King Billabong Wildlife Reserve wetlands located to the north and west of the proposal.

7.6.2.2 OPERATION

The proposal would have minimal impact on flood behaviour due to the sparsely located transmission line structures and suspended transmission line. There would be little impact to flood behaviour for the Murray River. Negligible impacts to the flood affectation of existing roads is expected.

Operational water demands would be minor and related only to occasional maintenance activities at the transmissions line structures. These would be from existing water sources at the Red Cliffs substation or via water trucks.

There is potential for water quality impacts as a result of spills or litter generated from operation and maintenance activities at transmission lines structures and in the corridor however, provided correct operational procedures and safeguards are implemented the likelihood of impacts would be low. Should there be any impacts from operation and maintenance activities it's likely the impacts would be minor.

7.6.3 *MITIGATION AND MANAGEMENT*

Impacts from the proposal during the construction phase would be managed through a Construction Environmental Management Plan (CEMP) which would include a soil and water management procedures developed in line relevant Environment Protection Authority EPA guidelines. The typical measures that would be incorporated into the CEMP include: notification to the EPA and Catchment Management Authority of any works in or changes to waterways; best practice erosion and sediment controls for proposal footprints and stockpiled material and flood emergency procedures.

A key aspect of the mitigation and management of impacts would be to ensure the water quality objectives of the Murray-Darling River Basin Plan are met throughout construction and operation. Basin Plan objectives would be incorporated into the CEMP to manage potential soil and water impacts and should the objectives not be met then mitigation measures would be updated to ensure compliance.

Operational mitigation and management including managing spills, would be developed and implemented as part of the operations environment management plans for the proposal.

7.6.4 *SUMMARY OF ASSESSMENT*

The potential water supply and water quality impacts to the Murray River are susceptible aspects that would need to be managed through the design. The Murray River generally achieves fair to good water quality so the application of a CEMP with soil and water management procedures included would need to be developed and implemented which would result in minimal impacts.

7.7 AIR QUALITY

Air quality impacts during construction would consist of nuisance dust from earthworks and construction traffic, as well as emissions from vehicle exhausts. While this is not expected to be significant, air quality impacts will be managed in accordance with a CEMP. Air quality management measures will include:

- use of dust suppressants such as water spraying, when undertaking ground disturbing works (where required)
- ceasing dust generating activities during excessive wind conditions
- maintaining and operating equipment in a proper and efficient manner to manage exhaust emissions.

The operation of the proposal will not result in fugitive air emissions.

7.8 NOISE

Some level of noise emissions can be expected during the construction phase. Construction work would be carried out seven days per week between 7:00 am and 7:00 pm. The extended construction hours are proposed given the distance to sensitive receivers and the shift arrangements of the workforce given the relatively remote nature of the proposal (noting the workforce would also be the team constructing the NSW Western Section component of EnergyConnect). Extended working hours would also achieve reductions in the overall duration of construction.

Where the extended hours are proposed for higher noise generating activities in proximity to sensitive receivers, additional measures would be implemented where works would potentially exceed noise management levels through an out of hours work protocol. This protocol would be approved by the EPA prior to the commencement of construction. Additionally, the site construction manager would monitor and manage construction noise as appropriate, with records of any noise complaints and corrective action made available for inspection.

The operation of the proposal would not emit noise at levels observable outside of their immediate location.

7.9 TRAFFIC, MOVEMENT AND ACCESS

Traffic movements for the construction of EnergyConnect will be confined to the construction staging periods defined in the Section 3.1.3. Daily mobilisation of the construction workforce will occur from the Buronga camp in NSW via the Sturt and Calder Highways (via town centre). Plant, equipment and materials sourced from Melbourne will access the site via the Calder Highway and routes via Red Cliffs, approved by Mildura Rural City Council during the development of the Traffic Management Plans (TMP). The TMP will also define the access /egress points currently utilised for the existing Woomera Avenue transmission line maintenance and traffic management requirements to manage site access and minimise disturbance to the local road network. Existing transmission line access is not the primary Kings Billabong public access point. The proposal will not restrict access to the Kings Billabong Park.

Vehicle movements for the Section 3.1.3 noted construction stages, would typically occur seven days per week between 7:00 am and 7:00 pm, in accordance with the approved TMP. A combination of heavy and light vehicles will be required for each day for each stage of construction (see Table 7.2). Approximately 20 heavy and light vehicles would typically be required for each stage of construction with the potential for some heavier usage peak periods. These peak periods would be considered in the TMP with appropriate controls identified to minimise impacts to the traffic network. Vehicle parking for the proposal will be within the permanent disturbance footprints, laydown areas, existing and improved access tracks within the proposal footprint. Sufficient room is available for the vehicle parking and avoidance of native vegetation marked delineated by no-go zones. In between active construction stages, workforce access will not be required, and proposal footprints would be secured.

Table 7.2 Construction vehicle types

HEAVY VEHICLES	LIGHT VEHICLES
Semi-trailers (plant and materials)	Utes
Graders	Vans
Piling rigs	Light trucks
Crane trucks	Cars
Water trucks	
Concrete mixers	
Truck and dog	

Due to the discrete construction staging and limited number of vehicles required on site for each construction stage, along with the implementation of a traffic management plan with specific mitigations measures and traffic controls no substantial adverse impacts on local traffic movements is expected.

During operation, the proposal would operate on a continuously unmanned basis, and would only require periodic visits for maintenance purposes. No dedicated car parking is proposed at the site.

8 CONCLUSION

TransGrid and ElectraNet are seeking regulatory and environmental planning approval for the construction and operation of a new HV connection to Red Cliffs in north-west Victoria as a part of the proposed EnergyConnect interconnector. EnergyConnect aims to secure increased electricity transmission between SA, NSW and Victoria, while facilitating the longer-term transition of the energy sector across the NEM to low emission energy sources.

The proposal would increase transfer capacity between the state electricity markets of Victoria and NSW and would support the establishment of the missing transmission link between the SA and NSW transmission networks. The upgrade to the existing transmission line between Buronga and Red Cliffs would relieve system constraints and allow for Victorian, NSW and SA consumers to benefit from expanded access to low-cost, large-scale solar generation in north-west Victoria and south-west NSW. The proposal is an essential component of EnergyConnect.

8.1 CONSISTENCY WITH THE PLANNING SCHEME

This Planning Report is deemed consistent with the relevant clauses in the PPF and LPPF discussed in the Sections 6.1.1 and 6.1.2 and has identified the following permit requirements under the MPS, which are required to facilitate the Victorian component of EnergyConnect.

Clause 36.03 Public Conservation and Resource Zone (PCRZ)

A planning permit is required for the use and development of the land for the proposal. Written consent from Parks Victoria is required indicating that they generally or conditionally consent to use and development of the land for the proposal.

TransGrid has obtained written consent from DELWP on behalf of Parks Victoria to lodge an application for the use and development of the proposal in Kings Billabong Park.

Clause 37.01 Special Use Zone Schedule 5 (Essential Service Utilities)

A planning permit is required for the use and development of the land for the proposal.

The SUZ5 requires a permit for use and development of a utility installation if a proposal is not in accordance with a Development Plan approved pursuant to Clause 2 of Schedule 5. Whilst there is an approved Development Plan for the land, it is over 20 years old and thus clearly does not contemplate the works proposed as part of this current permit application. Accordingly, a use and development permit is required pursuant to the SUZ5. The proposed use and development is entirely consistent with the purpose of SUZ5 and thus represents an entirely appropriate use and development outcome in the zone.

Clause 42.01 Environmental Significance Overlay Schedule 1 (ESO1)

A planning permit is required to construct a building or carry out works.

Through avoid and minimise principles incorporated into the design and CEMP, the proposal meets the objectives of the schedule to the ESO. A collaborative process with project designers and ecologists has avoided and minimised impacts to vegetation and waterways through the siting of monopole pads and temporary proposal footprints. Monopoles were specifically designed to be located in positions that avoided and minimised impacts to native vegetation and threatened species identified during field surveys as far as practicable. During the construction, implementation of no-go zones and sediment controls in accordance with relevant EPA guidelines will be implemented to avoid and minimise impacts to native vegetation and meet the objectives Murray-Darling Basin Plan for water quality adjacent to the proposal footprint.

Clause 44.04 Land Subject to Inundation Overlay (LSIO)

A planning permit is required to construct a building or to construct or carry out works.

The proposal has been designed to respond to inundation management objectives. This has been achieved through the use of monopoles, instead of a traditional lattice tower structure, which has reduced the proposal footprint of the proposal. This would minimise water passage and floodwater storage impacts and is compatible with the flood hazard and local drainage conditions as to not cause any significant rise in flood level or flow velocity. Potential impacts to water quality of adjoining waterbodies as a result of the proposal are considered low and would be managed through a CEMP in accordance with relevant EPA guidelines to meet the objectives Murray-Darling Basin Plan.

Clause 52.17 Native Vegetation

A planning permit is required to remove, destroy or lop native vegetation.

An avoid and minimise design approach has been adopted and has culminated in the use of the existing transmission corridor as much as practically possible. Native vegetation impact has been incorporated into the design after thorough consideration of constructability issues and undertaken in consultation with the proposal ecologist and TransGrid.

The removal of 5.419 hectares of vegetation, consisting of the full removal of 2.042 hectares and partial removal of 3.377 hectares of vegetation will be required for the proposal.

This report and supporting documentation form the Application for a Planning Permit which is deemed to be consistent with s47 of the P&E Act.

8.2 SECONDARY APPROVALS

The following primary and secondary consents are likely to be required for the proposal:

- land manager consent under the *National Park Act 1975* to the permit application being made or for the permit application being made for the proposed use and development of land within Kings Billabong Park, to the extent required by the proposal
- CHMP under the *Aboriginal Heritage Act 2006*
- permit to take protected flora under the *Flora and Fauna Guarantee Act 1988*
- permit under the *Wildlife Act 1975*, if wildlife are to be handled or relocated from the construction area
- permit for works on waterways under the *Water Act 1989* from Mallee Catchment Management Authority is required prior to construction
- permit under the *Catchment and Land Protection Act 1994*, if noxious weeds or material containing noxious weeds or weed seed is transported from the proposal construction area.

The proposal does not trigger or require the following:

- a referral under the *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth)
- a referral under the *Environment Effects Act 1978*
- a permit under the *Heritage Act 2017*.

9 LIMITATIONS

This Report is provided by WSP Australia Pty Limited (*WSP*) for TransGrid (*Client*) in response to specific instructions from the Client and in accordance with WSP's proposal dated September 2019 and Variation 013 Scope dated 24 April 2020 and agreement with the Client dated 31 October 2019 and 04 May 2020 (*Agreement*).

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APPENDIX A

CERTIFICATE OF TITLE



APPENDIX B

PLANS AND ELEVATIONS



APPENDIX C

WRITTEN CONSENT FROM DELWP ON
BEHALF OF PARKS VICTORIA



APPENDIX D

FLORA AND FAUNA IMPACT ASSESSMENT REPORT



APPENDIX E

HISTORIC HERITAGE DUE DILIGENCE REPORT



APPENDIX F

LANDSCAPE AND VISUAL AMENITY REPORT



APPENDIX G

PRELIMINARY SITE ASSESSMENT (CLM)



APPENDIX H

HYDROLOGY AND FLOODING IMPACT ASSESSMENT



APPENDIX I

BUSHFIRE MANAGEMENT STATEMENT



APPENDIX J

GEOTECHNICAL DESKTOP STUDY



APPENDIX K

DRAFT CONSTRUCTION

ENVIRONMENTAL MANAGEMENT PLAN



