

# Dunning Avenue Pop-up Cycleway

Tract



## Review of Environmental Factors

Part 5 – Environmental Impact Assessment

Prepared for the City of Sydney

# Quality Assurance

Dunning Avenue Pop-up Cycleway  
Review of Environmental Factors  
Part 5 – Environmental Impact Assessment

Project Number  
220-0060-00-02-RP02

## Revisions

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Issue	Date	Description	Prepared By	Reviewed By	Project Principal
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# 1 Introduction

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The City of Sydney (City) proposes to continue the operation of the pop-up cycleway along Dunning Avenue in Sydney for up to two years. The existing pop-up cycleway was constructed under the *Environmental Planning and Assessment (COVID-19 Development-Temporary Cycleways) Order 2020*.

The City of Sydney is both the proponent and the determining authority for this Review of Environmental Factors (REF) under Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

This REF has been prepared by Tract Consultants on behalf of the City of Sydney.

## 1.1 Overview

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The purpose of this Review of Environmental Factors (REF) report is to ensure that the operational impacts of the activities related to the proposed continued operation of the temporary Dunning Avenue pop-up cycleway for up to two years (the Proposal) are appropriately considered and assessed as per the requirements directed by the Minister for Planning and Public Spaces under Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act)

The State Environmental Planning Policy (Infrastructure) 2007 (ISEPP) is the environmental planning instrument (EPI) which determines the permissibility of a proposal of this nature and how it is assessed under the EP&A Act. Clause 94(1) of the Infrastructure SEPP allows for the development of 'roads and road infrastructure facilities' by or on behalf of a public authority without consent on any land. In accordance with Clause 94(1) of the Infrastructure SEPP, development consent is not required, and the proposal is designated as 'development without consent' under Division 5.1 of the EP&A Act.

In addition to Clause 94(1) of the Infrastructure SEPP, Clause 94(2)(c) specifically notes "alterations or additions to an existing road (such as widening, narrowing, duplication or reconstruction of lanes...)" as development permitted without consent.

However, it is still necessary and required to consider environmental impacts of the proposal under Part 5 of the EP&A Act.

This assessment finds that the proposal would not result in any significant impacts upon the environment and as such may be approved with relevant mitigations applied. Detail of the environmental assessment is provided in the following sections of this REF.

## 1.2 Background

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The City of Sydney 'Cycling Strategy and Action Plan 2018 to 2030' outlines the City's commitment to making cycling an equal first choice transport mode along with walking and using public transport and to providing safe and connected bicycle routes that can be used by people of all ages and abilities.

The creation of a comprehensive, coordinated and practical bike network across the local government area, and connecting to cycleways in adjoining local government areas, will benefit current and future cyclists and the wider community. Benefits include improvements to environmental and health conditions, reductions in traffic congestion and enhanced motorist, cyclist, and pedestrian safety.

Dunning Avenue is part of the broader NSW Govt Co-designed Bicycle Network Blueprint and City of Sydney's Cycling Strategy and Action Plan network (Bike Network). This cycleway is consistent with the aims of 'Sydney's Cycling Future' as it will improve the safety of and facilities for cyclists across the City.

The pop-up cycleway was initially installed and intended as a temporary cycleway to facilitate physical distancing and safe cycling to support travel during the COVID-19 recovery. Temporary cycleways were installed where it was identified as a strategic priority. This included locations where existing cycleways were discontinuous, where there was demand for cycling infrastructure, where there was a recognised route to key employment areas or where there was a recognised hot spot of congestion requiring more transport choices including access to recreation.

## 2 Site Analysis

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### 2.1 Site Location and Context

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The Dunning Avenue pop-up cycleway is located along Dunning Avenue and operates in one direction each side of the street between Gardeners Road to the south in Rosebery and Hansard Street to the north in Zetland.

### 2.2 Land Ownership and Legal Description

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The Dunning Avenue pop-up cycleway was delivered by the City of Sydney as it is administered as a local road under the *Roads Act 1993*.

The City of Sydney worked with Transport for New South Wales (TfNSW) to develop agreed upon safety and transport related outcomes. This included monitoring and evaluating the performance and safety of the pop-up cycleway along Dunning Avenue for potential impacts on lands owned by the City, in addition to those owned by others.

### 2.3 Existing Environment

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The Dunning Avenue pop-up cycleway is located within the southern part of the City of Sydney in the suburb of Rosebery. The location of the temporary separated cycleway and the surrounding land use is a mixture of residential, commercial/business, hospitality, light industrial and retail premises within a mixed urban environment.

### 2.4 Surrounding Development

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The follow points of interest and major building and developments surround and link between the Dunning Avenue pop-up cycleway:

- Existing City of Sydney bicycle network;
- Harcourt Business Park;
- The Cannery;
- The Hayesbery – Goodman developments;
- Turruwul Park;
- Cahill Memorial High School; and
- Green Square Town Centre (including train station).

The cycleway location and route run between Gardeners Road and Hansard Street as per the following figure:

Start: Gardeners Road, Rosebery

Finish: Hansard Street, Zetland

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Length: 1.4 km approximately

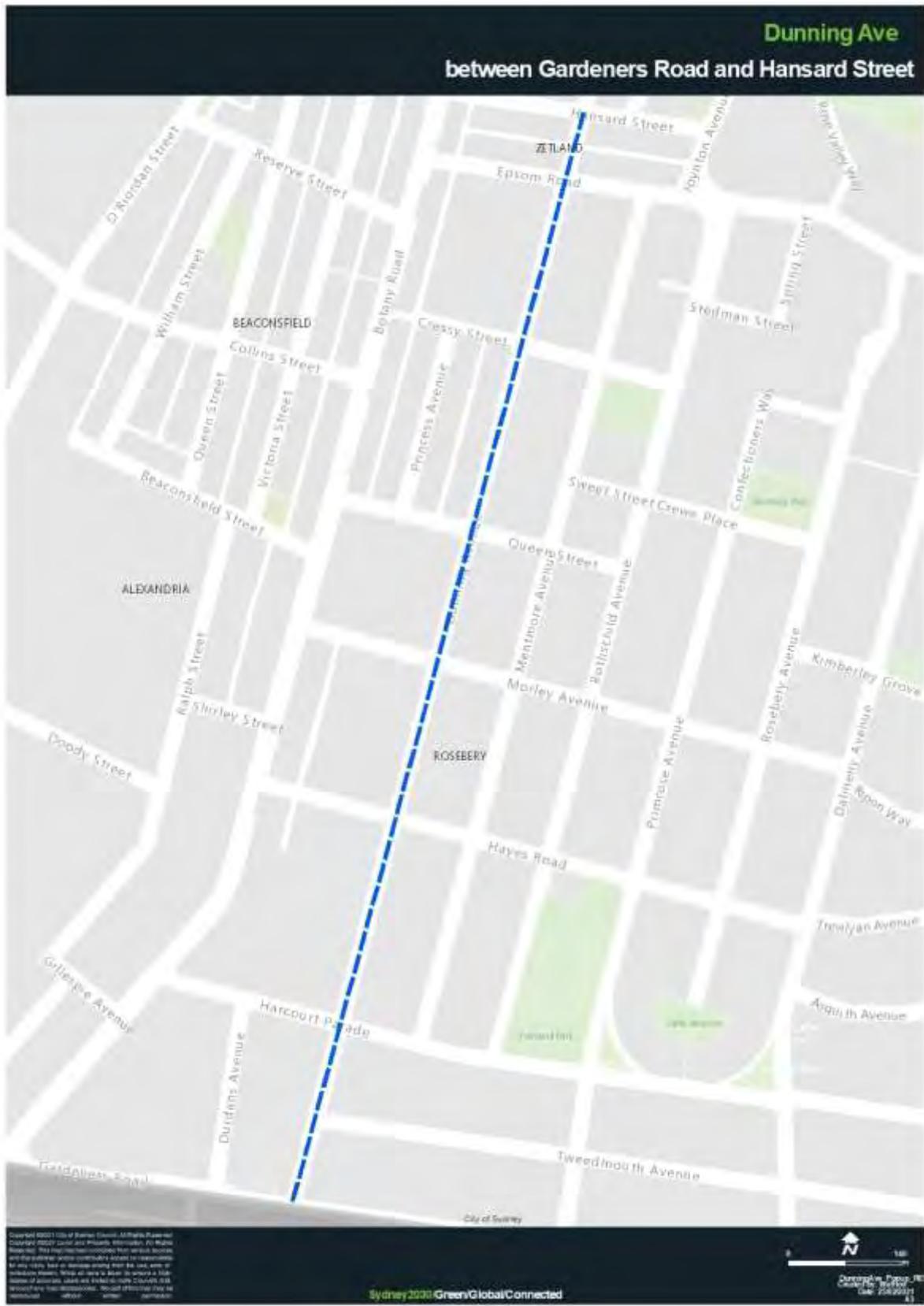


Figure 1. Dunning Avenue, Gardeners Rd to Hansard St Pop-up cycleway (Source: City of Sydney, 2021)

## 2.5 Existing Zoning

The zoning surrounding the Dunning Avenue pop-up cycleway is a mixture of R1 General Residential, R2 Low Density Residential, B1 Neighbourhood Centre, B4 Mixed Use, and B7 Business Park under the *Sydney Local Environmental Plan 2012*.



Figure 2. Land Zoning – Dunning Avenue Pop-up Cycleway (Source: NSW ePlanning Spatial Viewer, Sydney LEP 2012)

## 3 Project Description

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### 3.1 Project Overview

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The City of Sydney proposes to continue the operation of the Dunning Avenue pop-up cycleway which along both sides of Dunning Avenue between Hansard Street and Gardeners Road for a period up to two years, while the City considers and consults on a permanent project.

The City of Sydney is currently designing a permanent cycleway for Dunning Avenue that will be different to the pop-up cycleway. Community consultation on the improved design will commence late 2021. If supported, the City will commence construction of the improved design within two years.

The current temporary pop-up cycleway was constructed by the Minister for Planning and Public Spaces via the *Environmental Planning and Assessment (COVID-19 Development-Temporary Cycleways) Order 2020*. Construction was completed 5 August 2020 and the operation of a one-way southbound cycleway started on the 7 August 2020.

### 3.2 Project Justification

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#### 3.2.1 Strategic Context

##### NSW Government Strategic Frameworks

The NSW Government's '*NSW State Plan*' and the Greater Sydney Commission's '*A Metropolis of Three Cities - the Greater Sydney Region Plan*', both acknowledged that cycling has a significant role to play in the Government's pursuit of decreasing car dependence and improving the environment.

##### Sustainable Sydney 2030: Community Strategic Plan

The Sustainable Sydney 2030: Community Strategic Plan is the City of Sydney's long term plan for a more sustainable, prosperous, and liveable city. The plan outlines a vision of plan of a green, global, and connected city which includes measures to improve active transport connectivity specifically through establishing high-quality public transport, cycling, and walking networks that link to key places. A key target is for at least 10 per cent of total trips made in the city are by bicycle and 50 per cent by pedestrian movement.

The proposal contributes towards achieving this target.

##### The City of Sydney Cycle Strategy and Action Plan

The City of Sydney's '*Cycling Strategy and Action Plan 2018 to 2030*' outlines the City's commitment to making cycling an equal first choice transport mode along with walking and using public transport and to providing safe and connected bicycle routes that can be used by people of all ages and abilities.

The proposal contributes towards achieving the objectives and actions within the Cycling Strategy.

#### 3.2.2 Strategic Justification

According to the Inner Sydney Regional Bicycle Network Demand Assessment and Economic Appraisal (AECOM 2010) the Inner City Regional Bicycle Network will provide access for 1.2 million people in 164

suburbs and across 15 (now 11 following the amalgamations) local government areas. AECOM has estimated that the bicycle network is likely to deliver a net economic benefit of \$506 million (in today's dollars) over a 30 year period, and that for every one dollar spent on delivering the interconnected cycleway will generate an economic return of \$3.88 in today's dollars.

The creation of a comprehensive, coordinated, and practical bike network across the local government area, and connecting to cycleways in adjoining local government areas, will benefit current and future cyclists and the wider community. Benefits are expected to include improvements to environmental and health conditions, reductions in traffic congestion and enhanced motorist, cyclist, and pedestrian safety.

Dunning Avenue is part of the broader NSW Government Co-designed Bicycle Network Blueprint and City of Sydney's 'Cycling Strategy and Action Plan' network (Bike Network). This cycleway is consistent with the aims of the City of Sydney's 'Cycling Strategy' as it will improve the safety of and facilities for cyclists across the City.

### 3.3 Project Objectives

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The objective of the proposal is to achieve positive outcomes related to improving accessibility, enhancing the safety of road crossings, allowing more space for pedestrians and cyclists, and connecting the Bike Network.

The implementation of the Dunning Avenue pop-up cycleway supports the following outcomes:

#### Regional Cycleway Connection to Dunning Avenue

- Provides local access between the City Centre and the south (Rosebery, Mascot, Eastlakes);
- Provides local access to Green Square Town Centre from Rosebery and beyond;
- Provides regional connection to LGAs south of the City of Sydney; and
- Tests the feasibility of using a 12.8m wide road for a conventional running parking protected cycleway design.

### 3.4 Options Considered

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#### 3.4.1 Option 1 – 'Do Nothing'

As the proposal was constructed under the '*Environmental Planning and Assessment (COVID-19 Development-Temporary Cycleways) Order 2020*', the 'do nothing' option would require that the cycleway be decommissioned, with all existing infrastructure removed. The removal of the pop-up cycleway would reverse the positive impacts and outcomes of the cycleway and therefore be an adverse impact on the area. This option would not achieve the proposal objectives, nor would it achieve the City of Sydney's strategic objectives. Therefore the 'Do Nothing' approach is not the preferred option.

#### 3.4.2 Option 2 – Dunning Avenue pop-up Cycleway Continued Operation

This option meets the objectives of the proposal as well as the relevant strategy documents by maintaining access and safety for people on bikes along Dunning Avenue. It would also continue improved modal integration by maintaining infrastructure that ties in with and complements the wider transport network, inclusive of existing cycleway networks in the area.

This is the preferred option noting the following:

- An average of 759 trips per week in the month of February 2021;
- Dunning Avenue pop-up cycleway ridership started from a low base, with the smallest number of riders in the first week of all the pop-ups;

- The pop up cycleway along Dunning Avenue has shown that claiming space for riders, if done in a cost effective manner, can be a good way to demonstrate the need for infrastructure and a justification for further investment;
- The City of Sydney will look at options to address the cycleway width in a permanent design; and
- Rider volumes are expected to increase further once the final missing link between the south of the city, Green Square and the Sydney city centre is implemented (Portman Street).

A summary of the findings and additional outcomes outlined from the evaluation of the pop-up cycleway that support continued operation for up to two years include:

- An above average proportion of people surveyed said that they feel safe, or that it is safer than before;
- The proportion of people that say they feel safe, or that it is safer than before, was the lowest for Dunning Avenue compared to the other pop-up cycleways;
- The cycleway is at the edge of the City's cycling network and connects to a relatively low density area;
- There is a balanced proportion of new and experienced riders Dunning Ave, with 24% riding less than six months, 28% riding for six months to two years and 48% more than two years;
- The legibility of the shared path intersection treatments could be improved, and there are delays to crossing at Epsom Road;
- Access remained the same for people walking, and a reduction in people riding on the footpath;
- Access was the same for vehicles, as parking has been removed across from driveways to offset the effect of narrowing the roadway;
- Access was the same for waste vehicles, with only a minor change to operations;
- Access was the same for emergency vehicles; and
- Community concerns were resolved where feasible.

## 3.5 Detailed Description of the Project

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The City of Sydney proposes to continue the operation of the existing Dunning Avenue pop-up cycleway along both sides of Dunning Avenue between Harcourt Parade and Gardeners Road for a period up to two years, while the City considers and consults on a permanent project.

The proposal contributes to the following benefits/outcomes:

- Reducing demand on public transport, particularly at peak times;
- Creating shorter travel times in urban areas for cyclists by increasing the connectivity of the Sydney cycleway network;
- Supporting increased outdoor activity and physical activity, promoting healthy lifestyle and wellbeing;
- Providing local environmental benefits including pollution and noise reduction;
- Improving public spaces; and
- Providing better safety outcomes through enhanced network treatments for vulnerable users (e.g., pedestrians and cyclists).

The proposal is not anticipated to require construction as the temporary cycleway is currently constructed. Minor maintenance works may involve replacement of the safety barriers with other materials suitable for ongoing operation.

### 3.5.1 Configuration of the Cycleway

The Dunning Avenue pop-up cycleway implemented the following measures that altered the configuration of the streetscape and local road network based on pop-up cycleway concept plans designed by the City of Sydney in consultation with TfNSW.

- Conventional running parking protected bike lanes; and
- Shared path at all intersections along the route.

### 3.5.2 Operation of the Cycleway

The operation of the Dunning Avenue pop-up cycleway includes the following measures:

- Implementing a single direction cycleway along each side of Dunning Avenue between Harcourt Parade and Gardeners Road;
- Provides a cycleway connection over the specified two year period between the Sydney City Centre and southern Sydney (Rosebery, Green Square, Mascot, and Eastlakes); and
- Supplements bus capacity M20 from Mascot, 343 from Kingsford, 303 from Sans Souci.

### 3.5.3 Construction of the Pop-up Cycleway

Construction work started 9 June 2020 and finished 5 August 2020. Construction works over this period included the following activities:

- Relocation of parking lane, on both sides of the road from kerbside toward the center of the roadway;
- Removal of approximately 52 parking spaces at key intersections and areas of identified safety risks (e.g. adjoining driveways);
- Installation of temporary barriers and flexible posts to designate the cycleway; and
- Marking of the bike path with painted lines.

The Dunning Avenue pop-up cycleway was operational from the 7 August 2020.

### 3.5.4 Pop-up Cycleway Plans

Extracts of the concept plans for the temporary Dunning Avenue pop-up cycleway are provided below. The full proposed works are shown in the Tactical Works Plans ('Tactical Cycleway Delivery Covid-19 Response Pop Up Cycleways - Dunning Avenue, Rosebery & Wetland Works Plan 8').

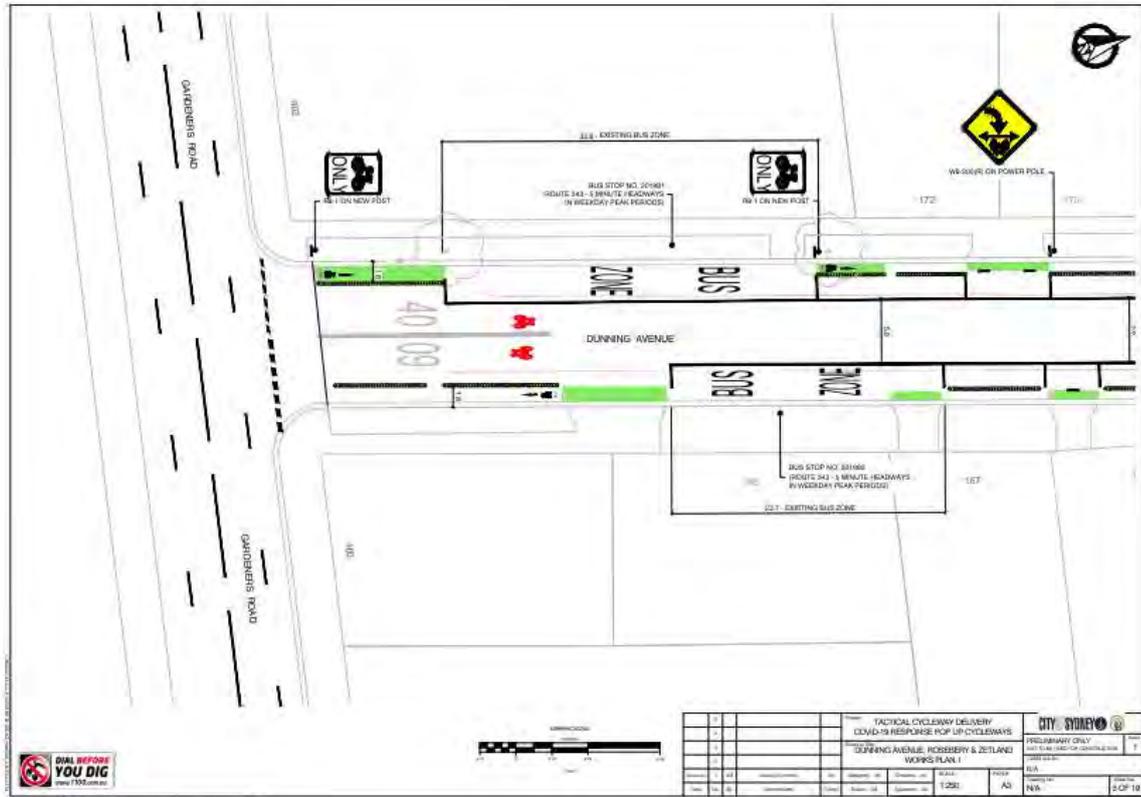


Figure 3 Tactical Cycleway Delivery Covid-19 Response Pop Up Cycleways - Dunning Avenue, Rosebery & Zetland Works Plan 1









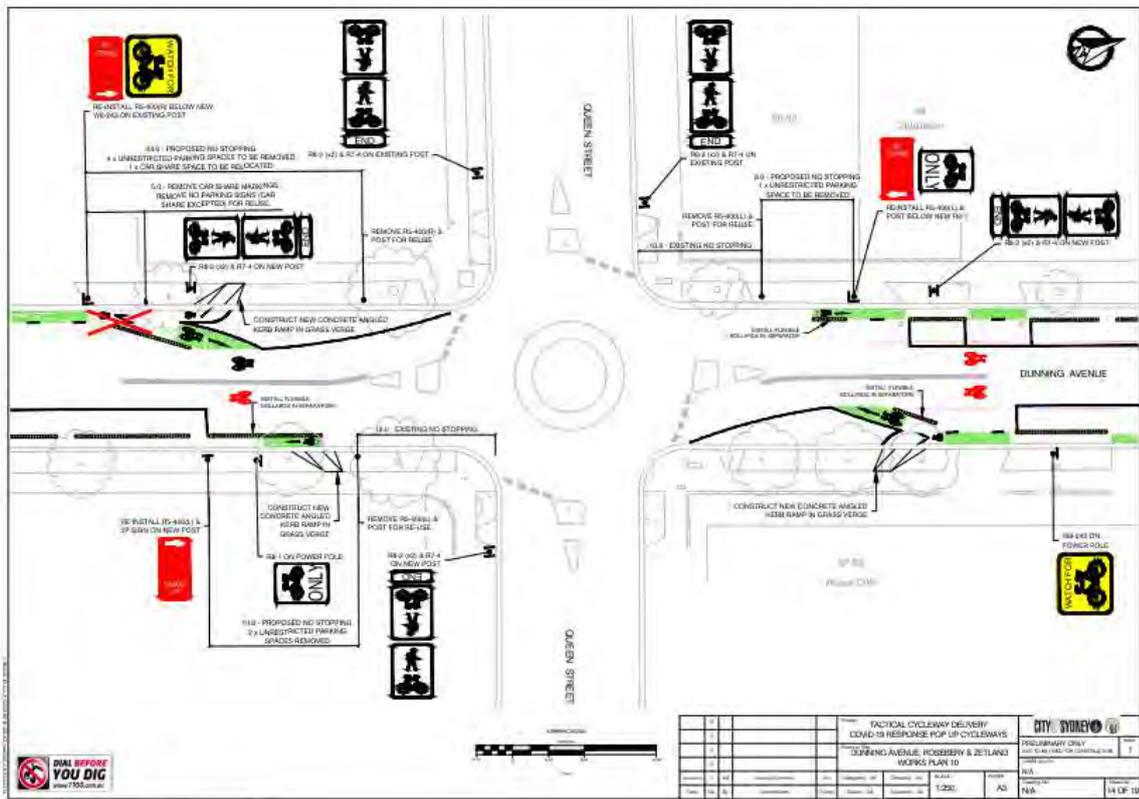


Figure 12 Tactical Cycleway Delivery Covid-19 Response Pop Up Cycleways - Dunning Avenue, Rosebery & Zetland Works Plan 10

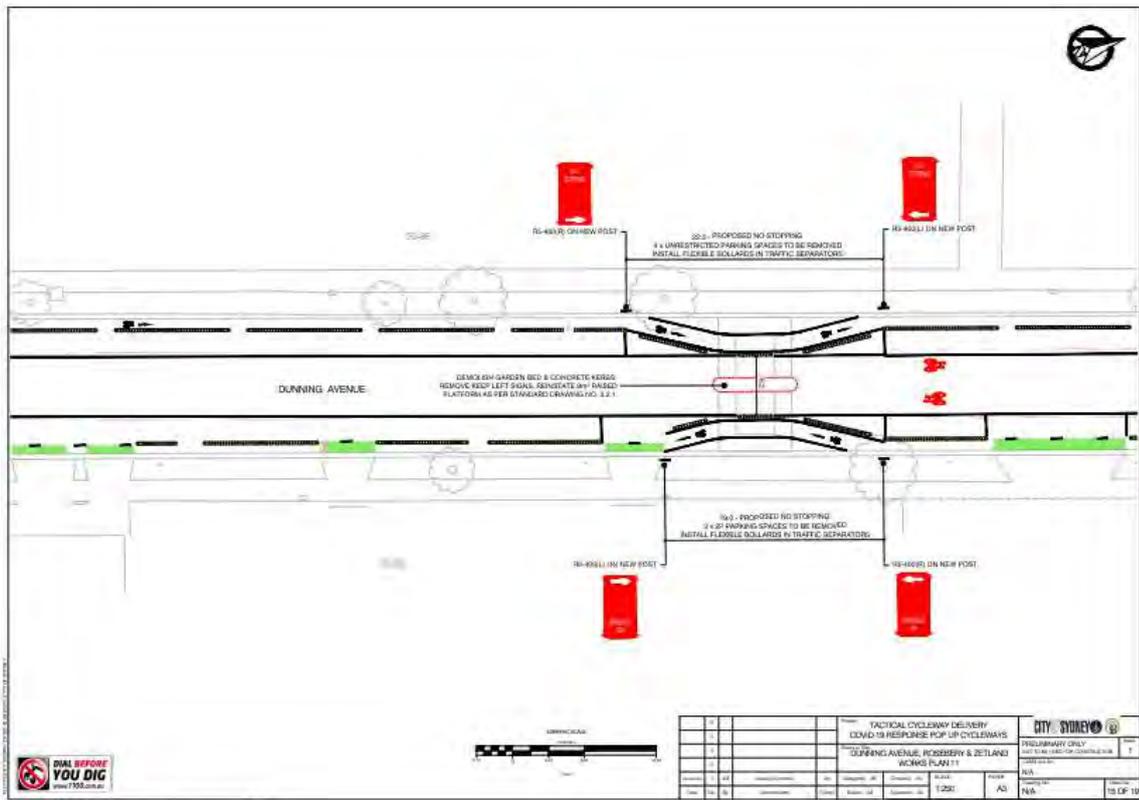


Figure 13 Tactical Cycleway Delivery Covid-19 Response Pop Up Cycleways - Dunning Avenue, Rosebery & Zetland Works Plan 11

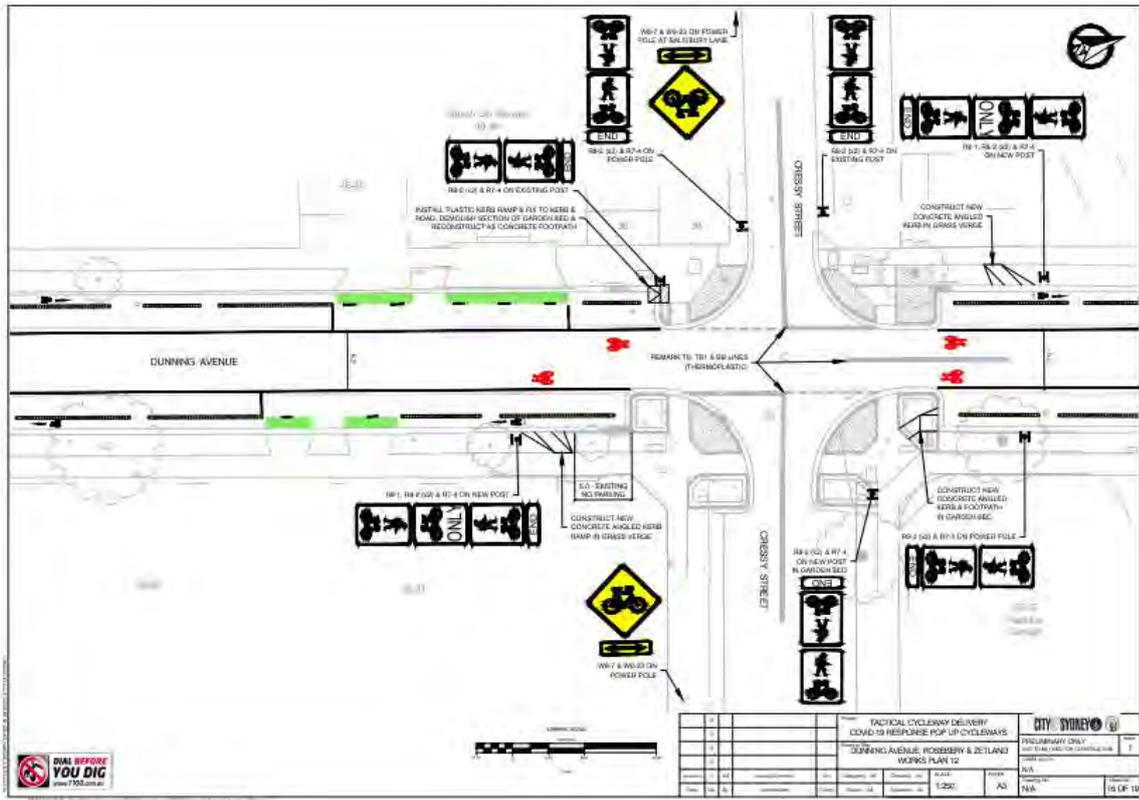


Figure 14 Tactical Cycleway Delivery Covid-19 Response Pop Up Cycleways - Dunning Avenue, Rosebery & Zeiland Works Plan 12

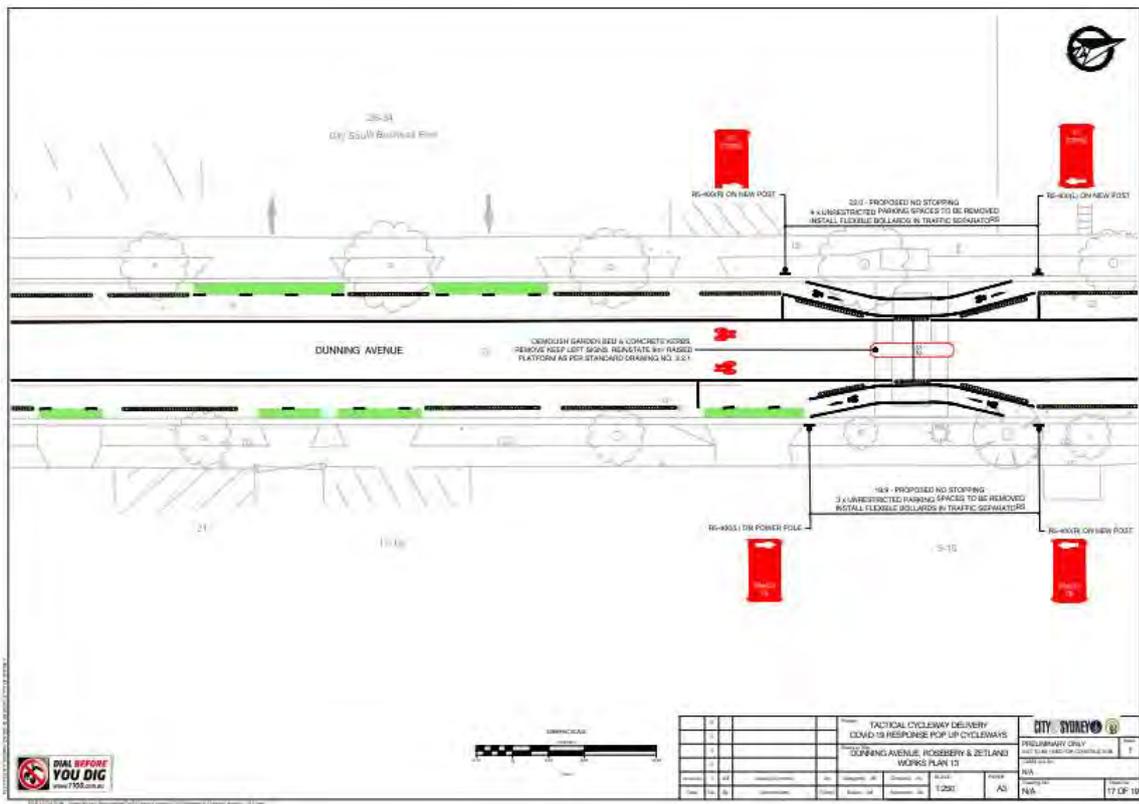


Figure 15 Tactical Cycleway Delivery Covid-19 Response Pop Up Cycleways - Dunning Avenue, Rosebery & Zeiland Works Plan 13



3.6 Before and After Photos of the Dunning Avenue Pop-up Cycleway

*Below some before and after photos taken along Dunning Avenue.*

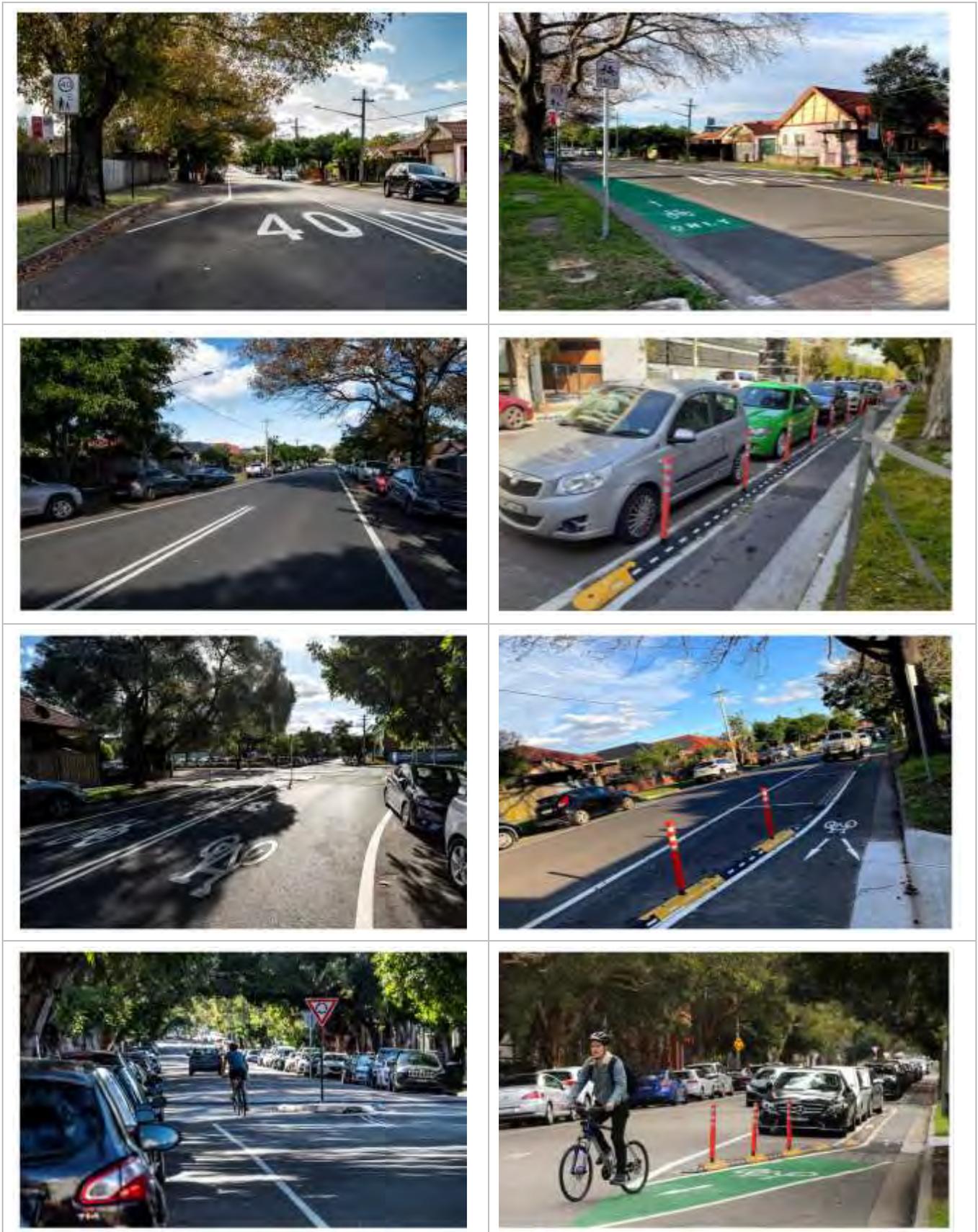


Figure 18. Before and After Photos – Dunning Avenue Pop-up Cycleway (Source: City of Sydney, 2020)



Figure 19. Before and After Photos – Dunning Avenue Pop-up Cycleway (Source: City of Sydney, 2020)

## 4 Legislative and Planning Framework

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### 4.1 Planning and State Legislation

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#### 4.1.1 NSW Environmental Planning & Assessment Act 1979

This REF considers the relevant provisions under Part 5 of the *NSW Environmental Planning & Assessment Act 1979* (EP&A Act), in addition other relevant Environmental Planning Instruments (EPI), and policy directions. Under Part 5, Section 5.5 the City of Sydney as the determining authority is required to “*examine and take into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of that activity.*”

Section 5.5 “Duty to consider environmental impact” states:

*For the purpose of attaining the objects of this Act relating to the protection and enhancement of the environment, a determining authority in its consideration of an activity shall, notwithstanding any other provisions of this Act or the provisions of any other Act or of any instrument made under this or any other Act, examine and take into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of that activity.*

Under Section 5.7, a council must consider whether the proposal is likely to significantly affect the environment, including threatened species populations, ecological communities or their habitats. If any critical habitat is affected or where any significant impacts on threatened species, populations or ecological communities or their habitats are likely, a species impact statement must be prepared.

Where a council forms the opinion that any significant impact is likely, an Environmental Impact Statement (EIS) would in turn need to be assessed and prepared under sections 4.12 (8) or 5.7 of the Act.

Further, Clause 228 of the EP&A Regulations defines the factors which must be considered when determining if an activity assessed under Part 5 of the Act, has a significant impact on the environment.

This REF has been prepared in accordance with Section 5.5 of the EP&A Act and as specified in Clause 228(2) of the EP&A Regulations.

#### 4.1.2 State Environmental Planning Policy (Infrastructure) 2007

*State Environmental Planning Policy (Infrastructure) 2007* (ISEPP) is the principal State EPI that applies to the assessment and approval of infrastructure in NSW. The main aims of the ISEPP are to provide a consistent approval system for the assessment of public infrastructure in NSW and to promote better coordination and integration with adjacent development and to achieve the efficient redevelopment of surplus government- owned land. The ISEPP also stipulates consultation requirements with key government agencies during the EIA process or prior to development.

The ISEPP includes development controls and exempt development provisions relating to the construction of a range of infrastructure and related service works, as well as requirements regarding consultation with relevant authorities. Relevant to this proposal, it covers roads and road infrastructure facilities.

Clause 97 of the ISEPP permits development by Council to carry out, without consent, works in connection with a road or road infrastructure facilities, providing it is within the meaning of the *Roads Act 1993* and complies with clause 20/20A.

The exempt works outlined in Clause 97 that are relevant to the proposal for the Dunning Avenue pop-up cycleway includes related works:

- pedestrian and cyclist facilities (such as footpaths, street lighting, kerb adjustments and ramps, pedestrian fences, refuges, holding rails, and bollards);
- removal from or addition to existing traffic lights of items such as signal displays, loops or buttons;
- minor road pavement or shoulder work (such as patching, grading, re-sheeting, sealing and re-sealing);

- street furniture (such as seats, bins and directional signs) and any associated kerb construction, access paths and ramps, lighting and signage that complies with AS:1428.2 and the Disability Standards;
- kerb and guttering; and
- culverts, drains and other works to improve the quality or control of stormwater runoff.

Clause 20 of the SEPP outlines pre-conditions which a proposal must comply with to be exempt. Certain elements of proposed project (namely those outlined above) are consistent with Clause 97 if seen as meeting the pre-conditions of clause 20 of the ISEPP.

Clause 94 (1) of the ISEPP details development permitted without consent and states:

*Development for the purpose of a road or road infrastructure facilities may be carried out by or on behalf of a public authority without consent on any land.*

Clause 94(1) of the Infrastructure SEPP allows for the development of 'roads and road infrastructure facilities' by or on behalf of a public authority without consent on any land.

In accordance with Clause 94(1) of the Infrastructure SEPP, development consent is not required, and the proposal is designated as 'development without consent' under Division 5.1 of the EP&A Act. However, it is still necessary and required to consider environmental impacts of the proposal under Part 5 of the EP&A Act.

Further and as mentioned in Clause 94(2), the reference to *road infrastructure facilities* in Clause 94 and Clause 96 includes reference to development for the following purposes if in connection with a road or road infrastructure facilities:

- a) *construction works (whether or not in a heritage conservation area)...*
- b) *emergency works or routine maintenance works...*
- c) *alterations or additions to an existing road (such as widening, narrowing, duplication or reconstruction of lanes, changing the alignment or strengthening of the road)...*
- d) *environmental management works, if the works are in or adjacent to a road corridor.*

In addition to Clause 94(1) of the Infrastructure SEPP, Clause 94(2)(c) specifically notes "alterations or additions to an existing road (such as widening, narrowing, duplication or reconstruction of lanes..." as development permitted without consent.

#### 4.1.3 State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017

The *State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017* (Vegetation SEPP) provides a mechanism for the protection of vegetation in non-rural areas of the State of NSW including the City of Sydney LGA. This policy aims to protect the biodiversity values of trees and other vegetation and preserve the amenity of non-rural areas of the State.

The City of Sydney through the implementation of the Dunning Avenue pop-up cycleway sought to protect and retain urban vegetation. The implementation of the Dunning Avenue pop-up cycleway does not require any extensive tree removal nor is it expected to impact upon the biodiversity of any trees or vegetations within its boundaries as part of its construction.

#### 4.1.4 Roads Act 1993 & Roads Regulation 2018

The *Roads Act 1993* outlines the objectives and road classifications for the NSW road network. The *Roads Act 1993* addresses the rights and functions of road users and road authorities using and carrying out of activities on classified and unclassified roads. Clause 7 provides detail with regards to the relevant roads approval authorities under the *Roads Act 1993* and requirements under the *Roads Regulation 2018*.

The City of Sydney has consulted extensively with TfNSW during the concept and implementation of the pop-up cycleway. The City of Sydney has referred all relevant road documentation including Traffic Impact Assessment reports, concept plans and refinements, community consultation, and Road Safety Audits throughout the design process to TfNSW as required.

The continued operation of the Dunning Avenue pop-up cycleway is not anticipated to require changes to the existing configuration. TfNSW will continue to be consulted to ensure all traffic and road safety impacts are managed and appropriate mitigation measures as necessary.

#### 4.1.5 Biodiversity Conservation Act 2016

The *Biodiversity Conservation Act 2016* outlines objectives to ensure the conservation of biological diversity, ecological diversity, to prevent negative impacts to threatened species and ecological communities.

Part 5.1 of the EP&A Act lists several factors, which are to be taken into account in the administration of Section 5.5, and when deciding if there is the likelihood of a significant impact on threatened species, populations or ecological communities, or their habitats.

If there is potential for adverse impact, then an Assessment of Significance is required to characterise the significance of the impact. If there is likelihood for a significant impact on threatened species, populations and their habitat or on ecological communities then a Species Impact Statement (SIS) is required.

A desktop study has revealed that no threatened species, population or ecological communities or their habitats are located within the subject area.

#### 4.1.6 Heritage Act 1977

The *NSW Heritage Act 1977* (Heritage Act) is the legislation that conserves the cultural heritage of NSW. The Heritage Act regulates any potential impacts on the State's heritage assets as identified within the State Heritage Register. Administered by the NSW Heritage Office, the Heritage Act details the statutory requirements for protecting historic buildings, State heritage significant areas and items.

Key objectives under the Heritage Act include:

- (a) to promote an understanding of the State's heritage,*
- (b) to encourage the conservation of the State's heritage,*
- (c) to provide for the identification and registration of items of State heritage significance,*
- (d) to provide for the interim protection of items of State heritage significance,*
- (e) to encourage the adaptive reuse of items of State heritage significance,*
- (f) to constitute the Heritage Council of New South Wales and confer on it functions relating to the State's heritage,*
- (g) to assist owners with the conservation of items of State heritage significance.*

Heritage items include items listed:

- On the NSW State Heritage Register.*
- On the National and Commonwealth Heritage Lists.*
- By City of Sydney Council, sourced from the State Heritage Inventory (SHI) and the Local Environment Plan for locally listed heritage items.*

*Under Section 60 of this act, applications to carry out works on items listed on the State Heritage Register (SHR) are required to be made to the Heritage Council.*

A desktop study has been conducted to review whether there would be any potential impacts to existing state and local heritage items. An investigation of the State Heritage Register and *Sydney Local Environmental Plan 2012* heritage mapping indicates that the proposed scope of works does not directly impact upon or affect any heritage item within Pitt Street.

#### 4.1.7 Sydney Local Environmental Plan 2012

The *Sydney Local Environmental Plan 2012* is the local environmental planning instrument which applies to the proposed cycleway. The Dunning Avenue pop-up cycleway is located on land zoned R1 General Residential, R2 Low Density Residential, B1 Neighbourhood Centre, B4 Mixed Use, and B7 Business Park.

The retention of the Dunning Avenue pop-up cycleway works is consistent with the objectives for each of the relevant zonings. The retention of the cycleway will encourage and promote the use of alternative transport, such as walking and cycling between various developments within each zone.

In addition, all works previously, and any minor operational works to continue the functional operation of the pop-up cycleway, are considered exempt as specified in Clause 97 of the ISEPP, or as development permitted without consent as specified in Clause 94 of the ISEPP.

#### 4.2 Commonwealth legislation

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No relevant Commonwealth legislation applies to this project.

#### 4.3 Relevant Policies

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The relevant NSW Government and City of Sydney policies relevant for improving cycling experiences within the LGA (including the implementation of the temporary pop-up cycleways) are:

- Greater Sydney Commission's 'Greater Sydney Region Plan, A Metropolis of Three Cities' (2018);
- Greater Sydney Commission's 'Eastern City District Plan' (2018); and
- City of Sydney's 'Cycling Strategy and Action Plan For a more sustainable Sydney 2018-2030' (2018).

##### 4.3.1 A Metropolis of Three Cities – Greater Sydney Commission

The *Greater Sydney Region Plan - A Metropolis of Three Cities* (Greater Sydney Region Plan) was released in 2018 by the Greater Sydney Commission as the NSW Government's 20-year plan to manage population growth and change for the Greater Sydney Region. The plan provides broad directions for improving Sydney's productivity, environmental management, liveability, infrastructure, and open space.

It also established a 40-year vision to realise Sydney as a competitive global 30 minute city, managing social, environmental and economic change through a strategic context. The vision seeks to integrate land use, transport and infrastructure planning across the Greater Sydney, establishing Greater Sydney as a metropolis of three distinct cities, The Western; Parkland City; the Central River City; and the Eastern Harbour City.

The following directions support the Greater Sydney Region Plan:

- *A city supported by infrastructure;*
- *A collaborative city;*
- *A city for the people;*
- *Housing the city;*
- *A city of great places;*
- *A well connected city;*
- *Jobs and skills for the city;*
- *A city in its landscape;*
- *An efficient city; and*
- *A resilient city.*

The proposal for the continued operation of the Dunning Avenue pop-up cycleway supports the Greater Sydney Region Plan directions and objectives. The pop-up cycleway was previously carried out in consultation with the NSW

Government and each of the relevant planning and transport agencies to meet the State Government's strategic transport and land use priorities.

#### 4.3.2 The Eastern Harbour District Plan – Greater Sydney Commission

The Eastern Harbour City District Plan contains the planning priorities and actions for implementing the directions outlined within the Greater Sydney Region Plan. The City of Sydney and the Project site fall within its district.

The District Plan's main goals are to improve liveability, productivity, sustainability, and infrastructure and collaboration within each of the districts. The Eastern City District Plan informs local strategic planning statements and local environmental plans, the assessment of planning proposals as well as community strategic plans and policies.

The following planning priorities and their associated actions regarding cycling and pedestrian connections broadly relate to the Project:

- *Providing services and social infrastructure to meet people's changing needs (Planning Priority E3);*
- *Fostering healthy, creative, culturally rich and socially connected communities (Planning Priority E4);*
- *Creating and renewing great places and local centres, and respecting the District's heritage (Planning Priority E6);*
- *Delivering integrated land use and transport planning and a 30-minute city (Planning Priority E10);*
- *Growing and investing in health and education precincts and the Innovation Corridor (Planning Priority E8);*
- *Increasing urban tree canopy cover and delivering Green Grid connections (Planning Priority E17);*
- *Reducing carbon emissions and managing energy, water and waste efficiently (Planning Priority E19); and*
- *Adapting to the impacts of urban and natural hazards and climate change (Planning Priority E20).*

The Dunning Avenue pop-up cycleway is consistent with the Eastern Harbour City District Plan priorities. The proposal aligns with the strategic need of improving cycling and pedestrian connections within the Eastern Harbour City. The Dunning Avenue pop-up cycleway meets strategic objectives to integrate transport with land use, and enable connected, safe, walkable active transport networks.

#### 4.3.3 Sustainable Sydney 2030 Community Strategic Plan – City of Sydney

'Sustainable Sydney 2030' is the City's long term strategic plan for the City of Sydney Local Government Area. 'Sustainable Sydney 2030' was delivered in 2013 and sets out a future vision to be achieved by 2030, under a theme of being '*Green, Global and Connected*'.

'Sustainable Sydney 2030' identifies 10 key strategic directions that orientate the City's future actions and objectives, including:

- *Direction 3 - Integrated transport for a connected city;*
- *Objective 3.4 - Increase public transport use and reduce traffic congestion on regional roads.*
- *Direction 4 – A city for walking and cycling;*
- *Objective 4.1 - A network of safe, linked pedestrian and cycleways integrated with green spaces throughout both the City and Inner Sydney*
- *Objective 4.2 - Improve cycle and pedestrian movements and amenity in the City Centre.*
- *Objective 4.3 - Green Travel is the preferred transport choice to City work places and venues*

The proposal aligns with the objectives of 'Sustainable Sydney 2030' as it provides for efficient and safe active transport infrastructure and addresses access requirements in a key area. Retention of the cycleway will continue to improve road safety and encourage walking and cycling in the area. The Dunning Avenue pop-up cycleway enhances the existing active transport network and provides an important linkage connecting the residential, business, commercial, and industrial areas of Rosebery, Zetland, Green Square to the Sydney CBD.

#### 4.3.4 Cycling Strategy and Action Plan 2018-2030 – City of Sydney

The 'Cycling Strategy and Action Plan 2018-2030' is the City of Sydney's commitment to provide an efficient and safe cycling experience for people to encourage cycling as an attractive active transport alternative.

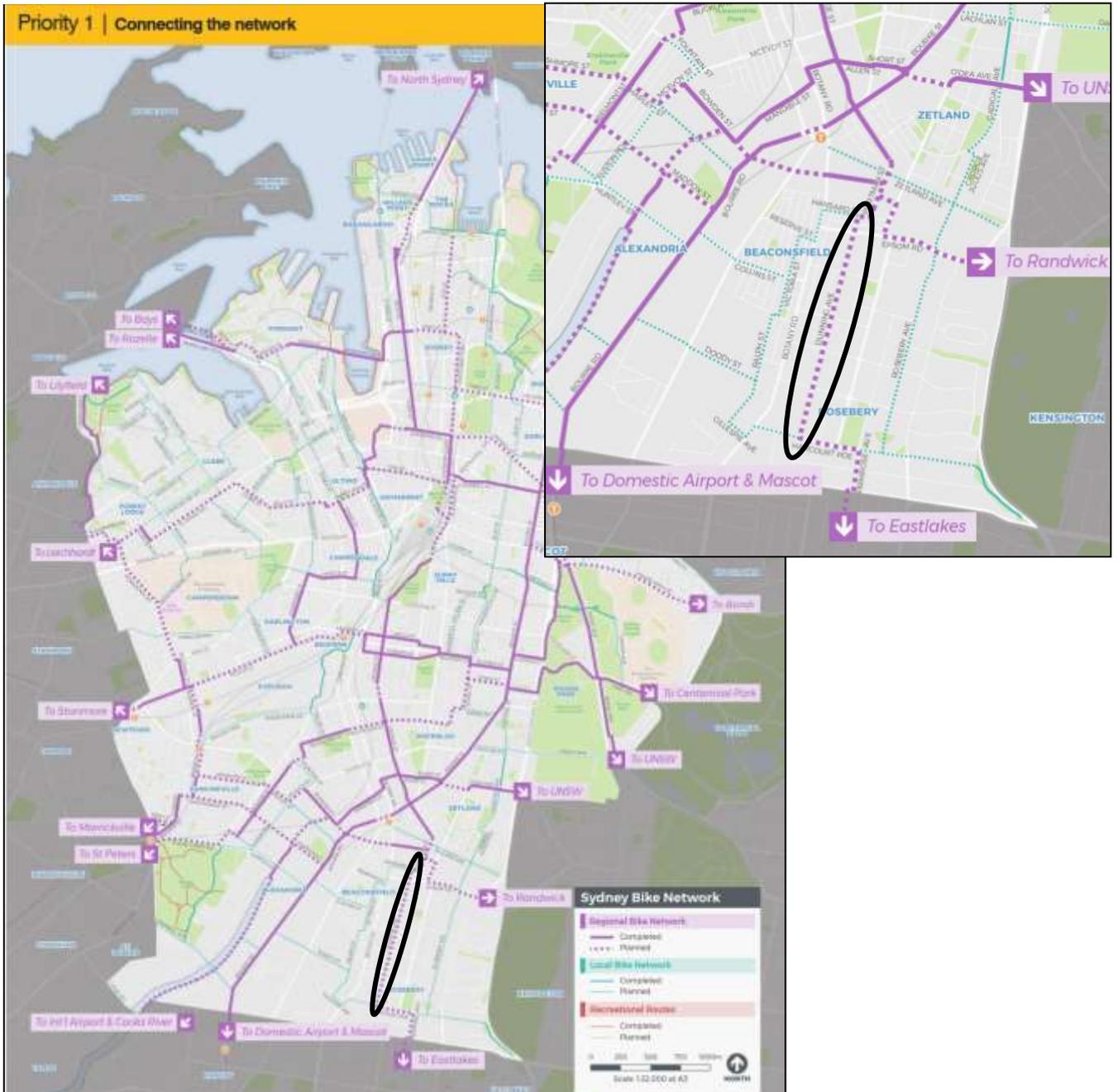


Figure 20: Extract of Sydney Bike Network - Cycling Strategy and Action Plan 2018-2030

The following four priorities and actions are relevant to the Project:

- *Priority 1- Connecting the network:*
  - *Action 1.4 - Improve safety and access throughout our area, for example by providing new contra-flow provisions, kerb ramps, reducing through traffic and speed on local streets;*
  - *Action 1.7 - Provide shared paths on, and alternative routes for, state roads where the City is not currently permitted to reallocate road space*

- *Action 1.8 - Investigate and respond to the community's suggestions and comments about the bike network, to improve safety, access and comfort; and*
- *Action - 1.12 Investigate improved intersection designs and reduce delays for people riding.*
- *Priority 2 - Supporting people to ride;*
- *Action 2.11 - Work with state government to improve compliance with road rules, targeting high risk behaviours.*
- *Priority 3 - Supporting businesses; and*
  - *Action 3.1 - Work with employers to encourage cycling, particularly in locations with job growth and change and where new cycling infrastructure is built.*
- *Priority 4 - Leadership and advocacy.*
  - *Action 4.6 - Identify and advocate for higher capacity separated cycleways along the most direct and flat routes with priority at intersections; and*
  - *Action 4.9 - Advocate for fairer prioritisation of street space and allocation of time at signals.*

TfNSW supported the previous pop-up cycleway and will be involved following further community consultation.

## 5 Consultation

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### 5.1 Authorities

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#### 5.1.1 Consultation with TfNSW

On 15 May 2020, the Minister for Transport and Roads confirmed that the NSW Government would provide funding to immediately deliver six new temporary cycleways, including Dunning Avenue, in partnership with the City of Sydney. The NSW Government strongly encouraged residents working within the Sydney CBD and LGA to walk or cycle to work as one measure to reduce capacities on public transit.

On 21 May 2020, the City of Sydney received funding approval for the Dunning Avenue pop-up cycleway to support the NSW Government response to the COVID-19 pandemic. The City of Sydney Local Pedestrian Cycling and Traffic Committee (LPCTCC) at its 21 May 2020 meeting was briefed about the six pop-up cycleways delivered by the City of Sydney and TfNSW.

All proposed changes to parking and loading areas related to the pop-up cycleways were provided to TfNSW for review and in-principle approval.

Authority Consulted	Items Consulted
<ul style="list-style-type: none"><li>· Transport for NSW (TfNSW)</li></ul>	<ul style="list-style-type: none"><li>· Funding approval.</li><li>· Review for parking, loading areas and road safety.</li><li>· Road Safety Audit carried out for in-principal approval.</li></ul>
<ul style="list-style-type: none"><li>· City of Sydney Local Pedestrian Cycling and Traffic Committee (LPCTCC)</li></ul>	<ul style="list-style-type: none"><li>· Briefing on pop-up cycleway implementation (all six temporary cycleways).</li><li>· Agreement and recommendations for pop-up cycleway implementation (all six temporary cycleways).</li></ul>

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Following all necessary road safety auditing requirements, the City of Sydney received Traffic Management Plan approval for the pop-up cycleway project from TfNSW.

Construction completed 5 August 2020 and open for use 7 August 2020.

### 5.2 Community

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#### 5.2.1 Notification and Feedback

The City provided notification prior to work commencing, including a description of the works and the construction period, to properties on the alignment of the cycleway for the Dunning Avenue pop-up cycleway.

Community members were provided with an opportunity to register their interest in the pop-up cycleway and be consulted when a permanent plan is developed. Community could also provide feedback which can inform the concept design and raise issues relating to the ongoing operation of the pop-up. This opportunity will remain open while the City develops a permanent plan for the street.

The City of Sydney collected and monitored feedback related to the impacts of the pop-up cycleway on street users including motorists, people on bikes, pedestrians, and the broader community between 24 August 2020, through to 16 November 2020. Activities undertaken during this period included:

- Structured site observations;

- Bike count data collection;
- Intercept surveys with people on bikes; and
- Review of feedback received via online community engagement platform 'Sydney Your Say' in relation to the pop-up cycleway.

Specific issues identified by the community during consultation included:

- Access and quality of road around driveways;
- Improving sight lines by the removal of parking in front of specific driveways;
- Additional line marking and hazard warning devices (e.g. bollards in front of trees); and
- Crossing and ramp interventions.

The City of Sydney evaluated the pop-up cycleway in December 2020 to determine the effectiveness and operational performance of the cycleway. As items and issues were raised by the community, the City of Sydney, or TfNSW, minor amendments were carried out to improve the function and safety of the pop-up cycleway.

No construction is required or anticipated and any future work for the pop-up cycleway will be for minor maintenance works. Should any more significant works on the pop-up cycleway be required, the community will continue to be consulted with as per the City of Sydney's Community Participation Plan and requirements under the EP&A Act, and EP&A Regulations.

Any future proposal to make the cycleway permanent will be subject to all applicable consultation requirements and approval processes.

## 6 Environmental Assessment and Mitigation Measures

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This section provides a detailed description of potential environmental impacts associated with the proposal. For each potential impact an assessment is undertaken as to how the existing environment may be protected and impacts to it mitigated.

It is noted as part of this proposal that no major impacts associated with construction are considered as no construction will be undertaken as part of this proposal.

This REF was prepared in accordance with City of Sydney's EIA Manual and Clause 228 of the EP&A Regulations. A checklist of Clause 228 factors and how they have been specifically addressed in this REF is included in Section 7.

### 6.1 Air Quality

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#### 6.1.1 Potential Impacts

No adverse air quality impacts or issues have occurred because of construction works or the ongoing implementation of the Pitt Street North pop-up cycleway.

Any potential air quality impacts generated by the minor amendments to the pop-up cycleway will be able ameliorated through the employment of mitigation measures including dust and construction management plans to ensure that there are no significant air quality impacts on the surrounding environment.

#### 6.1.2 Mitigation Measures

In response to any additional Dunning Avenue pop-up cycleway maintenance works as part of its retention, all activities will be expected to use dust control fencing and employ the damping down of materials. Dust generating works as part of any maintenance work should be stopped during periods of high wind. These measures can be contained within the site.

Further mitigation measures as required may include (as required):

- A Dust Management Plan (DMP) and Construction Environmental Management Plan (CEMP) will be amended as required by the contractors engaged to carry out any major maintenance works for the proposal;
- Any heavy vehicles and machinery are to be regularly maintained to minimise exhaust emissions;
- Dust pollution will be minimised and a waste and materials should be adequately covered during transportation from the site to minimise dust pollution; and
- Over the medium to long term, the proposal may improve air quality in the area due to the cycleway helping to reduce vehicle traffic and the corresponding vehicle emissions.

### 6.2 Water Quality and Quantity

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#### 6.2.1 Potential Impacts

No adverse impacts or water quality or quantity issues have occurred during the construction, operation or ongoing implementation of the Dunning Avenue pop-up cycleway.

## 6.2.2 Mitigation Measures

Any potential impacts to water quality during the retention of the pop-up cycleway as a result debris being washed or swept off site onto the public road network or drainage system are to be managed appropriately by a series of mitigation measures.

Additional mitigation measures may include (as required):

- Implementing a water quality control plan;
- All fuels, chemicals, and liquids stored appropriately in an impervious area away from drainage or areas prone to flooding;
- Open excavations and loose soils on the site are to be covered to prevent run off or stockpiled and removed upon classification;
- Ensuring emergency spill kits and relevant trained staff are on hand during all stages of construction;
- Prepare an Erosion and Sediment Control Plan (ESCP); and
- Regular sweeping and management of rains, gutters, roads and access ways to be free of sediment.

It is expected that there are unlikely to be any long term negative impacts to water quality because of the pop-up cycleway continuing to operate.

## 6.3 Soils

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### 6.3.1 Potential Impacts

No adverse soil issues or impacts have occurred during the construction, operation, or ongoing implementation of the Dunning Avenue pop-up cycleway.

### 6.3.2 Mitigation Measures

All areas containing acid sulfate soils are to be identified and either appropriately disposed off-site or remain undisturbed. The site must be managed in accordance with the general requirements of WorkCover NSW and strategies outlined in the relevant codes, standards, and guidelines.

## 6.4 Noise and Vibration

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### 6.4.1 Potential Impacts

No adverse noise/vibration impacts, or issues have occurred during the construction, operation, or ongoing implementation of the Dunning Avenue pop-up cycleway.

### 6.4.2 Mitigation Measures

Every effort will be made to ensure that any further maintenance works are undertaken in appropriate working hours. Any vibration activities need to consider the proximity to heritage items, sensitive land uses, fragile structures, and residents.

When considered appropriate, a Noise and Vibration Management Plan (NVMP) will be prepared, outlining specific construction noise mitigation measures.

No adverse noise and vibration impacts or issues have occurred previously as part of the implementation of the Dunning Avenue pop-up cycleway. It is expected that there are unlikely to be any long term negative impacts to noise and vibration.

## 6.5 Flora and Fauna

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### 6.5.1 Potential Impacts

No adverse impacts, or issues have resulted on flora and fauna as part of the construction of, implementation, or operation of the Dunning Avenue pop-up cycleway.

### 6.5.2 Mitigation Measures

Should any further construction activity potentially pose a risk to urban vegetation, the CEMP is to comply with the City of Sydney's 'Tree Management Policy' (City of Sydney, 2013) and the Australian Standard requirements for the protection of trees (AS4970).

## 6.6 Natural Hazards

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Not applicable and no natural hazards have been identified.

## 6.7 Sea Level Rise

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Not applicable.

## 6.8 Spoil and Waste Management

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No additional spoil or waste has been created due to the construction, or the ongoing implementation of, the Dunning Avenue pop-up cycleway. Any waste during construction was managed in alignment with City of Sydney's waste management policies.

### 6.8.1 Potential Impacts

All further waste requiring removal from the site in the continued operation of the pop-up cycleway will have to be done in accordance with the City of Sydney's Waste Management Plan (EMP).

### 6.8.2 Mitigation Measures

All waste that requires removal from the site will be in strict accordance with Council's Waste Management Plan and other relevant regulatory frameworks such as the *Protection of Environment Operations Act 1997*.

The Waste Management plan will be prepared by an appointed contractor for construction and operation, which would identify all potential waste streams associated with the works, identify opportunities to minimise the use of resources and outline methods of disposal to keep the site area clear during all stages of construction.

## 6.9 Chemical and Hazardous Substance Management

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### 6.9.1 Potential Impacts

The City of Sydney's preferred treatment system for dealing with chemical and hazardous substances in urbanised road environments is based on filtration (e.g. sand filters). The City of Sydney prefers not to utilise chemical treatments where possible.

It is anticipated that it is unlikely for there to be any significant chemical or hazardous substances utilised or stored on site during the retention of the Dunning Avenue pop-up cycleway.

## 6.9.2 Mitigation Measures

No chemical or hazardous substances were required to be managed as part of the construction works or the ongoing implementation of the pop-up cycleway

In event where chemical and hazardous substances are either utilised or identified on site, a nominated preferred operator will specify a chemical treatment method and facility in compliance with statutory requirements and in consultation with the NSW Office of Environment and Heritage and the NSW Environmental Protection Agency.

## 6.10 Transport and Access

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### 6.10.1 Potential Impacts

As a result of the Dunning Avenue pop-up cycleway, traffic and transport access has been managed through a submitted Traffic Management Plan (TMP) in accordance with Roads and Maritime guidelines titled '*Procedures for Use in the Preparation of a Traffic Management Plan*', Version 2.0 (2001).

A range of measures were proposed to mitigate traffic impacts because of the pop-up cycleway, including:

- Local access maintained for residents and business owners;
- Access for emergency vehicles maintained;
- Appropriate sign postings about changed traffic conditions in place;
- Notification letters outlining the proposed changes sent to all relevant stakeholders and the local community;
- Asphalt patch repairs as identified by the during City of Sydney / TfNSW site visit (Mill and resheet 50mm of asphalt); and
- Gardeners Road and Dunning Avenue bus swept paths changes based on TfNSW feedback.

Approximately x52 parking spaces temporarily removed at key intersections and areas where there were identified safety risks (e.g. adjoining driveways).

Further, the cycleway was implemented through a trialled method, using prefabricated materials that enabled rapid adjustments to driveway access, kerb use, and turning paths. This approach allowed for the early identification and resolution of safety issues, which led to safer operation of the cycleway during the period.

### 6.10.2 Mitigation Measures

Should the retention of the pop-up cycleway require significant amendments to the agreed TMP traffic and access conditions, the Traffic Management Plan (TMP) will need to be updated to mitigate any new potential traffic and access impacts. This plan should include details of proposed methods of directing traffic, in, out and through the construction area.

The TMP will consider vehicular, pedestrian and cyclist traffic and ensure traffic flows are protected from plant and machinery, conflicting traffic, and excavation works.

The TMP will also include details of at a minimum:

- Consultation with the consent authorities and relevant approvals;
- Expected construction vehicle numbers and frequency;
- Approach and departure routes;
- Anticipated special out of hours or escorted deliveries;
- Parking access arrangements during construction;
- Construction work zone locations;
- Site entry and exit points;

- Traffic Control signage;
- Safety barriers;
- Fencing or hoardings (temporary); and
- Traffic controllers and the proposed traffic and pedestrian management measures.

A communication plan has been prepared by the City and notification letters are to be distributed to all relevant stakeholders and community members.

## 6.11 Aboriginal and Non-Indigenous Heritage

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### 6.11.1 Potential Impacts

No Aboriginal and non-indigenous heritage items have been identified as being affected by construction works or the ongoing implementation of the Dunning Avenue pop-up cycleway.

A desktop search and review of the Office of Environment Aboriginal Places & State Heritage Register indicates that the proposal is not identified as being within an immediate vicinity of a listed item and the City will not need to obtain an Aboriginal Heritage Impact Permit in accordance with Part 6 of the National Parks and Wildlife Act 1974.

### 6.11.2 Mitigation Measures

The Project exists in an existing heavily urbanised part of the Sydney LGA with limited potential for impacts to remaining Aboriginal sites or places.

Should any other Aboriginal objects and/or places be located during any construction works activities, all work should cease in the vicinity of the finding with the City and the Office of Environment and Heritage contacted immediately on the findings.

## 6.12 Visual Impacts

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### 6.12.1 Potential Impacts

No long term visual impacts have occurred due to the construction works or the ongoing implementation of the Dunning Avenue pop-up cycleway.

### 6.12.2 Mitigation Measures

Any future works related to the maintenance and continued operation of the pop-up cycleway are to utilise urban design and landscape treatments that adhere to the City of Sydney's *'Sydney Streets technical specifications'* (2019) have been incorporated within the design to ensure a contextually consistent outcome that is of high quality in detail and provides aesthetic value to the area.

Other mitigation measures to reduce short term visual impacts for maintenance works for may include:

- Covering of materials;
- Implementation of waste management practices; and
- Fencing of visually imposing construction works.

### 6.13 Socio-Economic Impact

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The Dunning Avenue pop-up cycleway did not significantly affect the efficient functioning of businesses in the Rosebery area. It will supplement the public transport system and thus increase the number of employees who are able to safely access the CBD, Green Square, Mascot and East Lakes.

### 6.14 Future Land Use

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Prior and during construction it was determined by the City of Sydney that the temporary Dunning Avenue pop-up cycleway would not affect existing or any future development within the area. The project was found to supplement public transport capacity during the recovery from the pandemic, and thus contributes to economic recovery.

The temporary arrangements as highlighted above are fully with the City of Sydney and will not have any impacts on any adjacent council boundaries.

### 6.15 Ecologically Sustainable Development and Sustainability

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The Dunning Avenue pop-up cycleway improves ecologically sustainable development and sustainability outcomes within the City through promoting active transport activity and improve road safety for these users. The Minister for Transport and Roads as part of the NSW Government's support for temporary cycleways, as part of the COVID-19 public health response, strongly encouraged residents to walk or cycle to work instead of driving or overcrowding public transport.

### 6.16 Other Environmental Impacts

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No long term environmental impacts are expected as part of the conversion to a permanent cycleway. No other environmental impacts have occurred due to the construction works or the ongoing implementation of the Dunning Avenue pop-up cycleway.

### 6.17 Cumulative Environmental Impacts

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No significant cumulative environmental impacts have become evident because of the pop-up cycleway. The ongoing implementation of the Dunning Avenue pop-up cycleway is not expected to result in any additional cumulative environmental impacts over the period that it is operational.

## 7 Environmental Factors Considered

### 7.1 Consideration of Clause 228 Factors

Consideration of each of the Clause 228 Factors is included in the table below. The impacts have been quantified as:

CLAUSE 228 FACTORS	IMPACT			
	N/A	Negative	Nil	Positive
<i>(a) any environmental impact on a community,</i>				X
<p><u>Comment</u></p> <p>There are no significant negative environmental impacts on the community. It has been evaluated in the City of Sydney's assessment that of the six core outcomes agreed with TfNSW, the project was rated 'green' on five outcomes. No data for interim reporting of speed data is currently being collected.</p> <p>There was a 63% increase in ridership between week 1 and week 12 with an average of 1,000 trips in the week commencing 16 November 2020.</p> <p>Additional community impacts as evaluated and surveyed by the City of Sydney include:</p> <ul style="list-style-type: none"> <li>• An above average proportion of people surveyed said that they feel safe, or that it is safer than before;</li> <li>• The proportion of people that say they feel safe, or that it is safer than before, was the lowest across all the pop-up cycleways;</li> <li>• No data for interim reporting of speed data is currently being collected;</li> <li>• The cycleway is at the edge of the City's cycling network and connects to a relatively low density area; and</li> <li>• There is a balanced proportion of new and experienced riders on Dunning Ave, with 24% riding less than six months, 28% riding for six months to two years and 48% more than two years.</li> </ul>				
<i>(b) any transformation of a locality,</i>				X
<p><u>Comment</u></p> <p>The tactical approach of implementing and continued operation of the pop-up cycleways has helped achieve place-orientated benefits without the various construction impacts that arise from more extensive public domain improvements.</p> <p>Transformational observations that occurred during the pop-up cycleway included:</p> <ul style="list-style-type: none"> <li>• The legibility of the shared path intersection treatments could be improved, and there are delays to crossing at Epsom Road, however the cycleway route is highly legible due to the conventional running cycleway design;</li> <li>• An above average proportion of people that say they feel safe, or that it is safer than before, was the lowest across all the pop-up cycleways;</li> <li>• Dunning Avenue ridership started from a low base, with the smallest number of riders in the first week of all the pop-ups;</li> <li>• Access was the same for people walking, and a reduction in people riding on the footpath;</li> <li>• Access was the same for vehicles, as parking has been removed across from driveways to offset the effect of narrowing the roadway;</li> <li>• Access was the same for waste vehicles, with only a minor change to operations;</li> <li>• Access was the same for emergency vehicles; and</li> <li>• All community concerns resolved where feasible.</li> </ul>				

CLAUSE 228 FACTORS	IMPACT			
	N/A	Negative	Nil	Positive
<i>(c) any environmental impact on the ecosystems of the locality,</i>			X	
<u>Comment</u> There are no negative environmental impacts on the ecosystems of the locality.				
<i>(d) any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality,</i>			X	
<u>Comment</u> There are no negative impacts on the quality of the aesthetic, recreational, scientific or other environmental quality or value of the locality.				
<i>(e) any effect on a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations,</i>			X	
<u>Comment</u> There are no negative impacts on the heritage, aesthetic, cultural, social or special values of the locality.				
<i>(f) any impact on the habitat of protected fauna (within the meaning of the <u>National Parks and Wildlife Act 1974</u>),</i>			X	
<u>Comment</u> There are no negative environmental impacts on protected fauna as the project is within an urbanised area of southern Sydney.				
<i>(g) any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air,</i>			X	
<u>Comment</u> There are no negative environmental impacts on endangered species as the project is within an urbanised area of southern Sydney.				
<i>(h) any long-term effects on the environment,</i>			X	
<u>Comment</u> There are no negative long-term environmental impacts on the locality or local environment.				
<i>(i) any degradation of the quality of the environment,</i>			X	
<u>Comment</u> There are no impacts on the locality or local environment that would lead to the degradation of the quality of the environment.				
<i>(j) any risk to the safety of the environment,</i>				X
<u>Comment</u> The Dunning Avenue pop-up cycleway has improved road safety for pedestrians and cyclists in the area. 66% people responding to intercept survey (n=50) said they felt safe or very safe on Dunning Avenue, and 63% said it was safer				

CLAUSE 228 FACTORS	IMPACT			
	N/A	Negative	Nil	Positive
<p>than the previous road conditions. Concerns were raised about the width of the cycleway.</p> <p>Additional safety outcomes identified by the City of Sydney indicate that the cycleway route is highly legible, due to the conventional running cycleway design and that access has been improved for people walking, with a reduction in people riding on the footpath.</p> <p>Community concerns on matters relating to sight lines, kerbs, hazard markings and parking were resolved where feasible.</p>				
<i>(k) any reduction in the range of beneficial uses of the environment,</i>			X	
<p><u>Comment</u></p> <p>There has been no reduction in the range of beneficial uses of the environment.</p>				
<i>(l) any pollution of the environment,</i>			X	
<p><u>Comment</u></p> <p>There has been no additional pollution in the implementation of the Dunning Avenue pop-up cycleway cycleway. No additional pollution is expected in the retention of the Dunning Avenue pop-up cycleway cycleway. Any pollution created because of construction will be expected to follow the requirements under the specified Waste Management Plan (WMP) and City of Sydney waste management policies.</p>				
<i>(m) any environmental problems associated with the disposal of waste,</i>			X	
<p><u>Comment</u></p> <p>There have been no environmental problems due to the implementation of the pop-up cycleway, or additional environmental problems expected in the retention of the pop-up cycleway.</p>				
<i>(n) any increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply,</i>			X	
<p><u>Comment</u></p> <p>There have been no increased demands on resources due to the implementation of the pop-up cycleway. Additional space on footpaths for pedestrians has resulted due to less people cycling on the footpath.</p> <p>It is noted that approximately x52 parking spaces were temporarily removed at intersections and where there are safety risks, such as near driveways. Despite this, access has been maintained the same for people walking, traffic, emergency vehicles and waste vehicles.</p>				
<i>(o) any cumulative environmental effect with other existing or likely future activities,</i>			X	
<p><u>Comment</u></p> <p>There have been no cumulative environmental effects due to the implementation of the pop-up cycleway. No cumulative effects are expected because of the continued operation of the pop-up cycleway.</p>				
<i>(p) any impact on coastal processes and coastal hazards, including those under projected climate change conditions.</i>	X			
<p><u>Comment</u></p> <p>Not applicable.</p>				

Not applicable as no areas of National Environmental Significance are located / impacted by the proposal.

## 8 Summary of Mitigation Measures

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The following items are a summary of the mitigation measures implemented by the City of Sydney (in consultation with TfNSW) to reduce potential environmental and traffic impacts as part of the Dunning Avenue pop-up cycleway:

- A qualified and experienced environmental manager will be appointed prior to the commencement of construction and/or maintenance works and will oversee the implementation of key plans and environmental controls associated with the project;
- The City of Sydney will prepare a Construction Environmental Management Plan (CEMP) that provides an overall management of the potential construction environmental impacts with the project and include any other necessary mitigation plans as below:
  - Traffic Management Plan (TMP);
  - Dust Management Plan (DMP);
  - Noise and Vibration Management Plan (NVMP);
  - Erosion and Sediment Control Plan (ESCP);
  - Waste Management Plan (WMP); and a
  - Water Management Plan.
- The City of Sydney will refer all management plans and traffic documentation for further RMS review and comment as required;
- All management plans are to be prepared by contractors undertaking the works and to be approved by the City of Sydney prior to the construction stage or commencement of any maintenance works; and
- Notification of surrounding properties of construction activities and temporary traffic management arrangements will be undertaken regularly throughout the Project and works construction.

### 8.1 Construction Environmental Management Plan

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The Dunning Avenue pop-up cycleway has already been constructed and implemented and therefore does not require an additional construction environmental management plan. It is expected that should further construction be required; an updated Construction Environmental Management Plan will be prepared as part of the retention of the pop-up cycleway.

The CEMP provides the mechanism through which all potential environmental impacts relevant to the proposal are to be controlled, with an outlined framework of procedures and controls for managing any environmental impacts during the construction period.

The CEMP is to be prepared for any further major maintenance or construction works in accordance with Council's Environmental Management System requirements.

## 9 Conclusion and Certification

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This Review of Environmental Factors identifies the likely impacts of the proposal on the environment and details the mitigation measures to be implemented to minimise the potential impact to the environment.

The assessment has concluded that as the proposed works as described in this REF, including any proposed management measures and safeguards, will not result in a significant effect on the environment.

The proposed works will not result in a significant impact on any declared critical habitat, threatened species, populations or ecological communities or their habitats. Therefore, a Species Impact Statement (SIS) is not required.

Prepared by:

Name of company (if applicable): Tract Consultants

Company details (if applicable): Level, 8 80 Mount Street, North Sydney 2060

Person writing the report (print name): Ian Mundy

Position: Senior Town Planner

Date: 08/03/2021

Determining officer (print name) \_\_\_\_\_

Position \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_



# Appendices

Appendix A Tactical Design Plans

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# Appendix A Tactical Design Plans

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