10.5. Council submission to the Western Harbour Tunnel Place Design and Landscaping Plan

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ATTACHMENTS	1. NSC Submission WHT PDLP August 2024 [10.5.1 - 13 pages]
CSP LINK	5. Our Civic Leadership
	5.1 Lead North Sydney's strategic direction

PURPOSE:

The purpose of this report is for Council to consider a submission drafted in response to the Western Harbour Tunnel (WHT) Place Design and Landscape Plan (PDLP).

EXECUTIVE SUMMARY:

- Consultation for the Place, Design and Landscape Plan (PDLP) for the Western Harbour Tunnel (WHT) commenced on the 31 July 2024 and closes on 28 August 2024;
- Council officers have developed a submission in response to the PDLP, which is attached herein;
- The submission includes requests and feedback previously provided to the NSW State Government in relation to this project and representations that have been made to Council by the community of North Sydney.

Background:

On 31 July 2024, TfNSW opened consultation on the Place, Design and Landscape Plan for the Western Harbour Tunnel, seeking feedback on following aspects of the project:

- ventilation facilities
- tunnel portals (entry and exits)
- landscape design
- tunnel interiors

Public Consultation will close on 28 August 2024.

RECOMMENDATION:

- **1. THAT** The Council endorse the attached submission in response to the Western Harbour Tunnel Place, Design and Landscape Plan.
- **2. THAT** Council write to the NSW Minister for Planning and Public Spaces and NSW Secretary of the Department of Planning, Housing and Infrastructure in relation to concerns in relation to TfNSW's ability to comply with Condition E157, requiring a net increase in usable open space in the general vicinity of the land loss as a result of the WHT/WFU project.
- **3. THAT** Council write to the NSW Minister for Planning and Public Spaces and NSW Secretary of the Department of Planning, Housing and Infrastructure in relation to concerns in relation

- to TfNSW's ability to comply with Condition E185, in relation to the replacement of trees that are required to be replaced as a result of the WHT/WFU project.
- **4. THAT** Council write to the NSW Minister for Roads requesting that the NSW State Government underground the proposed Cammeray Ventilation Buildings to reinstate public open space that has been acquired for the WFU and WHT projects
- **5. THAT** Council write to the NSW Minister for Roads requesting that the NSW State Government construct a land bridge across the Warringah Freeway at Cammeray Park to offset public open space that has been acquired for the WFU and WHT projects
- **6.THAT** Council write to the NSW Minister for Roads, requesting that TfNSW release traffic modelling for the WHT/WFU project to Council to enable Council to understand the impacts that this project will have on the local road network, particularly given the results of the project's Environmental Impact Statement notes the project will result in the failure of multiple intersections on the North Sydney local road network.

Report

Council officers have reviewed the Place, Design, and Landscape Plan (PDLP) for the Western Harbour Tunnel project and have developed the submission attached herein.

The submission includes requests and feedback previously provided to the NSW State Government in relation to this project and representations that have been made to Council by the community of North Sydney.

Public Consultation

No formal public consultation has been undertaken to inform this report.

Financial implications details

There are no financial implications for Council in accepting the recommendations proposed within this report.

Resource implications details

Accepting the recommendations proposed within this report will require no additional resources.

Legislation

NSW Environmental Planning and Assessment Act 1979

North Sydney Council

Submission to Western Harbour Tunnel Place Design and Landscape Plan

22 August 2024

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Introduction

On 31 July 2024, TfNSW opened the Place, Design and Landscape Plan for the Western Harbour Tunnel project. TfNSW have identified the following key areas for feedback:

- Ventilation Facilities
- Tunnel portals (entry and exits)
- Landscape design
- Tunnel interiors

This submission, which was presented to the meeting of North Sydney Council on the 26 August 2024, represents North Sydney Council's (Council's) consolidated response to the TfNSW PDLP.

Ventilation Facilities

Cammeray Ventilation Building

The North Sydney LGA is one of the most densely populated LGAs in NSW, with over 7,000 persons per hectare. It has, however, one of the smallest ratios of recreation space per person among local government areas in metropolitan Sydney and the smallest in the North Sydney Region of Councils at 0.15hectares per person. The lack of recreation space will be exacerbated by the proposed Crows Nest Transport Oriented Development scheme, the Low to Medium Rise housing and other planning initiatives proposed by the NSW State Government.

The Warringah Freeway Upgrade (WFU) / Western Harbour Tunnel (WHT) projects have resulted in a loss of 15,000sqms of public open space.

Condition E157 of the Minister's Conditions of Consent States;

"The CCSI must result in a net increase in usable open space. Replacement space must be in the general vicinity of the loss, unless agreed to by the Planning Secretary".

TfNSW have not advised how they propose to meet this Condition, noting that the intent of the condition is to mitigate the impact of the development to those parts of the community who have been impacted.

The proposed Tunnel Exhaust Ventilation building, and adjacent construction compound located adjacent to Cammeray Park, which was formerly open space, presents possibly the only viable opportunity for TfNSW to meet the Condition of Consent in relation to a net increase in usable open space.

Aside from the loss of open space, Council and the community are deeply concerned that the introduction of industrial sheds is a poor design outcome. In addition to the use of precious open space, the height and cladding material adds further to the bulk and scale, which results in a design outcome, which is alien and intrusive to the surrounding parkland.

Council and the community have previously requested that TfNSW construct this building below ground, which could then be covered with usable open space. This option would also repatriate the space with the adjoining parkland.

The concept below developed by the local community members of North Sydney, demonstrates how this option would assist TfNSW in meeting its Conditions of Consent.





CURRENT OPTION

COMMUNITY ALTERNATIVE OPTION

Land Bridge Options

In its March 2020 submission to the Department of Planning Industry and Environment, the Australian Institute of Architects proposed two options for land bridges over the Warringah Freeway that would enable TfNSW to substantially meet its obligations in relation to Condition E157, resulting in no net loss of open space, noting the Condition requires a net increase in usable open space.

In addition to the creation of open space, the options result in the reconnection of Cammeray through green space.

At its meeting on the 12 August 2024, Council reaffirmed its position as follows;

- 1. THAT Council include in its report on the submission to Transport for NSW (TfNSW) on the place, design, and landscape plans in relation to the Western Harbour Tunnel and Warringah Freeway upgrade:
 - the need for more parkland and open space in our Local Government Area.
 - that the NSW State Government establish a rooftop park over the Warringah Freeway between Falcon and Ernest Streets to provide a direct link between Cammeray, Anzac, and St Leonards Parks via Jefferson Jackson Reserve and tunnel links under Ernest and Falcon Streets.
 - that the area of St Leonards Park land between Ridge Street and Bon Andrews Oval, part of which has been temporarily resumed by TfNSW for the Warringah Freeway Upgrade (WFU) project, when made good for restoration to Council on completion of the WFU project, as promised by TfNSW, be levelled and terraced to the Freeway to enable the area to be returned as parkland for use by the North Sydney community.

[Min No.175]





Option 1 Option 2

Cammeray Ventilation Outlet

Council notes that emissions from the proposed ventilation will reduce air quality in the North Sydney Area, which will be further exacerbated by an increase in surface vehicles, which can be to some extent mitigated through increased vegetation and open space.

The current bulk and scale of the current proposed ventilation structure is entirely out of character with the surrounding area. The proposed cladding serves to exacerbate the impact and dominates the surrounding environment. The shear bulk and scale of the proposed structure does not create a context sensitive to design as proposed within the PDLD. The facade material and colours are not sympathetic or complimentary to the surrounding landscape.

Ventilation Facilities – Recommendations

- TfNSW construct the Cammeray ventilation facility building below ground to be covered and converted into usable open space as proposed by the North Sydney Community, which will enable TfNSW to meet its Development Consent obligations and provide critically needed areas of recreation space to the Noth Sydney LGA.
- TfNSW construct a land bridge over the Warringah Freeway in consultation with Council
 and the community, which will enable TfNSW to meet its Development Consent
 obligations and provide critically needed areas of open space and tree canopy to the
 Noth Sydney LGA.
- 3. Investigate other technologies to reduce or eliminate the requirement for a ventilation outlet for the WHT project.
- 4. TfNSW reduce the bulk and scale and more appropriate and sympathetic finishes for the Cammeray Ventilation Outlet in consultation with North Sydney Council.

Tunnel portals (entry and exits)

WHT Entry Portal - Berry St

Whilst the intention of the Berry Street on-ramp is to enhance connectivity and accessibility while mitigating visual and environmental impacts, Council submits that it would do so at the expense of the surrounding urban fabric, aspirations for a more pedestrian friendly and accessible North Sydney CBD and challenge the travel mode share gains to be made by Metro.

Council has previously raised the issue of the reliance on Berry Street as a main access route for the Western Harbour Tunnel. This proposal will fundamentally change this street from a

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local road to main traffic artery through the heart of the North Sydney CBD, significantly impacting the amenity of the CBD, pedestrian accessibility and comfort, sustainable and active transport links.

Council's CBD Transport Masterplan and Public Domain Strategy

Council has previously endorsed the *North Sydney CBD Transport Masterplan* (2019) in the context of the impending arrival of Metro. Its purpose was to:

- Ensure that growth of the North Sydney Centre and Sydney Metro are complimented by transport infrastructure that improves the safety, amenity, vibrancy and overall appeal of the Centre for workers, residents, visitors and investors; and
- Facilitate significant increases in walking, cycling and public transport mode share and minimise the negative impacts of traffic within the North Sydney Centre.

That Masterplan essentially sought to create a comfortable, safe and vibrant pedestrian CBD environment by promoting various interventions that shifted "through" traffic to the edges of the CBD and maintained a more local and welcoming pedestrian environment within the CBD. Berry Street was identified as a bi-directional street for local traffic and Miller Street would perform a pedestrian plaza role on the doorstep of Metro.

Council subsequently endorsed the *CBD Public Domain Strategy* (2020) which reinforced the findings and recommendations of the *North Sydney CBD Transport Masterplan*. A key move in that Strategy was the creation of "Miller Place". This would represent approximately 7,500sqm of new pedestrian environment supplementing the Metro and growth of the North Sydney CBD. This recognised that the North Sydney CBD suffered from a lack of open space, a lack of solar access to the limited spaces available and a challenging topography.

Miller Place would seek to transform Miller Street from a busy four lane street to a new high grade activated public space providing a space to gather, host events such as outdoor concerts and markets and a place for public art. With large canopy trees, lawns and access to sunlight for most of the day, this new "place" would establish a much-needed civic heart for the North Sydney CBD.

The *Public Domain Strategy* also included the notion of a pedestrianised Civic Spine. This would connect the existing heavy rail in the south, to St Leonards Park in the north, via various urban elements, including Metro for workers, residents and visitors. Council has invested heavily to realise this vision, both in infrastructure spending, as well as approvals and planning work.

These initiatives and aspirations are only fitting for a high amenity employment centre with enormous levels of public and private investment, that is served by world class public transport.

North Sydney Integrated Transport Program

Over several years, North Sydney Council worked closely with a range of State Government agencies, including TfNSW, to maximise the benefits of Metro by preparing the *North Sydney Integrated Transport Program* (NSITP). Its core set of objectives revolved around deriving the greatest level of benefits from the arrival Metro whilst creating a vibrant and accessible employment centre with very high levels of amenity. One of the tangible outcomes of this work, would be the delivery of Miller Place and was based on a significant body of traffic/transport modelling and urban design work. This collaboration resulted in a condition being imposed on the Critical State Significant Infrastructure (CSSI) for the Western Harbour Tunnel project as follows:

E162 The CSSI must not preclude the delivery of the objectives proposed by the North Sydney Integrated Transport Program in consultation with the Government Architect NSW and North Sydney Council.

It is questionable whether Miller Place, as conceived by the NSITP, can be delivered with the proposed traffic and access arrangement to the Berry Street Portal given the traffic network changes required to create Miller Place, to both Berry Street and the Pacific Highway.

Impact of the Proposal

This proposal will result in:

1. Increased private motor vehicles in the North Sydney CBD

a. The proposal will result in direct contradiction with the NSW Government's policy of modal shift to reduce transport emissions. The notion of "induced demand" has previously been raised by Council and runs directly contrary and in competition with, investment in public transport. It is ironic that in contrast with the very successful opening and operation of Metro in August 2024, the WHT motorway portal will directly adjoin this public transport project and run diametrically opposite to the mass transit objectives of Metro. One of the broad objectives of the NSITP was to create a safe and comfortable pedestrian environment to build on the benefits of Metro. This objective will clearly not be served by the proposed motorway works.

2. Narrowing and restrictions of footpath widths

- a. Eliminating capacity build in protection for pedestrians from vehicles travelling to the WHT. This will place pedestrians in closer proximity to a higher volume of high-speed traffic. To maximise the capacity of Berry Street, existing parking will be removed thereby eliminating this pedestrian friendly "buffer" that currently characterises Berry Street.
- b. Loss of pedestrian blisters, which is already a concern due to the recent opening of the Metro. These blisters serve not only to slow and deter through traffic, but they serve a pedestrian island benefit.
- c. Prioritisation of vehicles over pedestrians through phasing of traffic lights resulting in longer wait times for pedestrians and cyclists, which is in direct contradiction to TfNSW Road Use and contrary to the objectives of NSITP.
- d. Space Allocation Procedure (Procedure Number: CPr21038), particularly in terms of prioritising different modes of transport.

3. Impacts on Placemaking

- a. Potentially undermining the capacity to deliver Miller Place from a traffic planning network perspective.
- b. Removal of loading zones impacting local businesses, vibrancy and commercial success of the North Sydney CBD.
- c. Reduces well-connected access from Victoria Cross Metro Station to the North Sydney CBD and Council's aspirations of reinforcing the north-south pedestrian spine.
- d. Severs the pedestrian spine from St Leonards Park to the North Sydney CBD as described in detail in Council's endorsed CBD Public Domain Strategy.

e. Significant impacts to ecology of the North Sydney CBD, which does not achieve the blue-green ratios required to maintain public health and pedestrian amenity.

4. Prioritisation of traffic flow from the Pacific Highway onto Berry Street

a. Impacting on other road users and place-oriented activities.

WHT Entry and Exit Portal – Ernest St

The installation of the Western Harbour Tunnel portals will have significant negative effects on Ernest Street, including:

1. Increased Traffic Burden

a. Ernest Street will become a major traffic route, leading to a substantial increase in vehicle volumes, which conflicts with the objectives outlined in the Transport and Infrastructure Strategy (2022), which aims to balance traffic flow with the needs of pedestrians and the local community. The resulting higher congestion and pollution will be at odds with these goals.

2. Compromised Pedestrian and Active Transport Facilities

a. The increased traffic will narrow the footpaths and reduce pedestrian safety. This outcome goes against the principles set by the Transport for New South Wales Road Use Space Allocation Procedure, which prioritises safe and accessible facilities for pedestrians and cyclists.

3. Impact on Local Business and Economic Activity

a. The rise in traffic and the removal of loading zones will disrupt local businesses on Ernest Street. This negatively affects the economic activity and vibrancy of the area, conflicting with the goals of the Placemaking Strategy, which seeks to support and enhance local commercial areas.

4. Environmental and Ecological Degradation

a. Increased traffic will lead to higher levels of noise and air pollution, impacting public health and the quality of the urban environment. This is contrary to the objectives of the Environmental Sustainability Strategy (2023), which aims to reduce pollution and improve urban living conditions.

5. Conflicts with Sustainable Transport Goals

a. The emphasis on increasing vehicle traffic on Ernest Street is at odds with the goals outlined in the Transport and Infrastructure Strategy and the Placemaking Strategy. These documents advocate for a balanced approach that supports sustainable transport modes and enhances the overall urban environment.

Traffic Impacts to Local streets

The placement and design of the portals for the WHT has significant impacts for the local traffic network, which Council has outlined in previous submissions to TfNSW and the NSW State Government. Due to these concerns Council has continually requested traffic modelling associated with the WFU and WHT projects to enable TfNSW and Council to work together to mitigate the known and unknown impacts of the WHT and WFU projects. To date TfNSW has not been willing to share this information with Council.

The Minister's Conditions of Approval (E147) requires TfNSW to;

- "prepare a Road Network Performance Plan in consultation with the relevant council(s).
 The Plan must incorporate operational traffic modelling results from the operation of major motorways including but not limited to WestConnex M4-M5 Link"
- 2. "consideration of movement and place analysis and local initiatives, such as local area

improvement strategies, potential land use changes, and any traffic changes as a result of other major projects [Metro]in the vicinity of the project area"

- 3. "an updated analysis, including modelling of traffic impacts to the adjoining road network (including impacts on local roads from rat-running), as a consequence of the CSSI".
 - (i) potential "pinch-points" where the merging of tunnel exit traffic and surface traffic would occur at Rozelle or along the **Warringah Freeway**;
 - (ii) traffic movements and congestion at various intersections in **North Sydney**, **Cammeray** and Rozelle/Annandale;

Condition E147 requires the submission of a Road Network Performance Plan to the Planning Secretary and relevant council(s) for information six months prior to the operation of the CSSI. The Condition requires TfNSW to implement the identified mitigation measures prior to the operation of the Oritical State Significant Infrastructure. It also notes that the Identified mitigation measures may need to be further assessed under the Environmental Planning and Assessment Act.

Council Infrastructure team advises that the implementation of measures to mitigate the impacts from the WHT to local roads would take over three years to implement, subject to available funding.

In the context of the above it is noted that the Environmental Impact for the WFU and WHT Projects notes the performance at the following intersections during peak hours following the WHT / WFU operation:

With the recent experience of the Rozelle Interchange, which resulted in many months of chaotic traffic conditions for the people of Rozelle, Balmain and surrounding suburbs, the NSW Government is urged to proceed with extreme caution at this juncture of this project. As we saw in that experience, and as heard by the NSW Legislative Council's *Impacts of the Rozelle Interchange Enquiry* in July 2024:

the increased traffic congestion following the opening of the Rozelle Interchange was unreasonable and unacceptable, given the size, planning and cost involved in the ...broader WestConnex project.

The careful planning and consultation of large infrastructure projects is much preferable than the retro-fitting of infrastructure after it has been installed, which is extremely disruptive, costly and ultimately, unlikely to be effective.

In the context of the above it is noted that the environmental impact for the WFU and WHT Projects notes the performance at the following intersections during peak hours following the WHT / WFU operation:

- Miller St and Falcon St FAIL
- Miller St and Berry St FAIL
- Miller St and Ernest St FAIL
- Miller St and Amhurst FAIL
- Pacific Hwy and Bay Rd FAIL
- Pacific Hwy and Berry St FAIL
- Military Rd and Ben Boyd Rd FAIL

It is also noted that the following connections will be lost from the local transport network as a result of the WHT Project:

- Access from Brook St southbond to the Harbour Tunnel.

- Harbour Bridge to Falcon St westbound.
- Harbour Tunnel to Falcon St westbound.
- Berry St (NS CBD) to Military Rd (Neutral Bay).
- The pedestrian path in Cammeray Park from Amherst St to Sutherland St
- Connection from the Harbour tunnel to Miller St
- North-south cycle underpass along Merlin St
- Ernest St to Bridge
- Ernest St from Harbour Bridge.

The above information is extremely concerning to Council and the community of North Sydney. It would also appear to confirm that traffic modelling has been completed in relation to impacts on local roads.

Active Transport Improvements

The current portal designs propose no active transport or pedestrian centric infrastructure of any significance to encourage increased pedestrian activity and modal shift, leading to carbased outcomes and alienation and potential abandonment of these areas.

E195 An Active Transport Network Review must be prepared in consultation with relevant Councils, Bicycle NSW and Bike North. The Active Transport Network Review must review active transport infrastructure within at least 500m of the Warringah Freeway corridor component of the CSSI and include:

- a. an analysis of the existing cycling network, including the identification of routes between existing and potential trip generators;
- b. an analysis of existing and expected patronage levels of current and proposed routes;
- c. identification of capacity constraints or missing links in the existing and proposed networks, including consideration of both State and Council cycling strategies and maps (including draft strategies) and expected demand;
- d. a calculation of pedestrian crowding and the suitability of shared facilities; and NSW Government 65 Department of Planning, Industry and Environment Western Harbour Tunnel & Warringah Freeway Upgrade (SSI-8863)
- e. a list of recommendations and the timeframes for implementation to address the findings of (a), (b), (c) and (d) above. The Review must be provided to the Planning Secretary for approval within 12 months of commencement of construction.

Note: Implementation timeframes must be reasonable, reflect network needs, and the objective of offsetting open space impacts (particularly in relation to open space impacts at Cammeray).

Tunnel portals (entry and exits) - Recommendations

- TfNSW immediately release traffic modelling associated with local roads in the North Sydney area and commit to working with Council to develop mitigation measures as required under Condition E147; and that TfNSW commit to funding all identified measures required to mitigate the impacts of the WHT on the local traffic network.
- 2. TfNSW commit to the undertaking an urban design investigation to improve amenity in the public domain and development of an active transport network connecting the broader LGA to alternative forms of transport to assist in offsetting the impacts of the WHT.

- 3. That TfNSW revise the design of areas adjoining the portals to align with the TfNSW Infrastructure Placemaking Strategies to incorporate improved pedestrian and cycling facilities, preservation of green spaces, and minimizing disruption to local businesses.
- 4. TfNSW and State Government recommit to funding Miller Place to ameliorate the significant impacts from the WHT on the North Sydney CBD.

Landscape design

It is unclear if the PDLP has been developed with reference to Ministers Condition of Consent E187, which requires the development of a Landscape Strategy Report, which details the type, size, number and location of replacement trees. The report must demonstrate how any replacement plantings are consistent with the requirements of Condition E184 [retention of trees] and Condition E185 [Replacement of trees].

The PDLP needs to be critically evaluated against the North Sydney Council Public Domain Style Manual and Design Codes (2019). This manual outlines specific design principles for public spaces within the Council's jurisdiction, covering elements such as street furniture, lighting, paving, landscaping, signage, and public art. The PDLP's approach to urban design should be measured against these standards to determine whether it adheres to the established guidelines or deviates in ways that may affect the quality and consistency of public spaces within North Sydney.

Particular attention should be given to how the PDLP addresses the integration of new infrastructure with existing public spaces. This includes analysing the consistency in design language, materials, and overall aesthetic appeal between the PDLP and the Council's manual. Any discrepancies identified could lead to a fragmented urban environment that fails to meet the community's expectations for quality and cohesiveness in public domain projects.

The PDLP's approach to public space enhancement should be compared with the North Sydney CBD Public Domain Strategy (2020), which focuses on improving streets, squares, parks, and public areas to create a more pedestrian-friendly environment. The report should identify any areas where the PDLP either supports or undermines these local strategies, highlighting potential conflicts that may need to be addressed by Council.

Tree Replacement

It is noted that the WFU / WHT has resulted in the removal of over 3000 trees from the North Sydney area. The following Condition of Consent relate to the required replacement of trees.

E185 Replacement trees must:

- (a) be located on public land and prioritised within 500 metres of the Construction Boundary, that delivers increased shading to footpaths, pedestrian and cycle paths;
- (b) be of a species suitable to the location, having regard for local ecology and existing street trees;
- (c) meet the requirements for quality tree stock specified in the AS2303:2018: Tree Stock for Landscape Use;

- (d) be provided no later than six months following the commencement of operation; and
- (e) have a minimum pot size consistent with the relevant council's plans / programs / strategies for vegetation management, street planting, or open space landscaping, or as agreed by the relevant council(s).

The PDLP does not demonstrate how this condition is proposed to be met.

The PDLP's tree replacement strategy requires alignment with North Sydney's Street Tree Strategy (2006) and the Draft North Sydney Tree Replacement Strategy (2022). This document provide guidelines for the selection, placement, and maintenance of street trees, with a strong emphasis on preserving the existing urban canopy and ensuring biodiversity. It would be helpful to understand if the PDLP has been developed in consideration of the document and its commitment to these principles, particularly in the context of tree removal necessitated by the project.

The North Sydney Street Tree Strategy advocates for the selection of appropriate species that contribute to the urban environment's aesthetics and functionality, while the Draft North Sydney Tree Replacement Strategy recommends a two-to-one replacement ratio to mitigate the loss of mature trees. The PDLP provides no advice in relation to how it might achieve these outcomes and whether the proposed tree species and replacement ratios will maintain or enhance the urban canopy within the Council area as a result of this project.

Green Infrastructure Considerations

Condition of Consent E186, requires the replacement and enhancement of vegetative screening along the project corridor to be undertaken in a progressive manner during construction to allow for the early establishment of vegetative screening. It is unclear from the PDLP whether this condition is being met.

The PDLP would appear to lack any significant green infrastructure and there would appear to be significant bear concrete infrastructure across the project that provide opportunities for green walls and horizontal gardens.

The principles outlined in the Greener Places Guide (2017) and the Urban Tree Canopy Guide (2017), should be applied to the PDLP. These guidelines emphasise the importance of integrating green infrastructure into urban design to enhance ecological connectivity, improve air quality, and provide shade and cooling in public spaces. The report should assess how the PDLP incorporates green infrastructure elements, such as green roofs, permeable surfaces, and urban forests, and whether these efforts contribute to the broader goal of achieving a 40% canopy cover by 2036, as stipulated in the Urban Tree Canopy Guide.

The analysis should also consider the PDLP's alignment with the Sydney Green Grid strategy, which seeks to create connected green spaces and corridors throughout Sydney. The Council should evaluate whether the PDLP supports the creation of these networks within North Sydney and identify any gaps that may require further attention.

Visual and Landscape Impact

The PDLP's visual impact assessments must be compared against North Sydney's objectives for open spaces and public amenities. The Western Harbour Tunnel and Warringah Freeway Upgrade EIS Appendix V outlines a strategic urban design framework, including a Landscape Character and Visual Impact Assessment (LCVIA) that evaluates the potential visual impacts of the project. This assessment should be cross-referenced with North Sydney Council's vision

for its urban landscape, as articulated in documents such as the North Sydney Open Space Provision Strategy (2009).

The report should assess how the PDLP addresses the visual integration of new infrastructure with existing landscapes, considering factors such as scale, form, and materiality. The potential for the PDLP to disrupt visual sightlines, overshadow public spaces, or create visual clutter should be critically evaluated. Additionally, the report should examine the PDLP's proposed landscape mitigation measures and their effectiveness in minimising adverse visual impacts on the local environment.

The landscape character of key areas, such as St Leonards Park and other significant green spaces, should be carefully considered. The PDLP's approach to preserving and enhancing these landscapes should be analysed in relation to North Sydney's goals for maintaining high-quality open spaces that contribute to the community's well-being and the area's overall aesthetic appeal.

Key environmental considerations include the PDLP's approach to habitat preservation, watersensitive urban design, and the integration of green infrastructure. The North Sydney community should be made aware of any potential environmental risks associated with the PDLP, such as the loss of biodiversity or the degradation of natural habitats and should discuss strategies for mitigating these risks.

Landscape Design – Recommendations

- 1. That in consultation with Council, TfNSW map North Sydney's green grid to identify opportunities to meet the Ministers Conditions of Consent.
- That in consultation with Council TfNSW immediately develop Landscape Strategy Report in accordance with the Ministers Condition of Consent E187 that outlines the details of replacement plantings.
- 3. That TfNSW demonstrate design compliance with the policies strategies and plans outline in this report including; Council Public Domain Style Manual and Design Codes (2019), Draft North Sydney Tree Replacement Strategy (2022), . Greener Places Guide (2017) and Urban Tree Canopy Guide (2017).

Tunnel interiors

The interior tunnel Interior design that acknowledges Country is recognised. meaningful connections to the local area are supported.