

Westgate tunnel

**CP BUS 5.02 - Westgate Tunnel - Jan2020 - Public
Regulatory proposal 2021–2026**

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Business	Westgate tunnel
Title	Data centre connection
Project ID	CP BUS 5.02 - Westgate Tunnel - Jan2020 - Public Confidential
Category	Customer Connections
Identified need	To meet our connection obligations in response to the Western Distributor Authority's request for relocation of CitiPower electrical assets.
Recommended option	Option 1: Relocate electrical assets to make way for the Westgate Tunnel
Proposed start date	Q4 2017
Proposed commission date	Q2 2022
Supporting documents	<ol style="list-style-type: none"> 1. CP ATT111 - Westgate Tunnel relocation - Oct2017 - Confidential 2. CP ATT110 - Westgate Tunnel media release - Feb2019 - Public

1.1 Overview

This business case details the Western Distributor Authority's request to CitiPower for relocation of electrical assets to make way for the construction of the Westgate Tunnel Project. The business case includes the scope of work, timing and associated costs.

The required investment over the 2021–2026 regulatory period will be customer funded and is outlined below.

Figure 1 Recommended option: investment profile (\$, million)



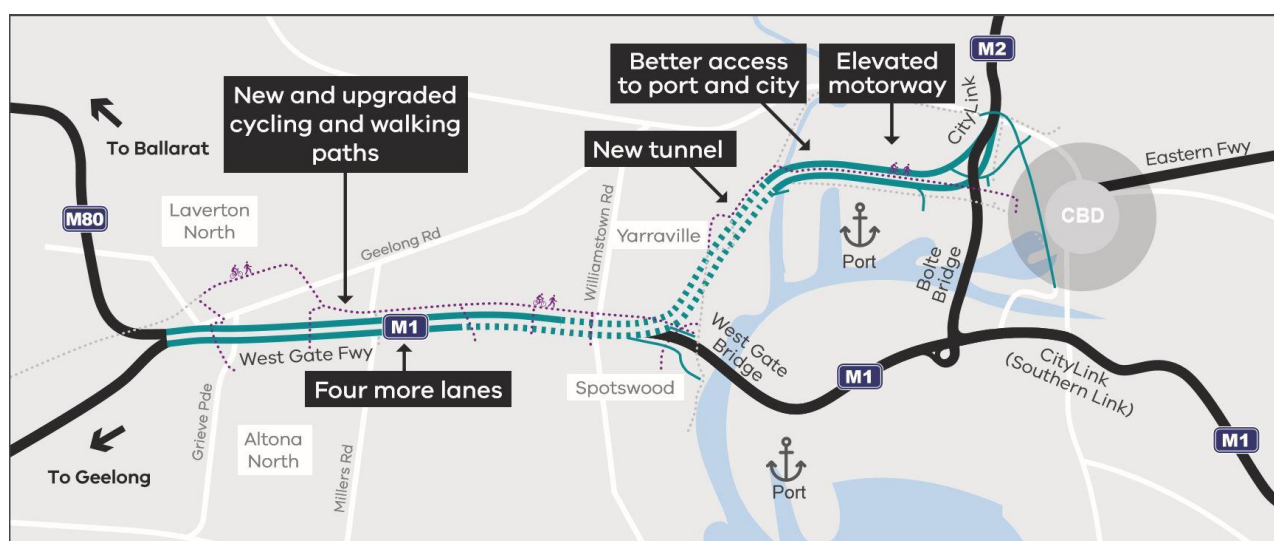
Source: CitiPower

1.2 Background

The Victorian Government has commissioned the \$5.5 billion West Gate Tunnel Project to deliver an alternative to the West Gate Bridge by providing a second river crossing. The works involve widening the West Gate Freeway, building a connecting road, a tunnel and bridges.

The project will provide direct access to the Port, Citylink and the North of the City as shown in figure 2.

Figure 2 Proposed Westgate tunnel works



Source: <http://westgatetunnelproject.vic.gov.au>

The Western Distributor Authority issued a tender for the Westgate Tunnel Project in mid 2016 for a duration of 20 weeks. Prospective proponents wrote to us during this time to request an estimate for relocation of electrical assets. We issued budget advice to the proponents on 24th October 2016.

The successful tenderer, CPB and John Holland Joint Venture (**CPBJH JV**), was appointed in April 2017 who began requesting preliminary design offers for the required electrical asset relocation works. We began work in the fourth quarter of 2018.



The West Gate Tunnel project is made up of 5 components as outlined below.

Figure 3 West Gate Tunnel components

Component	Title	Description of Work	Proposed Completion
1	West Gate Freeway Stage 1: Brooklyn Terminal Station to Lynch Rd Stage 2 Lynch Rd to M80	Relocation of 66kV/22kV overhead lines to underground	Stage 1: 2019 Stage 2: 2020
2	Port of Melbourne	Relocation of HV/LV underground cables and kiosk substation	2020
3	Moonee Ponds Creek / Dock Area	Towers impacted on creek alignment to be relocated	2021
4	Mackenzie Road	Relocation of HV/LV underground cables and kiosk substation	2022
5	Footscray Road	Relocation of HV/LV underground cables for raised roadway foundations	2022

Source: CitiPower

1.3 Identified need

The identified need of this business case is to meet our connection obligations and enable the Westgate Tunnel works to proceed safely and in accordance with the customers' requirements.

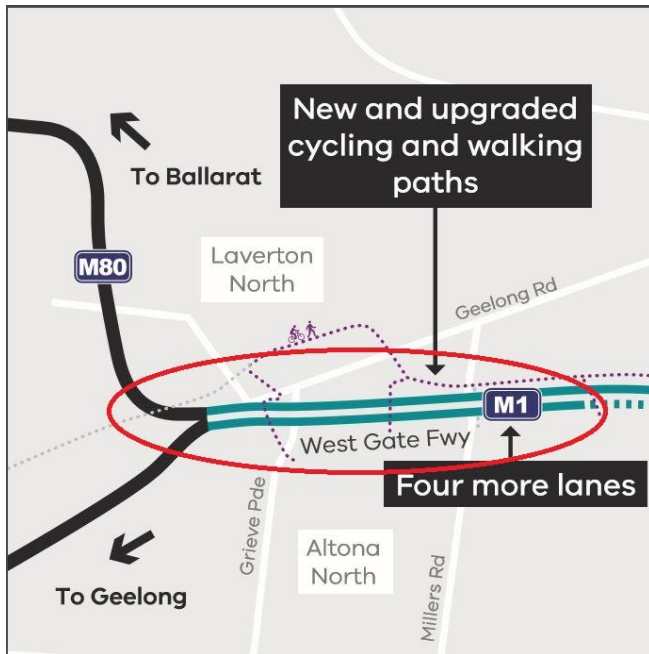
Clause 6 of our Electricity Distribution Licence requires connections services and the supply of energy to be provided to a customer when requested. Clause 11 further provides the conditions under which we are compelled to make an offer to customers for supply. The connection offer must be made in accordance with Chapter 5A of the National Electricity Rules.

1.4 Scope of Work

The scope for this project has been directed by the customer and their requirements. Attachment CP ATT111 outlines the customer's scope of works request and attachment CP ATT110 is the Westgate tunnel fact sheet. There is only one technically feasible option to meet this scope, which is as follows:

1. Component one scope—West Gate Freeway:
 - the first stage involves relocation of 66kV/22kV assets between Brooklyn Terminal Station (**BLTS**) and Lynch Rd. Stage 1 began in Q4 2018 and completion is due Q3 2019.
 - the second stage involves asset relocations from Lynch Rd to the M80 interchange and is required by Q1 2020.

Figure 4 West Gate Freeway works



Source: <http://westgatetunnelproject.vic.gov.au>

2. Component two scope—Port of Melbourne. This component involves relocating HV/LV underground cables in the Port of Melbourne area. This component is scheduled for completion in Q3 2020.
3. Component three scope—Moonee Ponds Creek. This component involves relocating sub-transmission towers impacted along the Moonee Ponds creek alignment. This component is scheduled to be undertaken in Q3 2021.
4. Component four scope—Mackenzie Road. This component involves relocation of HV/LV underground cables in Mackenzie Rd as well as a 500kVA kiosk substation. The scoping showed the load was able to be supplied from an alternative source and so the kiosk substation could be retired rather than replaced. Cable Relocations include:
 - 2 High Voltage feeder cables from Dock Area Zone Substation
 - 5 Low Voltage circuits
 - 2 Supervisory circuits

This component is scheduled for completion mid 2022.
5. Component Five scope—Footscray Road. This component involves the relocation of HV/LV underground cables for raised roadway foundations in Footscray Road as follows:
 - 8 High Voltage feeder cables from Dock Area Zone Substation
 - 3 Low Voltage circuits
 - 2 Supervisory circuits
 - 8 Public Lighting circuits

Completion of this component is required by Q3 2022.

The costs for completing each component of this project are based on our detailed designs as provided to the customer and are outlined below.

Figure 5 Component one costs

Source: CitiPower

1.5 Recommendation

We recommend relocating electrical assets as requested by the Western Distributor Authority to make way for the West Gate Tunnel and meet our connection obligations. The required investment over the 2021–2026 regulatory period will be customer funded and is outlined below.

Table 4 Recommended option: investment profile

Source: CitiPower