Attachment C

Pitt Street Permanent Cycleway – Review of Environmental Factors

Pitt Street Permanent Cycleway

Review of Environmental Factors

Part 5 – Environmental Impact Assessment

Prepared for the City of Sydney

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Quality Assurance

Pitt Street Permanent Cycleway

Review of Environmental Factors
Part 5 – Environmental Impact Assessment

Project Number

220-0060-00-02-RP01

Revisions

Issue	Date	Description	Prepared By	Reviewed By	Project Principal
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03	08/03/2021	Final	Ian Mundy	Leonard Slabbert	Leonard Slabbert

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1 Introduction

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

The purpose of this Review of Environmental Factors (REF) report is to ensure that the operational impacts of the activities related to the proposed permanent Pitt Street cycleway (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 key 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 REF allows the Council, as the determining authority, to fulfil its duty to examine and assess the proposal in terms of potential operational, environmental and construction impacts (including waste removal of all temporary materials) as required by Clause 228 of the Environmental Planning and Assessment Regulation 2000 (EP&A Regulations).

This REF was prepared in accordance with City of Sydney's (the Council) Part 5 'Environmental Impact Assessment Procedures Manual' (City of Sydney 2012) (EIA Manual) and the proponent is the Council.

This proposal primarily comprises a permanent separated two-way cycleway along Pitt Street. The Pitt Street permanent cycleway will follow the same route as the existing temporary Pitt Street pop-up cycleway along the same alignment and was established as part of the City of Sydney and NSW Government's COVID-19 response.

To provide for the finalised design and safety requirements, the Pitt Street permanent cycleway construction works will include (but are not necessarily limited to) activities designed to upgrade the existing road, paving and footpaths, kerbs, road crossings, parking arrangements, streetscape plantings, and signage.

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

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 creation of a comprehensive, co-ordinated 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 conflicts and enhanced motorist, cyclist and pedestrian safety.

Pitt Street 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.

2 Site Analysis

2.1 Site Location and Context

The Pitt Street permanent cycleway is to be located in the Sydney CBD along the western side of Pitt Street. The Pitt Street permanent cycleway replaces the existing pop-up cycleway that operates in both directions between King Street and Reiby Place.

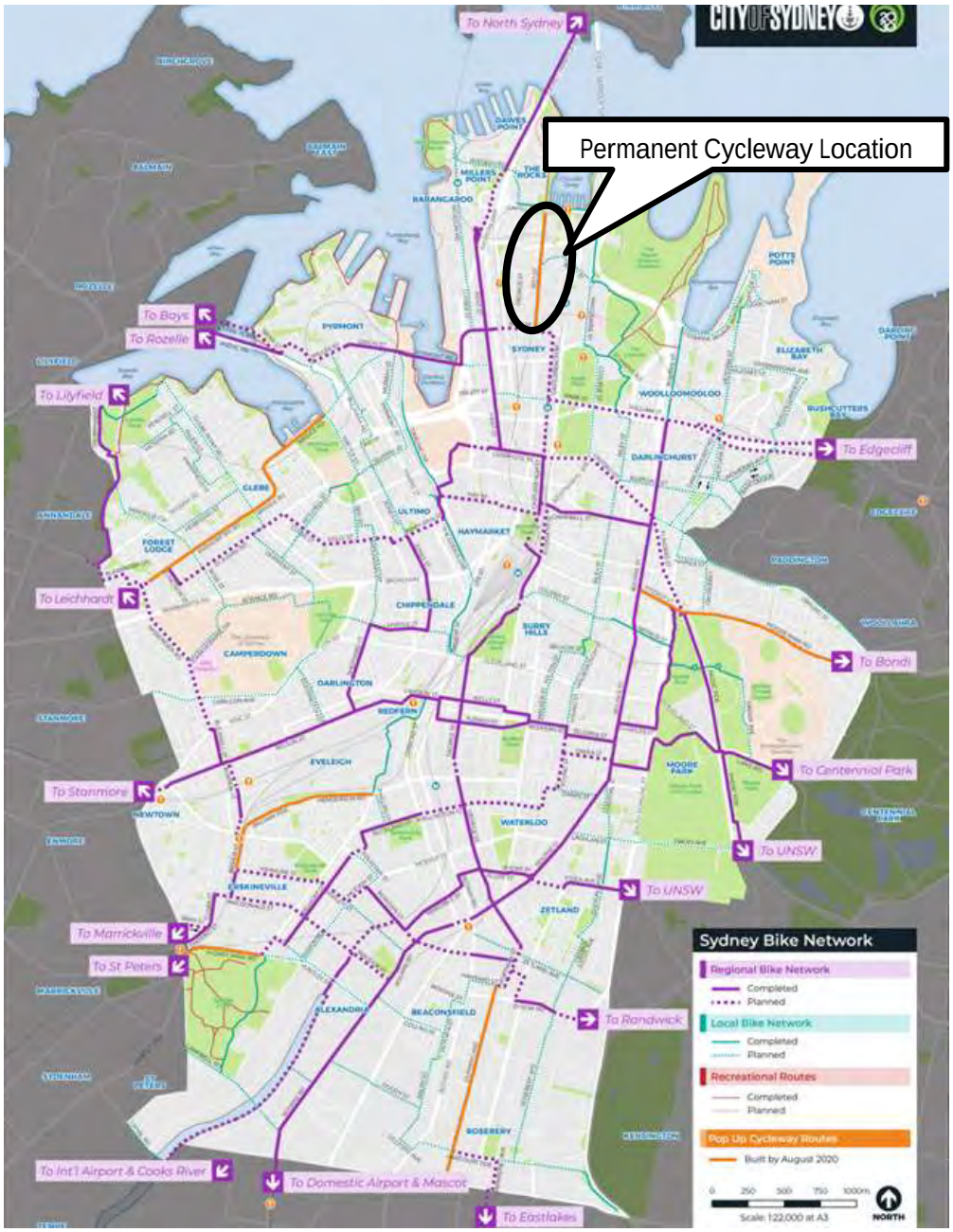

Figure 1. The Pitt Street permanent cycleway Location– Sydney Bike Network (Source: City of Sydney, 2020)

2.2 Land Ownership and Legal Description

The Pitt Street permanent cycleway is to be delivered by the City of Sydney as it is administered as a local road under the *Roads Act 1993*. Works are not proposed on privately held land.

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 the northern sections of Pitt Street for any impacts on lands owned by the City lands, in addition to those owned by others.

The TfNSW and the City of Sydney have since completed the evaluation process. Since considering the positive results and performance of the pop-up cycleways, the City has decided to construct a permanent cycleway to replace the existing pop-up cycleway along Pitt Street in consultation with the community and TfNSW.

2.3 Existing Environment

The Pitt Street pop-up cycleway opened in both directions on 28 August 2020 and is located within the northern part of the Sydney CBD, between King Street and Underwood Street. The permanent cycleway will replace the existing pop-up cycleway.

The location of the temporary separated cycleway and the surrounding land use is primarily a mixture of commercial / business, hospitality and retail premises within an urban central business environment.

The roads affected by the proposal are primarily flat and serve an urban CBD environment which includes interfacing with business-orientated laneways, driveways, and kerbside uses.

2.4 Surrounding Development

The following points of interest, infrastructure, buildings, and developments surround and are linked by the existing Pitt Street pop-up cycleway:

- Existing City of Sydney bicycle network;
- Martin Place;
- Sydney GPO;
- Fullerton Hotel Sydney;
- Radisson Blu Plaza;
- The Tank Stream;
- Australia Square;
- Bridge Street;
- Bulletin Place / Reiby Place; and
- Circular Quay (including ferries, light rail and train stations).

The Pitt Street permanent cycleway will continue along the same alignment as the pop-up cycleway. It will continue to support and link users to these key destinations and developments.

The cycleway runs between Circular Quay and the City Centre as per the following figure:

Start:	Reiby Place / Alfred Street, near Circular Quay
Finish:	King Street, Sydney city centre
Length:	775 m approximately

Figure 2. Pitt Street permanent cycleway - King Street to Reiby Place / Alfred Street (Source: City of Sydney, 2021)

2.5 Existing Zoning

The zoning for the Pitt Street permanent cycleway and most of the directly adjacent land is B8 Metropolitan Centre as per the *Sydney Local Environmental Plan 2012*.

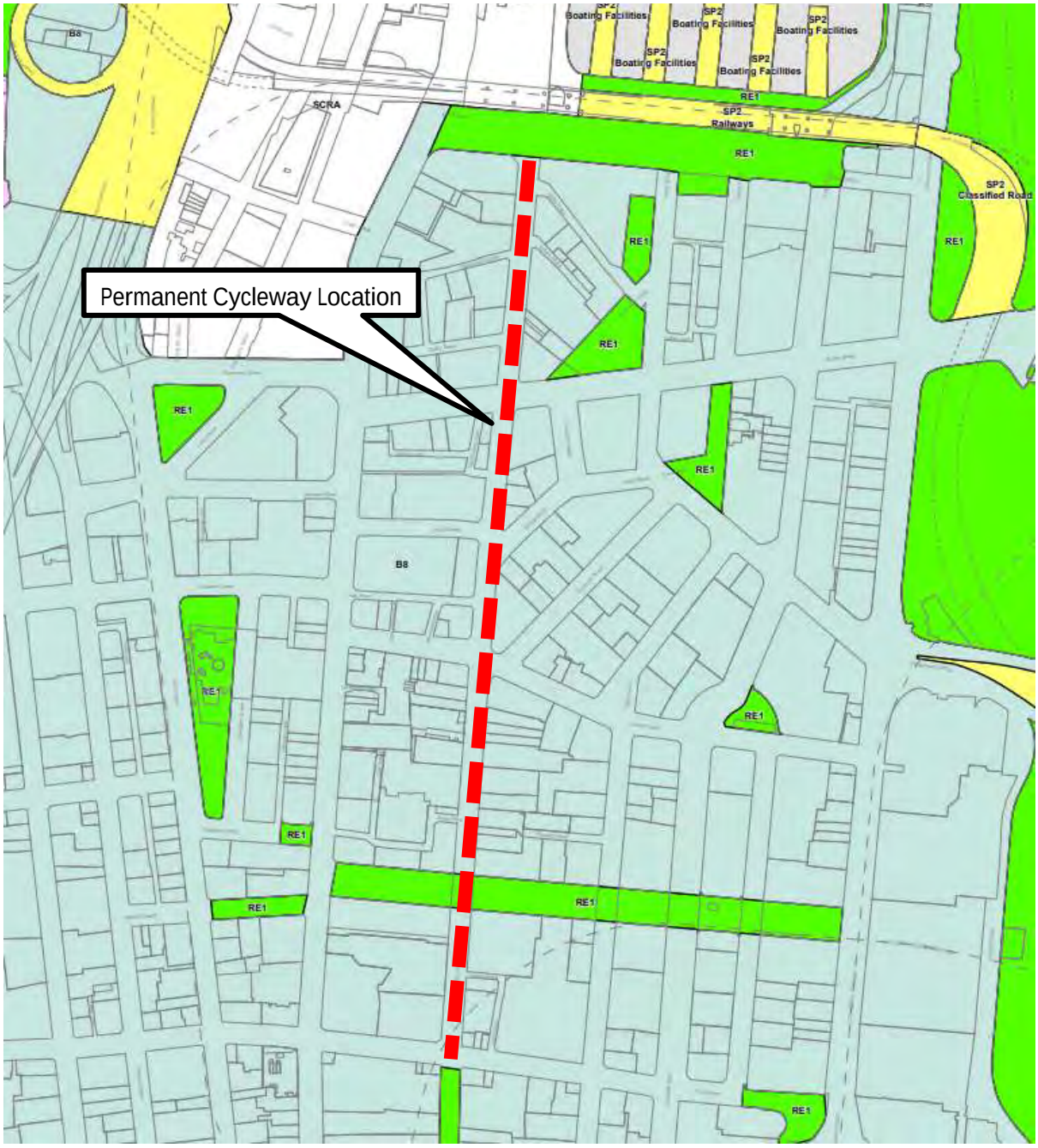

Figure 3. Land Zoning Surrounding the Pitt Street permanent cycleway (Source: Sydney LEP 2012)

3 Project Description

3.1 Project Overview

The City of Sydney proposes to construct a permanent cycleway along the western side of Pitt Street between King Street and Reiby Place.

3.2 Project Justification

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 livable 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 Cycle 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.

Pitt Street 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

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 linking the connections of Sydney's the Inner City Regional Bicycle Network.

The implementation of the Pitt Street permanent cycleway supports the following outcomes:

Connecting Places

- Provides local access along Pitt Street;
- Significantly enhances the amenity for people crossing local roads;
- Connections as part of the NSW Government Co-designed Bicycle Network Blueprint; and
- The northern end of the second of two north-south cycleways in the city centre (the other is Kent Street).

Rebalancing Space

- Additional space for dominant users of the CBD - people walking;
- Efficient access for deliveries by bike to denser parts of the Sydney city centre; and
- Provision of additional space for outdoor dining.

3.4 Options Considered

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 – Pitt Street Pop-up Cycleway Continued Operation and Permanent Cycleway

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 Pitt Street. 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.

3.5 Detailed Description of the Project

The City of Sydney proposes to install the Pitt Street permanent cycleway currently operating as a pop-up cycleway along the western side of Pitt Street between King Street ad and Reiby Place.

As part of this REF, a detailed description of all works and activities related to construction of the permanent cycleway and upgrades to the streetscape include:

- Pre-construction, construction, operation and remediation;
- The size of the proposed activity footprint;
- Ancillary activities e.g., landscaping, services relocation;
- Proposed construction methods, materials and equipment;
- Receipt, storage, and on site management for materials used in construction;
- Earthworks or site clearing including extent of vegetation to be removed;
- Environmental safeguards and mitigation measures; and
- Construction timetable and staging, hours of operation.

It is expected that select intersections and roads may be temporarily impacted by road and constructions works related to the Pitt Street permanent cycleway. Repairs and replacement of existing footpath and road assets will also be undertaken. Excavation is expected to be limited and primarily will involve the removal of temporary pop-up cycleway elements, construction of permanent separation and kerb extensions and the repair of damaged existing kerbs and pavements where appropriate.

3.5.1 Configuration of the Cycleway

The Pitt Street permanent cycleway does not propose any significant configuration changes to what is already established as part of the Pitt Street pop-up cycleway.

The proposal is for the current configuration to be made permanent. The measures that have altered the configuration of the streetscape and local road network as part of the pop-up cycleway included:

- Western kerbside reallocated to pedestrians;
- Second lane converted to a bi-directional separated cycleway;
- Installation of a marked pedestrian crossing in Bond Street at Pitt Street;
- Closure of vehicular access into Spring Street from Pitt Street;
- Right turn bans for vehicles turning from Pitt Street into Bridge and Hunter Streets; and
- Kerbside use changes on the eastern side of Pitt Street and surrounding streets.

3.5.2 Operation of the Cycleway

The operation of the Pitt Street permanent cycleway allows the same operational performance measures as current under the Pitt Street pop-up cycleway:

- A two-way cycleway along western side of Pitt Street;
- Connection between Pitt Street Mall and to near Circular Quay; and
- Additional pedestrian space for walking along the western footpath.

3.5.3 Construction of the Permanent Cycleway

The Pitt Street permanent cycleway is to be developed in accordance with the following Australian and City of Sydney Standards, Codes, Regulation, Policies and Legislation:

- Sydney Streets Code, 2013;

- Sydney Streets Technical Specifications (version 4), 2016;
- City of Sydney Street Tree Masterplan, 2011;
- Sydney Lights Design Code, 2015;
- *Disability Discrimination Act 1992*, *Disability Services Act 1993* and the *Anti-Discrimination Act 1997* as amended;
- *NSW Roads Act 1993* and any relevant RMS design codes, technical directions and guidelines;
- All relevant Austroads guidelines;
- All relevant Service Authority requirements; and
- All relevant Australian Standards.

3.5.4 Extent of Works and Construction Activities

Extent of Works - Roads and Kerbs

- Retain and protect kerb and gutter during construction;
- Repair of kerb and concrete gutter;
- Removal of temporary cycleway kerbs and infrastructure (plastic bollards, etc);
- New permanent cycleway kerbs and infrastructure; and
- New pedestrian ramps.

Extent of Works - Hard-Works

- Asphalt pavement to cycleway;
- Paint cycleway green in accordance with the City of Sydney standards; and
- New pavement to footpath extensions.

Extent of works - Lighting and Electrical

- Retain and protect existing street lights during construction; and
- Review TCS and adjust traffic signals as required.

Extent of Works - Furniture

- Removal of redundant parking meters and street furniture as required;
- New signposts and signs as required;
- New furniture associated with permanent cycleway (cycle stands, pumps, planters, etc); and
- Relocation of existing furniture as required.

Extent of Works – Street Trees

- Retain and protect existing street trees during construction.

3.6 Construction Activities

Finalised construction staging and works activities are to be determined during the detailed design stage. It is anticipated that a general construction and works methodology will be implemented which includes, but is not necessarily limited to the following activities:

3.6.1 Pre-construction

- Site establishment, surveying, and identification of services;
- Installation and implementation of environmental, erosion, sediment, and traffic management control measures via an Erosion and Sediment Control Plan (ESCP);
- Placement and location of loose pavement materials; and
- Establish stockpile sites that consider the distance from waterways, heritage and any other sensitive areas.

3.6.2 Construction

- Provision of drainage and utilities works (including adjustments to existing and new service pits and utilities as required) as required;
- Demolition of existing cycleway and footpath pavements, and new paving as required;
- Retention and salvaging of existing stone, kerbs, street furniture, and signage poles as required; and
- Provision of road linework and cycleway markings as required.

3.6.3 Operation and Remediation

- Demobilise, clean site, and remove traffic management and environmental controls.

3.6.4 Traffic Management and Access

The City has referred all relevant road documentation including Traffic Impact Assessment reports, signalisation plans, and Road Safety Audits and design concepts throughout the design process for RMS review and comment.

- Prior to commencing construction works, a traffic management plan (TMP) will be required to be implemented to identify the proposed methods of directing traffic in, around, and out of the construction site.

3.6.5 Ancillary Facilities

At this stage, it is too early to indicate where stockpile and compounding sites will be located. It is anticipated however, that the selection of appropriate sites must consider any distances to any natural or built waterways, heritage items, residential dwellings and other uses that may be sensitive to noise.

- Stockpile sites will include the storage of various plant and machinery equipment and be secured via man-proof fencing.

3.7 Cycleway Plans for Implementation

Extracts of the concept plans for the Pitt Street permanent cycleway are provided below. The draft concept design plans for the permanent cycleway are shown in **Appendix A**.

The proposed permanent alignment for the Pitt Street permanent cycleway will be largely identical to the previous plans and current alignment of the pop-up cycleway, with some minor amendments.

The majority of changes will involve replacement of temporary elements with permanent, longer lasting materials and finishes, as described in the City of Sydney's technical and design specifications. The construction of the permanent cycleway will improve the safety and function of the cycleway for all road users.

The concept plans will be placed on public exhibition for further feedback and evaluation by the community and relevant stakeholders, which will guide development of the final detailed design.

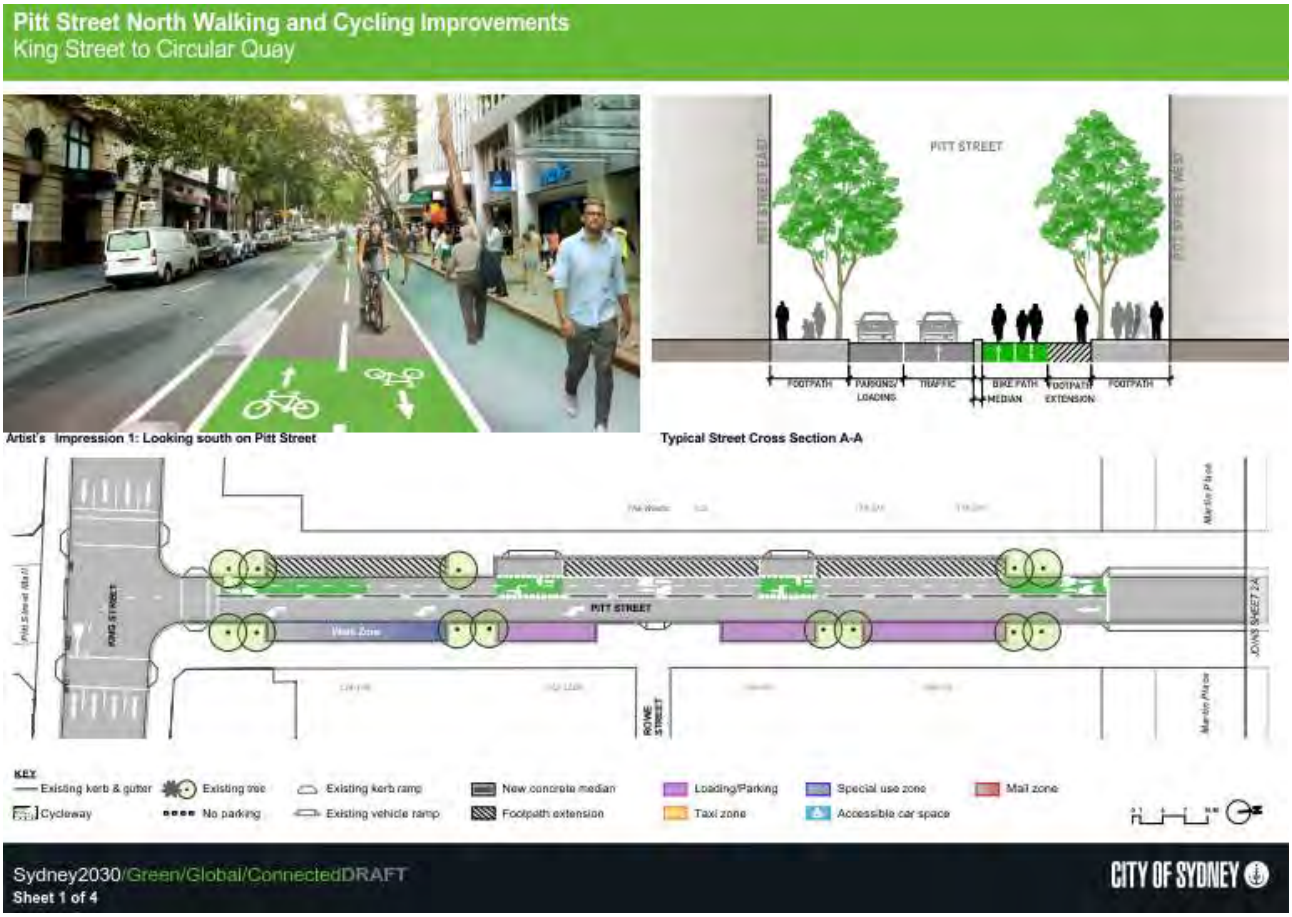

Figure 4. Draft Concept Design Plan – Sheet 1 of 4 (Source: City of Sydney, 2021)

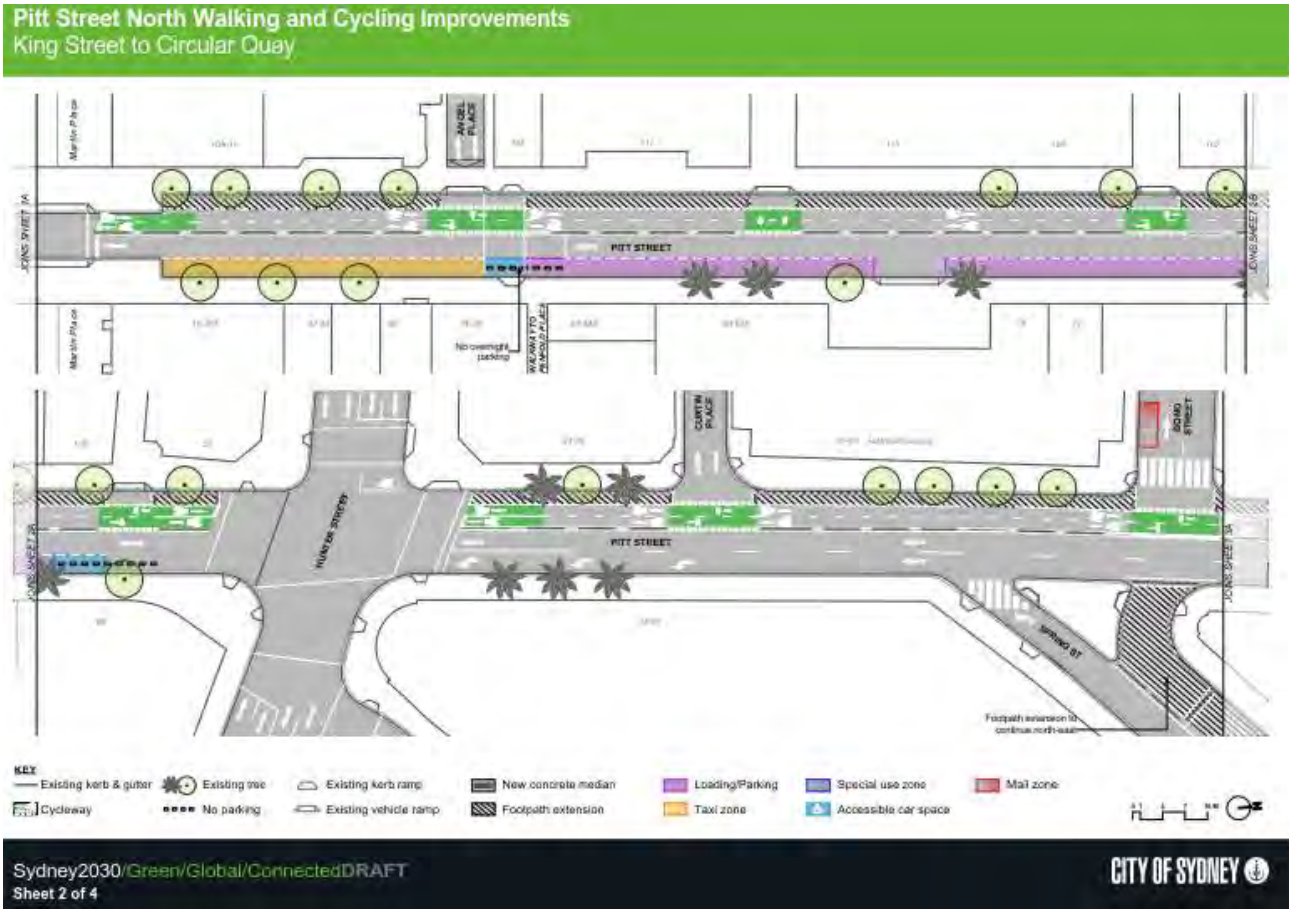

Figure 5. Draft Concept Design Plan – Sheet 2 of 4 (Source: City of Sydney, 2021)

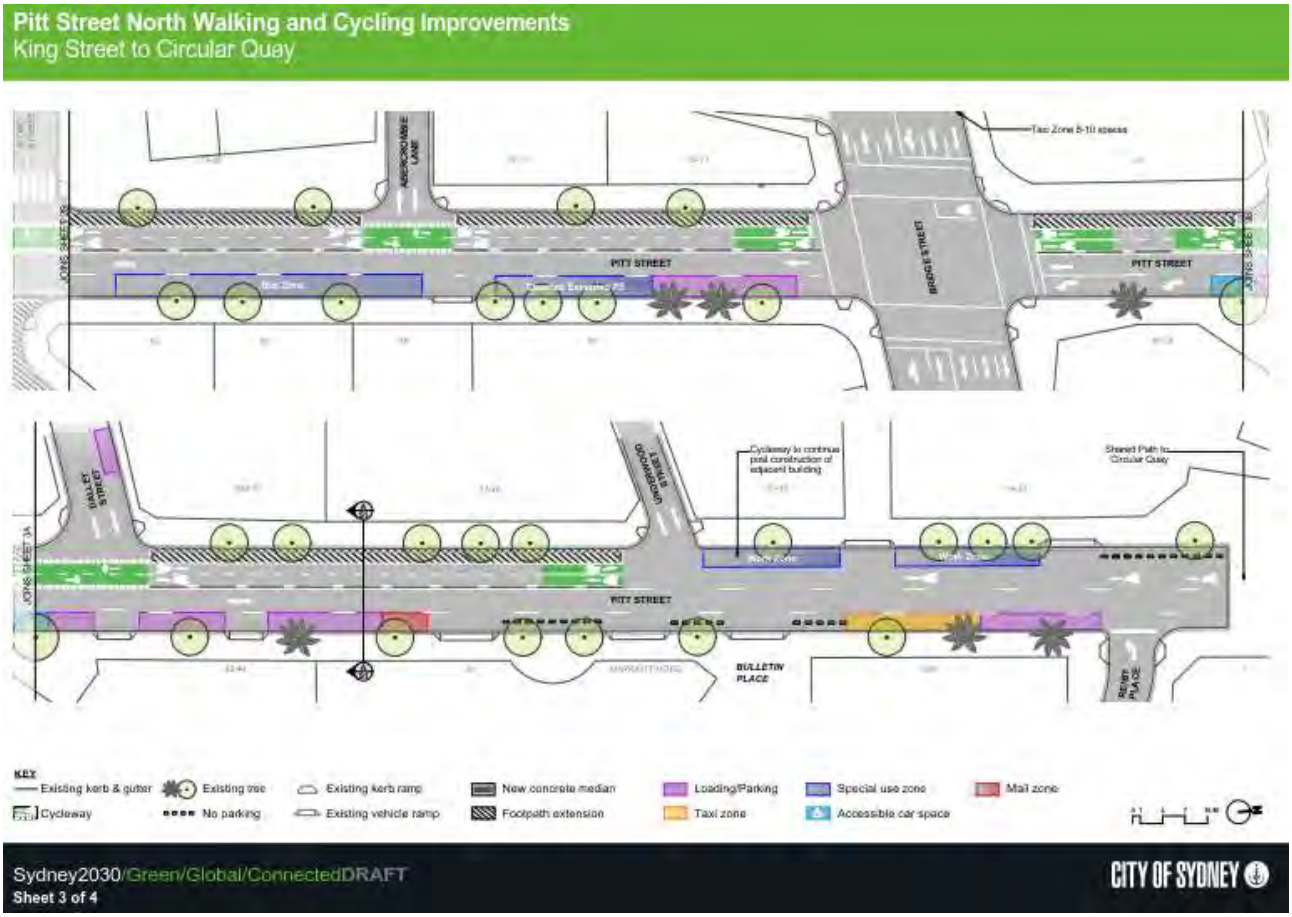

Figure 6. Draft Concept Design Plan – Sheet 3 of 4 (Source: City of Sydney, 2021)

Figure 7. Draft Concept Design Plan – Sheet 4 of 4 (Source: City of Sydney, 2021)

3.8 Current Photos of the Pop-up Cycleway

Figure 8. Before and After Photos – Pitt Street Cycleway (Source: City of Sydney, 2020)

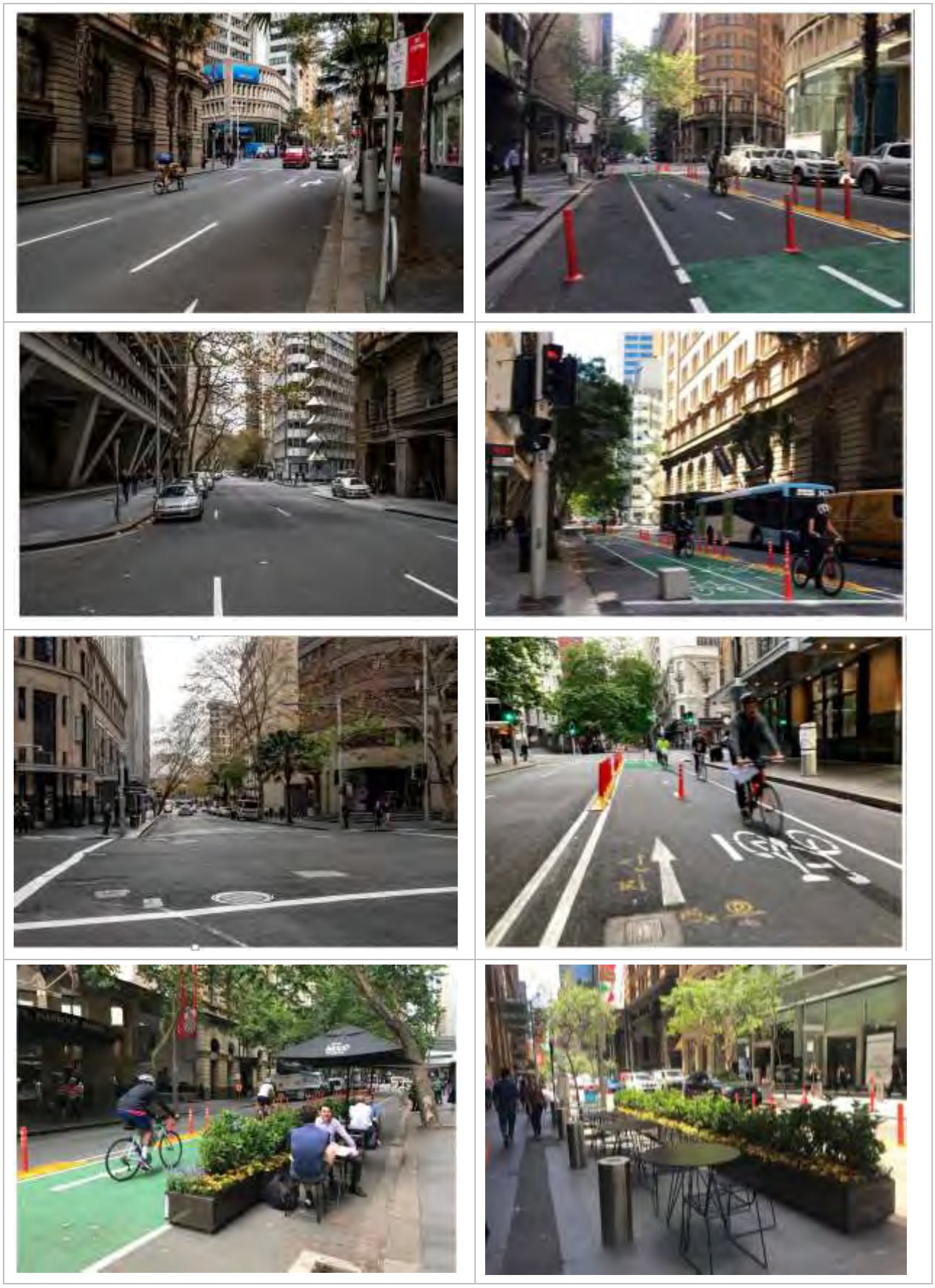

Figure 9. Before and After Photos – Pitt Street Cycleway (Source: City of Sydney, 2020)

4 Legislative and Planning Framework

4.1 Planning and State Legislation

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 habitants. 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 Pitt Street permanent 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 Pitt Street pop-up cycleway sought to protect and retain urban vegetation. The implementation of the Pitt Street permanent 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 Pitt Street permanent cycleway aims to replace the temporary pop-up cycleway with minimal changes to configuration outside of replacing temporary elements with permanent ones. 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 Pitt Street permanent cycleway site and scope of the proposed works is located on land zoned as B8 Metropolitan Centre. The objectives of this zone include:

- *To recognise and provide for the pre-eminent role of business, office, retail, entertainment and tourist premises in Australia's participation in the global economy.*
- *To provide opportunities for an intensity of land uses commensurate with Sydney's global status.*
- *To permit a diversity of compatible land uses characteristic of Sydney's global status and that serve the workforce, visitors and wider community.*
- *To encourage the use of alternatives to private motor vehicles, such as public transport, walking or cycling.*
- *To promote uses with active street frontages on main streets and on streets in which buildings are used primarily (at street level) for the purposes of retail premises.*

The proposed Pitt Street permanent cycleway works are consistent with the objectives for the B8 Metropolitan Centre Zone. The works to make the existing pop-up cycleway permanent will encourage and promote the use of alternative transport, such as walking and cycling.

IN addition, the works are considered exempt as specified in Clause 97 of the ISEPP or development permitted without consent as specified in Clause 94 of the ISEPP.

4.1.8 Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

The *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005* (now a deemed State Environmental Planning Policy) encompasses Sydney Harbour's waterways, foreshores, islands, and the wider Sydney Harbour catchment. The plan protects, enhances, and maintains the maritime and waterway areas within Sydney Harbour, balancing between promoting a working harbour, sustainable waterway management, and establishing recreational access to foreshores and waterways.

The proposal is located within the area subject to *Sydney Regional Environment Plan (Sydney Harbour Catchment) 2005*. The site is located outside the Foreshores and Waterways Area boundaries identified within the plan. The proposal does not affect any of the strategic foreshore sites, heritage items or wetland protection areas subject to the plan.

In general, the proposal is consistent with the aims of the plan as it supports accessibility and a sustainable urban environment, improving connections to the Circular Quay (a Strategic Harbour Foreshore Site) and the Ferry Wharves (State Significant Heritage Item).

4.2 Commonwealth legislation

No relevant Commonwealth legislation applies to this project.

4.3 Relevant Policies

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.*

Conversion of the pop-up cycleway to the Pitt Street permanent cycleway is in alignment with and supports the Greater Sydney Region Plan directions and objectives. The proposal for the pop-up cycleway was carried out in consultation with the NSW Government and each of the relevant planning and transport agencies. It is expected that the Pitt Street permanent cycleway will continue to involve consultation with all relevant NSW Government transport and planning authorities as required.

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 Pitt Street permanent 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 Pitt Street

permanent cycleway meets strategic objectives to integrate transport with land use, and enable connected, safe, walkable active transport networks.

The project and associated construction work to make the Pitt Street pop-up cycleway permanent mitigates unsafe road user interactions between vehicles, cyclists and pedestrians within the Sydney CBD. It further encourages active transport in the area, and assists in meeting improving sustainability, productivity and liveability objectives.

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. Works to make the cycleway permanent will improve road safety and encourage walking and cycling in the area. The Pitt Street permanent cycleway will further enhance the existing active transport network and provides an important linkage connecting between Circular Quay to Martin Place within 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.

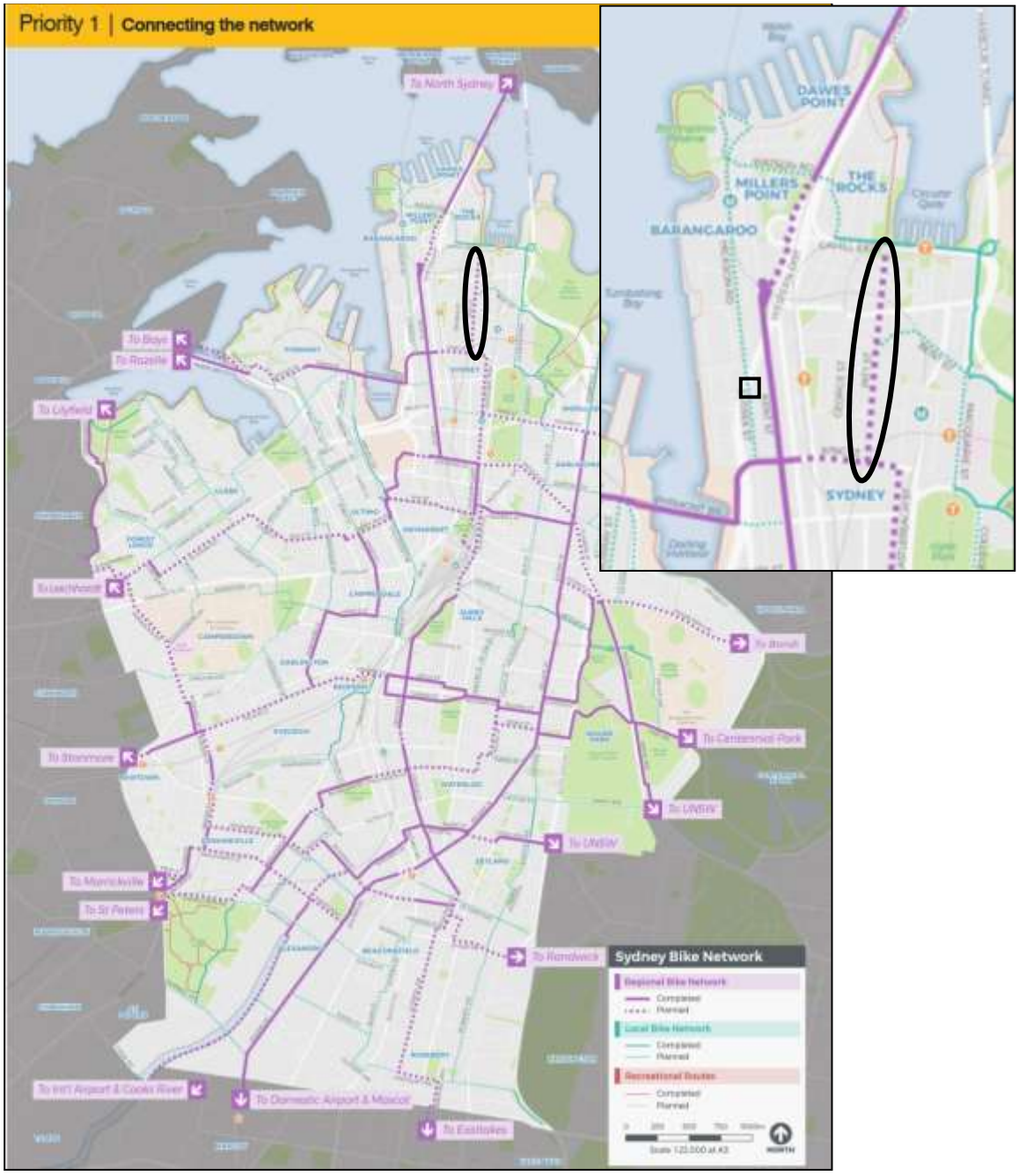

Figure 10: Extract of Sydney Bike Network - Cycling Strategy and Action Plan 2018-2030

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.*

Meeting strategic objectives outlined within the City's 'Cycling Strategy and Action Plan 2018-2030', Sustainable 'Sydney 2030 Community Strategic Plan', and NSW Government strategic plans, the works converting the existing temporary pop-up cycleway elements to a permanent facility as part of the Pitt Street permanent cycleway project addresses the links as per the 'Sydney Bike Network' map. Further, the Pitt Street permanent cycleway concept has been designed in collaboration with TfNSW.

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

5 Consultation

5.1 Authorities

5.1.1 Consultation with 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.

On the 3 June 2020, the City of Sydney received Traffic Management Plan approval for the project from TfNSW. The project was implemented in its entirety by 30 June 2020 following final design and delivery by the City of Sydney.

The current proposal to retain and make the Pitt Street cycleway permanent has been referred to TfNSW. Further comments from TfNSW into the detailed design and documentation stages will be addressed as required.

5.2 Community

5.2.1 Notification and Consultation

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

- Review of feedback received via online community engagement platform Sydney Your Say in relation to the pop-up cycleway

Key themes raised related to the Pitt Street pop-up cycleway included:

- Removal / relocation of parking and loading
- Impacts on traffic and increased travelling time
- Access into side streets, private property and construction sites.

6 Environmental Assessment and Mitigation Measures

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.

This environmental impact assessment has been undertaken in accordance with This REF was prepared in accordance with City of Sydney's EIA Manual and Clause 228 of the EP&A Regulation.

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

6.1.1 Potential Impacts

It is anticipated that the following impacts may occur as a result of the Pitt Street permanent cycleway construction works:

- Dust generation e.g. demolition, excavating, stockpiling, disturbing and transporting soil; and
- Fumes and odours or other air pollution from vehicles, equipment, machinery, and materials may be inhaled or exposed to pedestrians and motorists within the vicinity of operation.

Construction related impacts are considered minor as they will only have short-term or localised impacts and will create only temporary nuisance.

Any potential air quality impacts generated by the proposal 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 project Pitt Street permanent cycleway construction works, all activities will be expected to use dust control fencing and employ the damping down of materials. Dust generating works should be stopped during periods of high wind. These measures can be contained within the site.

- A Dust Management Plan (DMP) and Construction Environmental Management Plan (CEMP) will be prepared by the contractors engaged to carry out the intended construction works for the proposal;
- All 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.

It is expected that there are unlikely to be any long term negative impacts to air quality as a result of the pop-up cycleway being made permanent.

6.2 Water Quality and Quantity

6.2.1 Potential Impacts

The proposed works associated with construction of the proposal are unlikely to exacerbate or cause addition risks to any existing flooding hazard within the Sydney city area in the short, medium, or long term. The Pitt Street permanent cycleway is located within an urban CBD area which is predominately hardstand e.g. concrete and paving. The local stormwater system services the site of the proposal and directs rainwater through downpipes or stormwater drainage inlets in the area.

The proposal would have a minor effect on the existing land form as the Pitt Street permanent cycleway primarily involves the replacement of the existing pop-up cycleway and other moderate upgrades to existing paths, kerbs and other associated works.

During the construction phase for the Pitt Street permanent cycleway the following impacts on soil and local water quality may occur:

- Accidental spills of fuels, oils and other chemicals from construction vehicles, machinery and equipment; and
- Sediment from excavated and disturbed areas and stockpiles, generated during rainfall events.

6.2.2 Mitigation Measures

Any potential impacts to water quality 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.

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

- 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.

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

It is expected that there are unlikely to be any long term negative impacts to water quality as a result of the pop-up cycleway being made permanent.

6.3 Soils

6.3.1 Potential Impacts

Excavation works on site will need to take appropriate measures to address any acid sulfate soils if any occur or are discovered on the site.

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

6.4.1 Potential Impacts

It is expected that there will be traffic disruptions during the construction phase and an increase in related noise and vibration levels along Pitt Street and other road intersections. This includes the noise of construction vehicles and the use of machinery on site including jackhammers and powered hand tools.

Construction tasks associated with the Pitt Street permanent cycleway include the removal of the existing pop-up cycleway elements, paving, asphalting, and installation of any signage and other cycleway elements are likely to temporarily increase noise within the vicinity.

Once the Pitt Street permanent cycleway improvements are completed there will be no substantial net increase in noise and vibration activities as a result proposal.

6.4.2 Mitigation Measures

Every effort will be made to ensure that work is undertaken in appropriate standard working hours. Occasionally other works may be undertaken out of hours to minimise impacts on road traffic and businesses. 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 nose mitigation measures.

No adverse noise and vibration impacts or issues have occurred previously as part of the construction of or implementation of the Pitt Street pop-up cycleway. It is expected that there are unlikely to be any long term negative impacts to noise and vibration because of the pop-up cycleway being made permanent.

6.5 Flora and Fauna

6.5.1 Potential Impacts

The Pitt Street permanent cycleway site is characterised as an existing urbanised CBD environment. No threatened species identified as being present within the site.

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

6.5.2 Mitigation Measures

It is not considered likely that any threatened or endangered species will be impacted by the proposal. The detailed design and construction methodology are intended to protect and retain existing plants and vegetation wherever possible.

Should any 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

Not applicable and no natural hazards have been identified. The Pitt Street permanent cycleway construction works are limited in terms of scope and scale and it is unlikely to be impacted by any natural hazards.

6.7 Sea Level Rise

Not applicable.

6.8 Spoil and Waste Management

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

6.8.1 Potential Impacts

Waste streams generated from the construction works related to converting the pop-up cycleway to the Pitt Street permanent cycleway may potentially include:

- Materials from the proposed parking realignment and landscape works;
- Material's from demolition of existing pedestrian path;
- Contaminated Materials (Acid Sulfate Soils if any);
- Excavation of soils and rock; and
- Green and soil waste from vegetation installation.

Demolition and construction work as part of the permanent cycleway will contribute to a sizeable portion of the waste generated, including the special handling, transport and treatment of demolition works, stone and paving materials, asphalt, and metal offcuts from signage and intersection upgrades.

These materials pose risks to human health and safety if not disposed of in a coordinated and orderly manner. All waste requiring removal from the site will have to be done in accordance with the City of Sydney's Waste Management Plan (EMP).

The outcome of the proposal will result in a high quality cycleway with upgraded paths, intersections, crossings, driveways, and streetscape features.

6.8.2 Mitigation Measures

All waste that requires removal from the site will be in strict accordance with Councils 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 contract 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

It can be noted that chemical or hazardous substances were required to be managed as part of the construction works or the ongoing implementation of the Pitt Street pop-up cycleway.

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 use chemical treatments where possible.

It is anticipated that it is unlikely for there to be any significant chemical or hazardous substances used or stored on site during the construction works related to converting the pop-up cycleway to the Pitt Street permanent cycleway.

6.9.2 Mitigation Measures

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

6.10.1 Potential Impacts

As a result of the Pitt Street 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;

TCS modified as per attached plans; and

Notification letters outlining the proposed changes sent to all relevant stakeholders and the local community.

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.

The City of Sydney's Traffic and Transport Committee (CSTTC) considered the potential impact of the Pitt Street pop-up cycleway on traffic and transport. The CSTTC found the following:

Impact on the Road Network

- That the proposal would not have a significant impact on the surrounding road network.
- Since the construction of Light Rail commenced, traffic volumes along this section of Pitt Street have reduced due to access restrictions.

Impact on Parking and Kerbside Use

- As part of the agreed design with TfNSW, all parking on the western side of Pitt Street north of King Street was removed.
- The use of these was varied across the day and week, including around 30 daytime loading zones (most of which also operate with evening and weekend meter parking - a revenue source the City has chosen to forego; mobility spaces; a Mail Zone; lengths of taxi zone and a small number of short-stay spaces).
- With most of the existing parking on the eastern kerb of high value, especially for passenger transport, the City developed a Kerbside Use Plan in collaboration with TfNSW, to meet likely kerbside need (noting the difficulties in predicting business operations and consequential kerbside demand for the rest of 2020).

- The plan focusses on activating some unused kerbspace; increasing the operating hours of the significant number of remaining and new loading zones, and meter parking; timing replacement mobility parking; and minor changes in some adjacent streets (primarily Spring and Bond Streets).
- The City of Sydney will monitor needs of businesses and respond with any required minor adjustments to the Kerbside Use Plan as required.

Maintenance of Access for Freight Within the Whole or Any Part of the Sydney CBD

- The Kerbside Use Plan increases the operating hours of loading zones on Pitt Street and some adjacent streets (generally at the expense of paid meter parking).
- Some new loading zones have also been included in the Kerbside Use Plan.
- Access to buildings for freight vehicles will be maintained.

Efficiency and traffic safety of the public transport network in the Sydney CBD

- The proposal has been developed in consideration of current bus operations in consultation with TfNSW.
- The current efficiency and safety of the public transport network in the Sydney CBD has been maintained.

Needs of Commuters, Residents, Pedestrians and Visitors in the Whole or Any Part of the Sydney CBD

- The proposal has not had a significant impact on the needs of commuters in the Sydney CBD.
- The proposal's construction and operation may have caused minor delays to car park egress for a small number of drivers for short periods but has provided additional benefits for a much larger number of commuters, residents, pedestrians, and visitors through it supplementing public transport networks, and increasing safety and amenity on Pitt Street.

As part of the monitoring and evaluation process, the City and TfNSW developed an agreed monitoring and evaluation approach, including shared outcomes, targets and measures. This approach was independently reviewed by experts in cycling policy and complex program evaluation. The approach includes both quantitative and qualitative data, including 55 hours of structured site observations and intercept surveys with riders.

The independently peer reviewed evaluation process found a strong case for making the pop-up cycleway permanent. The City of Sydney's assessment found that of the agreed upon shared outcomes with TfNSW, the Pitt Street pop-up cycleway was positive 'green' in all outcomes. The proposal was found to vastly improve the place aspects of Pitt Street and increase the number of cyclists riding within the CBD, serving supressed travel demand within the city centre.

A summary of the evaluation process findings for the pop-up cycleway included:

- Improving cyclist's perceptions on road safety on Pitt Street compared with previous road conditions;
- Improving significantly on cyclist riding and pedestrian walking times;
- Slower vehicle speeds observed;
- Increased numbers of cyclists riding and connecting from other established cycleways; and
- Positive support and feedback from the community for the pop-up cycleway.

Additional outcomes identified by the City of Sydney in its assessment on the performance of the cycleway included:

- People can ride safely in both directions along Pitt St, which is a vast improvement to the previous unprotected street, and footpath riding;
- The proportion of people riding on Pitt Street that are new riders was the most significant across all of the pop-up cycleways;
- Walking is safer and more pleasant due to extra space for walking along the street and shorter crossing distances;
- Additional space has been created for outdoor dining;
- Reduced crowding for people walking has made it easier to walk and access the street;
- People with restricted mobility have more space available due to the extra space created along the street;
- Vehicle access has been maintained to the city centre;

- Allocation of space along the kerb has been more carefully considered throughout the day for a wide variety of customer needs, this includes space for waste collection; and
- New spaces were allocated for loading and loading times have been extended at some locations to address impacts to local businesses.

These traffic and access issues and the resolution of them has been considered for the conversion of the pop-up cycleway to a permanent cycleway. The Pitt Street permanent cycleway detailed design and documentation will further refine the cycleway to ensure impacts to traffic and access are mitigated as per TfNSW and the City of Sydney's traffic safety and cycleway requirements.

6.10.2 Mitigation Measures

Prior to the commencement of any construction works, a Traffic Management Plan (TMP) will also be prepared to mitigate 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.

Signage advising of the proposed works and changes to traffic conditions, as well as areas under construction should be visibly placed around the areas involving construction works of the permanent cycleway.

A communication plan has been prepared by the City and initial notification letters have been distributed. Further consultation and notification will occur prior and during construction.

6.11 Aboriginal and Non-Indigenous Heritage

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 Pitt Street 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.

No heritage listed items are within the construction area. The proposal is located within the roadway and no Aboriginal and non-indigenous heritage items are expected to be impacted from any construction works related to the Pitt Street permanent cycleway.

6.11.2 Mitigation Measures

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

Should any other Aboriginal objects and / or places be located during 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.

To ensure that all Aboriginal and non-indigenous heritage items are considered as part of the construction works, the following mitigation measures are to be anticipated:

- A stop-work procedure is to be respected should any archaeological material is found;
- All plant and equipment are to be kept away from any heritage items, walls, and fences to prevent damage at all times; and
- All workers on-site will be made aware of their responsibility under the *Heritage Act 1997*.

If workers or other persons on site are unsure if the proposed works will harm aboriginal objects, they must adhere to the Department of Environment, Climate Change and Water *'Due Diligence Code of Practice for Protection of Aboriginal Objects in NSW'* (2010).

6.12 Visual Impacts

6.12.1 Potential Impacts

The proposal is located within an existing heavily urbanised part of the Sydney CBD characterised as a modified urbanised CBD environment surrounded by high density commercial and residential buildings. The existing streetscape and on-road character is visually distinguished by asphalt, paving, street furniture, landscaping vegetation and street signage that corresponds with the City of Sydney's *'Sydney Streets technical specifications'* (2019).

No long term visual impacts have occurred due to the construction works or the ongoing implementation of the Pitt Street pop-up cycleway. During the construction works converting the pop-up cycleway to the Pitt Street permanent cycleway, the proposal may cause some short term visual impacts associated with construction activities such as the use of equipment, noise and dust barriers, materials, and fencing.

6.12.2 Mitigation Measures

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 may include:

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

6.13 Socio-Economic Impact

The Pitt Street permanent cycleway did not significantly affect the efficient functioning of businesses in the whole or part of the Sydney CBD. It will supplement the public transport system and thus increase the number of employees who are able to access the CBD safely.

Further, adjustments to kerbside use reduce the impacts of parking removal, while also supporting the staged return of late night economy.

6.14 Future Land Use

Prior and during construction it was determined by the City of Sydney that the temporary Pitt Street permanent cycleway would not affect existing and / or future developments within the City. The project was found to supplement public transport capacity during the recovery from the pandemic, and thus contributes to economic recovery.

The current arrangements for the cycleway are fully within the City of Sydney and will not have any impacts on any adjacent council boundaries.

6.15 Ecologically Sustainable Development and Sustainability

The Pitt Street permanent 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

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 Pitt Street pop-up cycleway.

6.17 Cumulative Environmental Impacts

No significant cumulative environmental impacts have become evident because of the pop-up cycleway. The ongoing implementation of the Pitt Street permanent 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
(a) any environmental impact on a community,				X
Comment As investigated during the pop-up cycleway's operation, there were no identified 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 all outcomes. Increased ridership from the first week of operation (in one direction) highlights that there is suppressed demand for cycling in the city centre and this helps reduce environmental impacts from vehicular modes as more people utilise cycling as a method of travel.				
(b) any transformation of a locality,				X
Comment The previous pop-up cycleway's operation has vastly improved the place aspects of Pitt Street, making a more pleasant place to pedestrians and cyclists. This project serves to implement lasting public domain improvements as part of making the cycleway permanent. Transformational observations that occurred during the pop-up cycleway included: • Walking is a much safer and more pleasant due to extra space for walking along the street, and shorter crossing distances; • People with restricted mobility have more space available due to the extra space created along the street; • Vehicle access has been maintained to the city centre; • Allocation of space along the kerb has been more carefully considered throughout the day for a wide variety of customer needs, this includes space for waste collection; • Emergency vehicles – same level of access, and can use the cycleway in an emergency; • New spaces have been allocated for loading, and loading times have been extended at some locations; • Vast improvement to crossing opportunities, as the removal of a lane of traffic and parking has reduced crossing distance along the street; and • Majority of community concerns resolved where feasible. These transformations of the streetscape are expected to be reinforced by making the Pitt Street cycleway permanent.				
(c) any environmental impact on the ecosystems of the locality,			X	
Comment There are no negative environmental impacts on the ecosystems of the locality. The locality is an urban CBD environment and the scope of constructions work low and minor impact.				
(d) any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality,			X	
Comment				

CLAUSE 228 FACTORS	IMPACT			
	N / A	Negative	Nil	Positive
There are no negative impacts on the quality of the aesthetic, recreational, scientific or other environmental quality or value of the locality. The locality is an urban CBD environment and the scope of constructions work low and of minor impact. The project's permanent elements improve the urban qualities and streetscape value along Pitt Street.				
(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,			X	
Comment There are no negative impacts on the heritage, aesthetic, cultural, social or special values of the locality.				
(f) any impact on the habitat of protected fauna (within the meaning of the National Parks and Wildlife Act 1974),			X	
Comment There are no negative environmental impacts on protected fauna as the project is within the Sydney central business district.				
(g) any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air,			X	
Comment There are no negative environmental impacts on endangered species as the project is within the Sydney central business district.				
(h)any long-term effects on the environment,			X	
Comment There are no negative long-term environmental impacts on the locality or local environment.				
(i) any degradation of the quality of the environment,			X	
Comment There are no impacts on the locality or local environment that would lead to the degradation of the quality of the environment. The project's permanent cycleway elements improve the safety and cycling experience along Pitt Street. The project encourages cyclists and limits vehicles within the area which helps to improve the quality of the environment.				
(j) any risk to the safety of the environment,				X
Comment The Pitt Street pop-up cycleway improved road safety for pedestrians and cyclists in the area. The intercept surveys on rider behaviour found that 97% people responding to the intercept survey (n=100) said they felt safe or very safe on Pitt Street, and the same proportion said it was safer than the previous road conditions. Additional safety outcomes identified by the City of Sydney indicate that vehicles are travelling slower, people can ride safely in both directions along Pitt Street (improving on previous riding conditions along unprotected streets and footpath riding), and that people driving and walking across the cycleway take additional care to look out for people riding.				
(k) any reduction in the range of beneficial uses of the environment,			X	

CLAUSE 228 FACTORS	IMPACT			
	N / A	Negative	Nil	Positive
Comment There has been no reduction in the range of beneficial uses of the environment.				
(l) any pollution of the environment,			X	
Comment There has been no additional pollution in the implementation of the Pitt Street pop-up cycleway. No additional pollution is expected during the retention and construction of the Pitt Street permanent 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.				
(m) any environmental problems associated with the disposal of waste,			X	
Comment There are no environmental problems expected in implementing the Pitt Street permanent cycleway. Any pollution created because of construction will be expected to follow the requirements under the specified Waste Management Plan and City of Sydney waste management policies.				
(n) any increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply,			X	
Comment Access of the road space and parking has been considered and maintained where possible within the city centre in consultation with TfNSW and the City of Sydney. Allocation of space along the kerb has been more carefully considered throughout the day for a wide variety of customer needs, this includes space for waste collection.				
(o) any cumulative environmental effect with other existing or likely future activities,			X	
Comment There are no cumulative environmental effects expected as part of constructing or establishing the Pitt Street permanent cycleway.				
(p) any impact on coastal processes and coastal hazards, including those under projected climate change conditions.	X			
Comment Not applicable.				

7.2 Consideration of National Environmental Significance

Not applicable.

8 Summary of Mitigation Measures

The following items are a summary of the recommended mitigation measures implemented by the City of Sydney (in consultation with TfNSW) to reduce potential environmental and traffic impacts as part of the Pitt Street permanent 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 plus any other necessary mitigation plans as required, including:
  - 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
  - Water Management and / or Quality 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 works; and
- Notification of surrounding properties of construction activities and temporary traffic management arrangements will be undertaken regularly throughout the proposal and works construction.

8.1 Construction Environmental Management Plan

The Pitt Street permanent cycleway will implement a Construction Environmental Management Plan (CEMP) as per the City of Sydney's requirements.

The CEMP is to be prepared for the construction phase of the project in accordance with Council's Environmental Management System requirements. 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.

9 Conclusion and Certification

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:

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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

Appendix A Design Concept Plans