



Construction Pedestrian & Traffic Management Plan

**Sydney Opera House
Renewal Stage 1**
For Sydney Opera House
5 December 2019

**parking;
traffic;
civil design;
communication;
ptc.**

Document Control

Sydney Opera House Renewal Stage 1, Construction Pedestrian & Traffic Management Plan

Issue	Date	Issue Details	Author	Reviewed
1	26/07/17	DA2 - 1st Issue	C.S	A.M
1	17/11/17	DA3 – 1 st Draft Issue	C.S	A.M
2	20/11/17	DA3 - 2 nd Draft Issue	C.S	A.M
3	30/11/17	DA3 – 3 rd Draft Issue	C.S	A.M
4	26/04/18	DA3 – 4 th Draft Issue	C.S	A.M
-	4/05/18	Work in Progress	C.S	A.M
4	24/05/18	DA3 – 1 st Issue	C.S	A.M
5	05/10/18	DA3 – 2 nd Issue	H. L	A. U
6	13/12/19	Revised to Suit Condition 33	A.M	A.M
7	7/02/20	Includes authority endorsements	A.M	A.M

Contact

Andrew Morse

+61 2 8920 0800

+61 414 618 002

andrew.morse@ptcconsultants.co

Contents

1.	Introduction	1
1.1	Project Summary	1
1.2	Purpose of this Report	2
2.	Proposal	5
3.	Existing Road Network	6
4.	Pedestrian & Traffic Management Plan	11
4.1	Objective	11
4.2	Hours of Work	11
4.3	Construction Site Layout	12
4.3.1	Site Access Arrangements	12
4.3.2	Loading Dock Access	13
4.3.3	Broadwalk & Forecourt Access	13
4.4	Construction Activities & Program	13
4.4.1	General Construction Considerations	14
4.4.2	Construction Workforce	14
4.4.3	Work Shifts	14
4.5	Construction Traffic	14
4.5.1	Construction Vehicle Types	14
4.5.2	Loading Dock	15
4.5.3	Construction Traffic Activity	16
4.5.4	Works Zone	18
4.5.5	Construction Vehicle Routes	18
4.5.6	Road Occupancies	20
4.6	Construction Impacts	20
4.6.1	Key Stakeholders	20
4.6.2	Sydney Coordination Office	21
4.6.3	Roads & Maritime Services (RMS)	21
4.6.4	City of Sydney (CoS)	21
4.6.5	Local Residents and Businesses	21
4.6.6	State Transit Authority (STA)	21
4.6.7	SOH Consultation Framework	21
4.7	Cumulative Construction Impacts	22
4.7.1	Quay Quarter Sydney	22
4.7.2	Opera Residences Apartments	23
4.7.3	The Sandstone Project	24
4.8	General Requirements	25
4.9	Traffic Control Measures	26
4.10	Pedestrian Management Plan	26
4.10.1	Vehicle Spotters	26
4.10.2	Driver Requirements	26
4.10.3	Caution Signage	27
4.10.4	Work Sites	28
4.10.5	Crane Set-up	29
4.11	Special Deliveries & Oversized Vehicles	29

4.12	Contractor Parking	29
4.13	Work Site Security	29
4.14	Induction	29
4.15	Emergency Vehicle Access	29
4.16	Taxi Notification	30
4.17	Contact Details for On-Site Enquiries and Site Access	30
4.18	Occupational Health and Safety	30
5.	Summary	31
Attachment 1	- City of Sydney Standard Requirements for Construction Traffic Management Plan	32
Attachment 2	- SOH Consultation Framework	33
Attachment 3	- Green Travel Plan for Construction Workers	34
Figure 1	- Subject Site & Surrounding Road Network	1
Figure 2	- Overview of Site and Works	5
Figure 3	- Road Hierarchy (Source: RMS Road Hierarchy Review)	6
Figure 4	- Existing Road Network - Macquarie Street (Southbound)	7
Figure 5	- Existing Road Network - Eastern Distributor Motorway (M1) (Northbound)	8
Figure 6	- Existing Road Network - Shakespeare Place (Westbound)	8
Figure 7	- Existing Road Network - William Street (Eastbound)	9
Figure 8	- Existing Road Network - Cleveland Street (Eastbound)	9
Figure 9	- Existing Road Network - College Street (Northbound)	10
Figure 10	- Existing Road Network - Elizabeth Street (Southbound)	10
Figure 11	- Proposed DA3 Worksite Arrangements	12
Figure 12	- Laing O'Rourke Loading Arrangement within B4 Loading Dock	15
Figure 13	- Construction Vehicle Routes	19
Figure 14	- Alternative Egress Route for Articulated Vehicles	20
Figure 16	- Quay Quarter Construction Routes	23
Figure 17	- The Sandstone Project Location (Lands and Education Buildings)	25
Figure 18	- Temporary Truck Caution Signage for Broadwalk and Forecourt	27
Figure 19	- Caution Signage Location (Macquarie Street Interface with Broadwalk)	28
Table 1	- Construction Activity Program	13
Table 2	- Work Shifts	14
Table 3	- Construction Traffic Movements	17

1. Introduction

1.1 Project Summary

The Sydney Opera House (SOH) is undertaking a series of construction projects, as part of the Sydney Opera House Renewal Stage 1 project. **ptc.** has previously prepared a Construction Pedestrian and Traffic Management Plan (CPTMP) for the SOH, which SOH was previously working under for DA2 (SSD7665) works.

SOH has engaged **ptc.**, to prepare a revised Construction Pedestrian and Traffic Management Plan (CPTMP) to incorporate the works approved under the package of works known as the Concert Hall and Creative Learning Centre Project (DA3 – SSD8663).

The location of the subject site is presented in Figure 1.

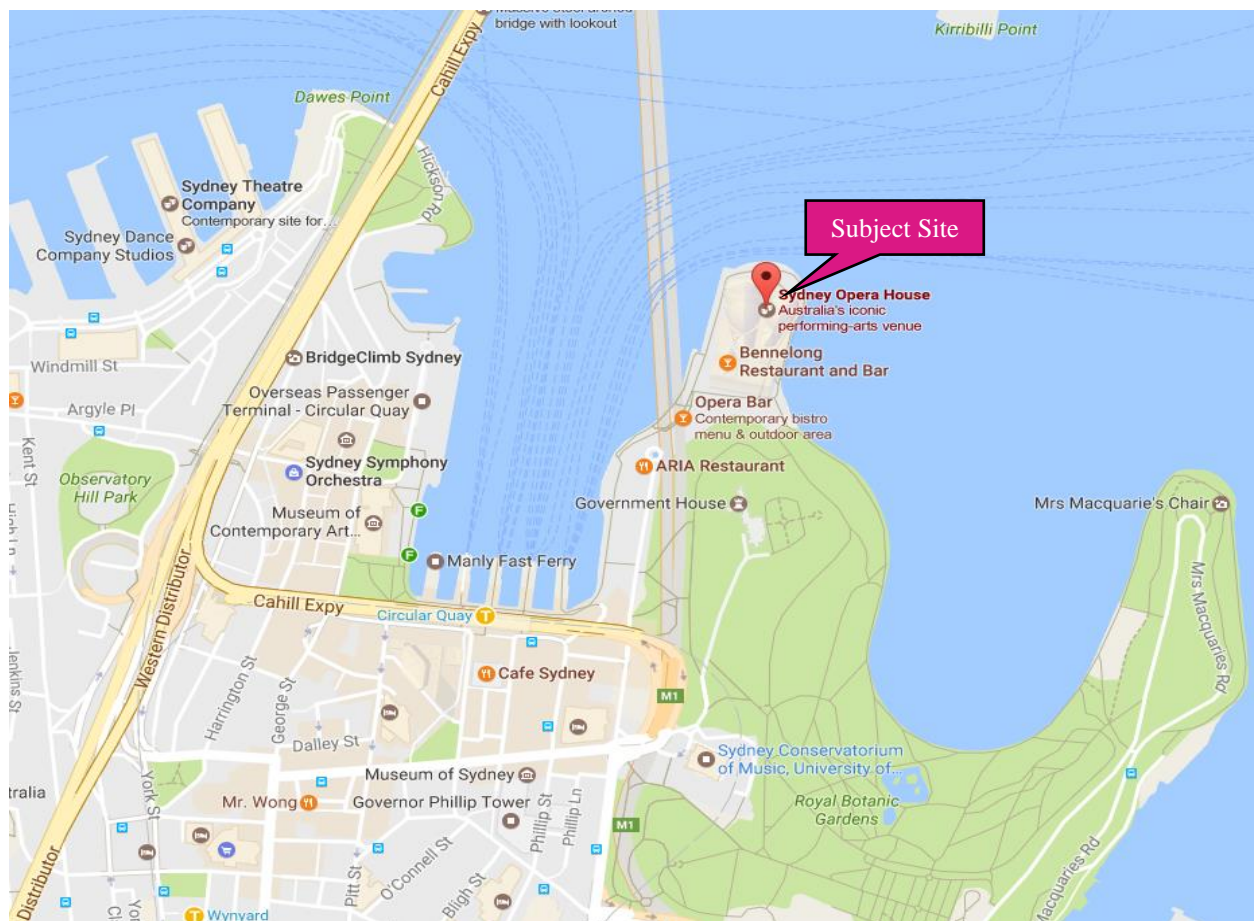


Figure 1 - Subject Site & Surrounding Road Network

1.2 Purpose of this Report

The purpose of this report is to forecast and identify potential impacts on traffic, pedestrians and cyclists in the surrounding road network as a result of the increased construction traffic and altered traffic conditions that will occur during the associated works.

The report responds directly to the requirements of Condition B33 of the consent.

CONSTRUCTION PEDESTRIAN AND TRAFFIC MANAGEMENT SUB-PLAN

B33. Prior to the commencement of works, a Construction Pedestrian and Traffic Management Sub-Plan (CPTMP) prepared by a suitably qualified person shall be submitted to the Certifying Authority. The CPTMP should be prepared in consultation with the CBD Coordination Office, TfNSW, TfNSW (RMS) and Council.

The Sub-Plan must include a Green Travel Plan for workers and detailed measures that would be implemented to minimise the impact of the development on the safety and capacity of the surrounding road network, minimise truck movements to and from the site as far as practicable during the peak periods of this consent.

A Green Travel Plan for construction workers is presented in Attachment 4.

In addition, the CPTMP shall address, but not be limited to, the following matters:

Condition	Report Reference
<i>(a) location of the proposed work zone(s);</i>	No Works Zone is required
<i>(b) location of any crane(s);</i>	Refer Section 4.3
<i>(c) haulage routes;</i>	Refer Section 4.5.5
<i>(d) construction vehicle access arrangements;</i>	Refer Section 4.9
<i>(e) proposed construction hours;</i>	Refer Section 4.2
<i>(f) estimated number of construction vehicle movements and detail of vehicle types, noting vehicle movements are to be minimised during peak periods;</i>	Refer Section 4.5.3
<i>(g) details of construction activities and timing of these activities;</i>	Refer Section 4.4
<i>(h) consultation strategy for liaison with surrounding stakeholders;</i>	Refer Section 4.6
<i>(i) any potential impacts to general traffic, cyclists, pedestrians and bus services within the vicinity of the site from construction vehicles during the construction works;</i>	Refer Section 4.7
<i>(j) cumulative construction impacts of projects including Sydney Light Rail Project, Sydney Metro City and Southwest and surrounding developments. Existing CPTMPs for developments within or around the development site should be referenced in the CPTMP to ensure coordination of work activities are managed to minimise impacts on the road network; and</i>	Refer Section 4.7

(k) should any impacts be identified, the duration of the impacts and measures proposed to mitigate any associated general traffic, public transport, pedestrian and cyclist impacts must be clearly identified and included in the CPTMP.

Refer Section 4.7

The Applicant shall provide the builder's direct contact number to small businesses adjoining or impacted by the construction work and the Transport Management Centre and Sydney Coordination Office within TfNSW to resolve issues relating to traffic, freight, servicing and pedestrian access during construction in real time. The Applicant is responsible for ensuring the builder's direct contact number is current during any stage of construction.

See Section 4.17 for details.

A copy of the final CPTMP, to be endorsed by the CBD Coordination Office, TfNSW, TfNSW (RMS) and Council prior to the commencement of works, is to be provided to the Planning Secretary.

We have obtained endorsement from City of Sydney, RMS (TfNSW) and the CBD Coordination Unit through recent correspondence, which is detailed overleaf.

This report has been prepared to in accordance with the RMS publication Traffic Control at Works Sites and the Australian Standard AS1742.3-Traffic Control Devices for Work Sites on Road. The City of Sydney's Guidelines for preparation of a CTMP were also referred to while preparing and developing the CPTMP.

This report has been prepared in conjunction to the following documents:

- Loading Dock Management Plan prepared by **ptc.**¹ in May 2017,
- Construction Pedestrian & Traffic Management Plan for DA2 prepared by **ptc.** in July 17, and
- Construction Management Plan for DA3 prepared by SOH in April 2018.

¹ formerly 'Parking & Traffic Consultants'

This report presents the following considerations relating to the construction traffic activity:

- Section 2 - A description of the project;
- Section 3 - A description of the road network servicing the development property;
- Section 4 - Management of construction traffic & existing road users; and
- Section 5 - Summary.

1.3 Correspondence with Authorities

The Revised CTMP document was issued to the following organisations on 10th December 2019:

City of Sydney

Roads and Maritime

Transport for NSW

Endorsement has been received from:

City of Sydney = Amy Douglas (email dated 21st January)

I confirm the City of Sydney has reviewed the CTMP and has no comments to add.

RMS (now TfNSW) Transport for NSW / CBD Coordination Unit = Alex Karki (email dated 5th February)

TfNSW endorses the content of the CPTMP that has been provided subject to following conditions:

- *In the event that construction activities overlap with the performances or other events at the Sydney Opera House (SOH), it is recommended that pedestrian and traffic supervision be provided for the entry and egress of the patrons.*
- *Where traffic control is to be implemented, it is requested that the TMP/TCPs be forwarded to SCO and TfNSW (RMS) for review and approval.*
- *During the construction period, the proponent is to consult with nearby developers, SOH and SCO in regards to work days where high-than-average traffic volumes are expected and when performances or events are scheduled at the SOH.*

2. Proposal

The SOH Renewal Project involves various construction and upgrade works to the Sydney Opera House, which to date, have been allocated to four work packages, known as DA1, DA2, DA2a and DA3.

This revised CPTMP addresses the key traffic and pedestrian considerations for the following construction works:

- Safety, Accessibility and Venue Enhancement (SAVE) of the Joan Sutherland Theatre (JST), Entry Foyer Works (DA2 – SSD 7665 **approved**);
- Construction of a Function Centre & Ballet Rehearsal Room (DA2a – SSD 7881 **approved**); and
- DA3 Package of works (approved), including:
 - Acoustic, technical and accessibility upgrades to the Concert Hall (CH); and
 - Dedicated facilities within the Opera House for creative learning, known as the Creative Learning Centre (CLC).

Details of the specific works, methodology, timing and more are provided in the Construction Management Plan submitted by SOH/Taylor as part of this approved project.

The location of the DA3 work components are outlined in Figure 2.

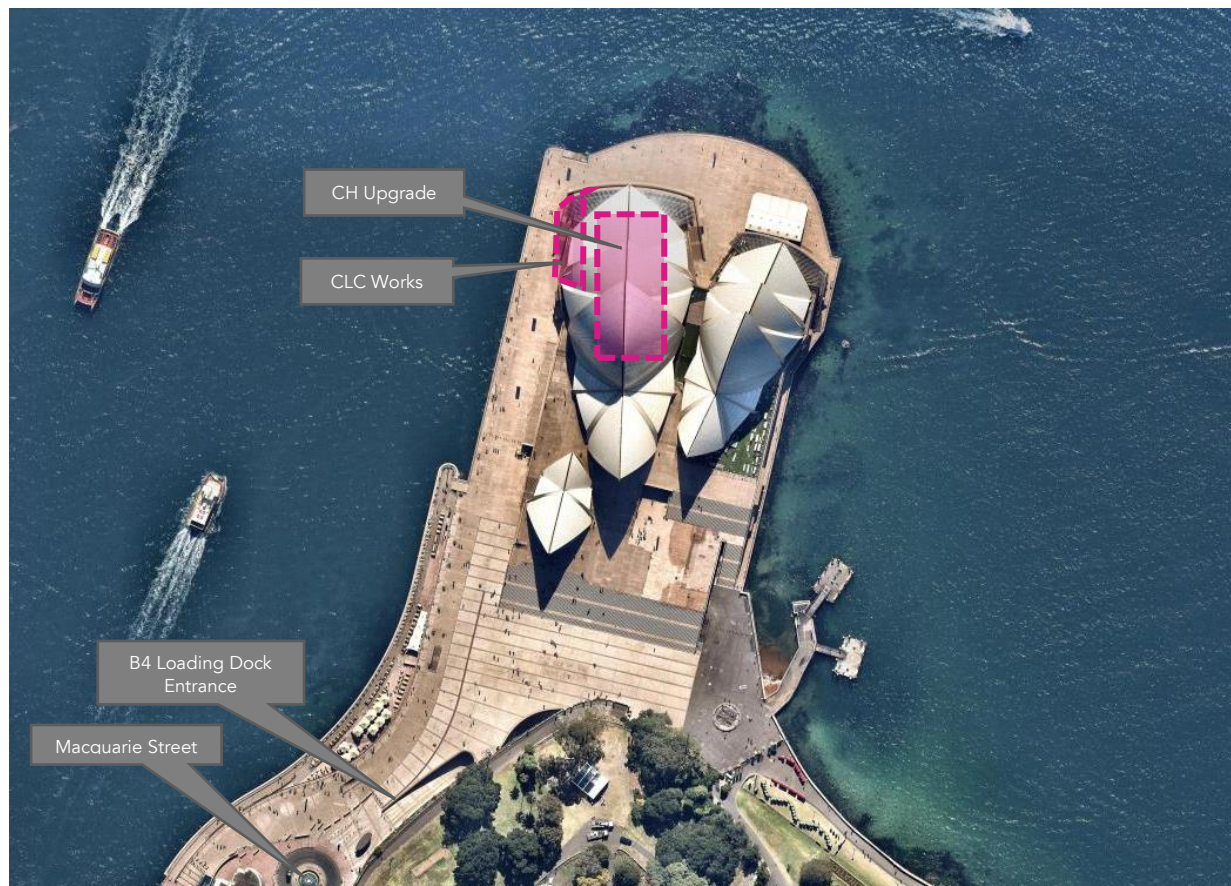


Figure 2 - Overview of Site and Works

3. Existing Road Network

The SOH is located at Bennelong Point, at the northernmost end of Macquarie Street. The surrounding road network consists of several classified state and regional roads in addition to various unclassified local roads. Being located on the outskirts of the Sydney CBD, many of these roads, regardless of classification, play a significant role in Sydney's transportation network. The surrounding road network is outlined in Figure 3 identifying classified roads.

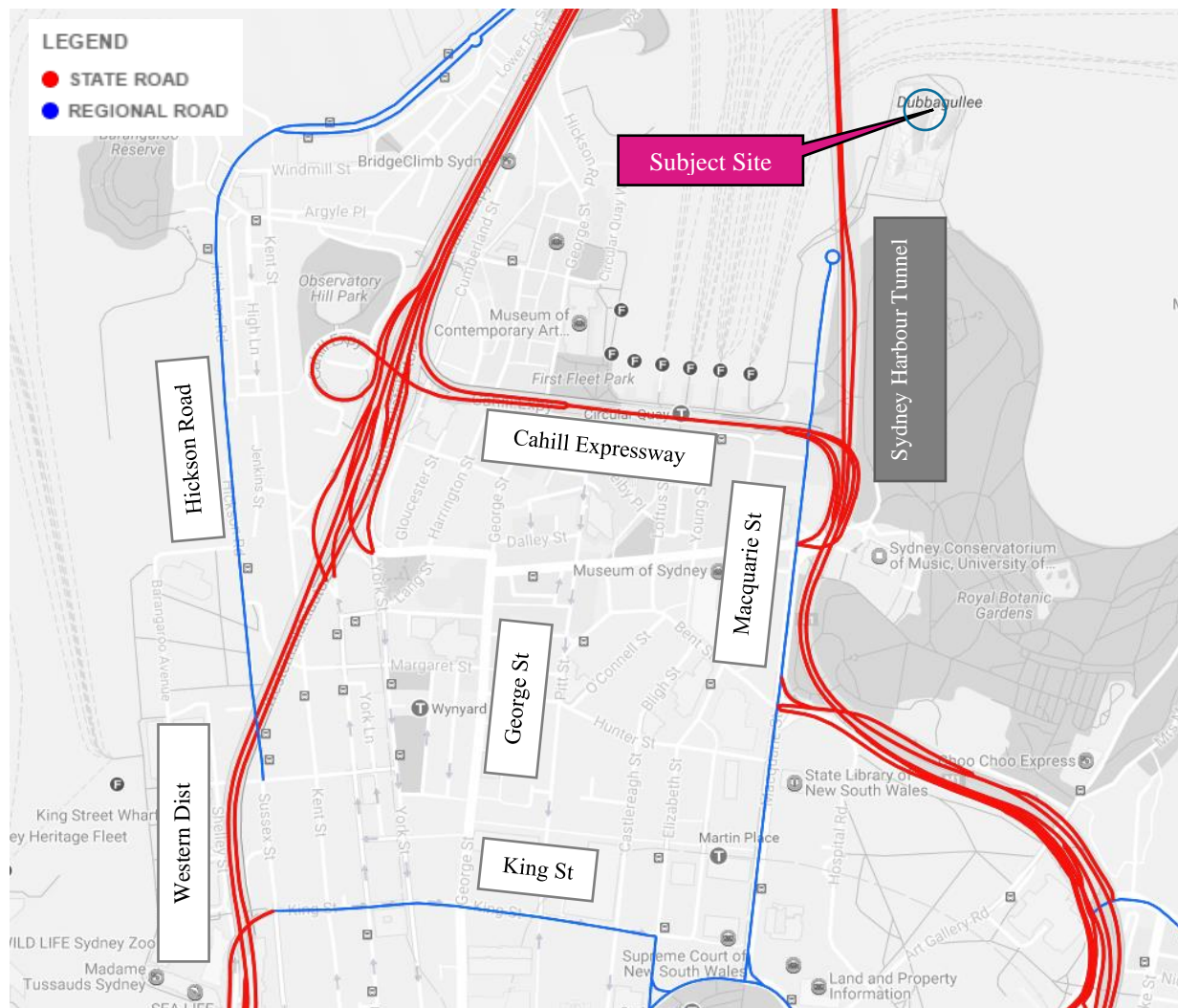


Figure 3 - Road Hierarchy (Source: RMS Road Hierarchy Review)

The NSW administrative road hierarchy comprises the following road classifications, which align with the generic road hierarchy as follows:

- | | |
|----------------|--|
| State Roads | - Freeways and primary arterials (RMS managed) |
| Regional Roads | - Secondary or sub arterials (Council managed, part funded by the State) |
| Local Roads | - Collector and local access roads (Council managed) |

The road network serving the site includes:

Macquarie Street is a regional road aligned north-south, providing vehicular access to and from the SOH. The carriageway is undivided, and typically comprises one northbound lane and two southbound lanes, each with restricted parking lanes. Parking along the kerb-side lane in the southbound direction is provided as a dedicated coach set-down area. Being in a high-pedestrian activity zone, a speed limit of 40km/h applies.



Figure 4 - Existing Road Network - Macquarie Street (Southbound)

Eastern Distributor Motorway (M1) is a state road aligned north-south which forms a major link of the Sydney Orbital Network, directly connecting the north-east and south-east regions of Sydney via the CBD. The carriageway is divided and varies in the number of lanes over the length of the road. Typically, the road is comprised of 3 lanes in each direction. The road features variable speed limits with the default speed limit set as 80 km/h. Parking is not permitted.



Figure 5 - Existing Road Network - Eastern Distributor Motorway (M1) (Northbound)

Shakespeare Place: a one-way state road aligned east-west and runs alongside the Eastern Distributor Motorway on the south side of the Botanic Gardens. The carriageway is undivided and comprises three westbound lanes. A speed limit of 50km/h applies for most of the road; however, the western end of the road is located in a high pedestrian activity zone resulting in a reduced speed limit of 40km/h. Parking is not permitted.



Figure 6 - Existing Road Network - Shakespeare Place (Westbound)

William Street: a state road aligned east-west. The carriageway is divided and is comprised of two lanes in each direction. The left lane in both directions are denoted as T2 transit lanes operational from 6am to 7pm Mon-Fri. There are also painted bicycle lanes in both directions spanning the street from the Eastern Distributor Motorway intersection to the College St intersection. 2-hour metered parking is available in multiple parallel parking bays offset on the side of the street. A speed limit of 50km/h applies.



Figure 7 - Existing Road Network - William Street (Eastbound)

Cleveland Street: a state road aligned east-west is the major east-west connection between City Road and the Eastern Distributor. The undivided carriageway has 2 lanes in each direction. Clearways are in operation during peak hours from Mon-Fri. A speed limit of 50km/h applies with school zone speed limits of 40km/h applicable from the Pitt St intersection to the Buckingham St intersection.



Figure 8 - Existing Road Network - Cleveland Street (Eastbound)

College Street: a regional road adjacent to the eastern end of Hyde Park. The undivided carriageway is aligned north-south and is composed of 3 lanes in each direction. The road is located in a high-pedestrian activity zone, resulting in a speed limit of 40km/h. Along parts of the road heading southbound, the left lane transitions into parking lanes with 4P metered parking. The southern half of the road is situated in a school zone.



Figure 9 - Existing Road Network - College Street (Northbound)

Elizabeth Street: a regional road adjacent to the western side of Hyde Park. It is aligned north-south and extends all the way down towards Green Square. The undivided carriageway has 3 lanes in both directions with bus lanes present usually on either the left or middle lane. A speed limit of 40km/h applies in the northern portion of the road closer to the CBD and increases to 50km/h away from the city centre. There are small portions of the road where parking is permitted in the left lane and is available as 4P metered parking.



Figure 10 - Existing Road Network - Elizabeth Street (Southbound)

4. Pedestrian & Traffic Management Plan

4.1 Objective

The pedestrian and traffic management plan associated with the construction activity of the SOH Renewal Project aims to ensure the safety of all workers and road users within the vicinity of the construction site, with the following primary objectives:

- To minimise the impact of the construction vehicle traffic on the overall operation of the road network;
- To ensure continuous, safe and efficient movement of traffic (vehicular and pedestrian) for both the general public and construction workers;
- Installation of appropriate advance warning signs to inform users of the changed traffic conditions;
- To provide a description of the construction vehicles and the volume of these construction vehicles accessing the construction site;
- To provide information regarding the changed access arrangement and also a description of the proposed external routes for construction vehicles accessing the site; and
- Establishment of a safe pedestrian environment in the vicinity of the site.

4.2 Hours of Work

The construction activities associated with this work shall be carried out within the hours approved by the relevant authorities.

Based on the approved conditions for the prior works packages of the Renewal project, these hours are anticipated as follows:

- Monday to Friday 7:00am to 6:00pm
- Saturdays 8:00am to 1:00pm
- Sundays or Public Holidays No works to be undertaken without prior approval

Works may be undertaken outside these hours where:

- The works are internal and undertaken within the wholly enclosed building; or
- The delivery and removal of vehicles, plant or materials is via the underground loading dock within the Subject Site (in which case it may be undertaken on a 24 hour a day, 7 days a week basis during the construction of the development); or
- The delivery and removal of vehicles, plant or materials (not via the underground loading dock under Condition C1(d)(ii)) is required outside these hours by the Police or other public authorities, or it is determined that it would be hazardous to the general public (i.e. tourists, patrons or events in the forecourt/Boardwalk), provided it is undertaken outside scheduled performance times at the Sydney Opera House (including not within 30 minutes before or after scheduled performances); or
- It is required in an emergency to avoid the loss of life, damage to property and/or to prevent environmental harm; or
- A variation is approved in advance in writing by the Secretary or his/her nominee.

Stakeholders must be informed of any works that are to be undertaken outside these hours.

4.3 Construction Site Layout

LOR have prepared a site layout to be established for DA3 works, outlined in Figure 11. In terms of construction vehicle access, all movements will approach SOH via Macquarie Street. A number of reserved work zones are proposed to receive vehicles:

- Western Crane Site along the Western Boardwalk;
- Northern Crane Site, located on the northern section of the public Boardwalk;
- Vehicular Concourse, under the monumental steps; and
- B4 Basement Loading Dock.

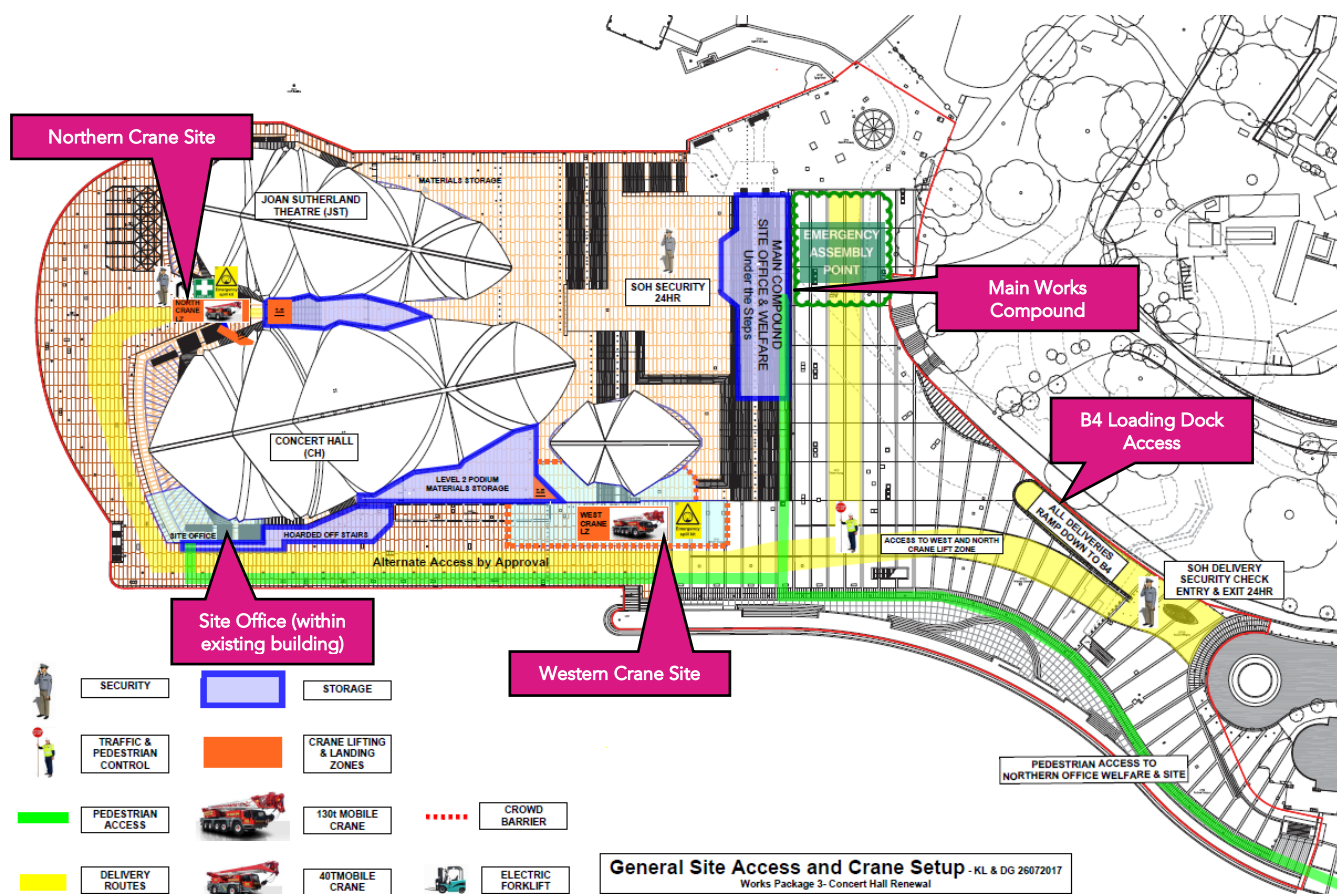


Figure 11 - Proposed DA3 Worksite Arrangements

4.3.1 Site Access Arrangements

All construction traffic shall enter and exit the site from Macquarie Street in a forward direction. Traffic Controllers and spotters shall be present to ensure safe coordination between entering/exiting construction traffic associated with this project and local traffic.

4.3.2 Loading Dock Access

The primary construction vehicle activity is anticipated to access the B4 Loading Dock, adopting the same arrangements and safety procedures as those currently in-place for SOH loading-unloading operations. A section of the loading area has been made available for sole-possession of the contractor for DA1 and DA2 works, and this arrangement is proposed to be maintained for the DA3 works. This is discussed in greater detail in Section 4.5.2.

4.3.3 Boardwalk & Forecourt Access

On occasion, construction vehicles will be required to access the crane sites, via the pedestrianised Boardwalk and Forecourt respectively, as shown in Figure 11.

The safety of the public is a paramount consideration in the movement of vehicles along the Boardwalk and forecourt areas. Sydney Opera House has extensive experience in managing such movements and has safely carried out vehicle activities on the Boardwalk prior to the construction of Loading Dock B4, when deliveries were required around the northern end of the Opera House.

In relation to timing, construction vehicle access within the pedestrianised Boardwalk/forecourt will be limited to night works where practicable, in accordance with the work hour conditions stipulated in C1 (d) (ii), stated in Section 4.2.

In terms of the volume of truck movements specifically along the forecourt/Boardwalk, it is anticipated that no more than two trucks would arrive and depart in any single hour, amounting to four trips.

A number of measures will be undertaken to ensure the safety of pedestrians, outlined in Section 4.10.

4.4 Construction Activities & Program

The remaining construction activities to date are anticipated to occur between 2017 to 2022. A breakdown of the approximate time frames for the work packages are provided below:

Table 1 - Construction Activity Program

Stage	Scope of Works	Construction Period (approx.)
DA2 (SSD7665)	Works include: - the refurbishment of the entry foyer, and - the safety, accessibility and venue enhancement to the Joan Sutherland Theatre (JST SAVE).	Mid 2017 – 2019
DA 2a (SSD7881)	Construction of the new Function Centre to accommodate 190 seated and 500 standing patrons, and a ballet rehearsal room.	Mid 2017 – Early 2019
DA 3 (SSD8663) (subject)	1. CLC (Stage 1) 2. CH 3. CLC (Stage 2)	Commence post approval of DA3 Commence February 2020, 18-24-month duration Post CH Completion (est 2021)

4.4.1 General Construction Considerations

All construction activities shall be wholly contained within the approved construction compounds, including, but not limited to plant, vehicles, materials, waste, site offices and amenities.

Any hoardings and barriers shall not impact pedestrians, maintaining worksite security, whilst providing appropriate pedestrian thoroughfare. Providing safe pedestrian visibility near any crossing points will be a key criterion in the hoarding arrangements. Prior to any site establishment works, the hoarding arrangement will obtain approval from the relevant Certifying Authority. Upon completion of any stage, the dismantling of any hoardings or road-signage shall be done in accordance with RMS Traffic Control at Works Sites Manual.

4.4.2 Construction Workforce


The workforce will vary over the project lifespan, dependant on the requirements of each construction activity. The following figures have been provided to ptc.:

- Administration/Management Staff: 24;
- Construction Workforce (typical): 40; and
- Construction Workforce (peak): 200.

4.4.3 Work Shifts

Work shifts are primarily divided into a night shift and a day shift. This is outlined in the table extracted from the SOH Construction Management Plan in Table 2.

Table 2 - Work Shifts

Sydney Opera House Renewal Project																										
WORK DAY BREAKDOWN																										
HRS	23:30	00:30	01:30	02:30	03:30	04:30	05:30	06:30	07:30	08:30	09:30	10:30	11:30	12:30	13:30	14:30	15:30	16:30	17:30	18:30	19:30	20:30	21:30	22:30	23:30	
SHIFT RESTRICTIONS	23:30 - 10:30 Noisier works which will otherwise be disruptive to Opera House operations but not audible outside of the building, major materials handling, dust & vibration											10:30 - 18:00 General construction/no major noise generating activities								18:00 - 23:30 Planning and quiet activities which are compatible with live performances occurring in other venues within the site						
MONDAY																										
TUESDAY																										
WEDNESDAY																										
THURSDAY																										
FRIDAY																										
SATURDAY																										
SUNDAY	NO WORK																									

4.5 Construction Traffic

4.5.1 Construction Vehicle Types

The proposed works are envisaged to be carried out using a mix of commercial vehicles, ranging from small to heavy rigid vehicles (SRV to HRV). It is understood that some vehicles exceeding 12.5 metres in length will be required, including, but not strictly limited to:

- Articulated Vehicles (19m long) for material deliveries;

- Cranes (40 tonne and a 130-tonne crane)

The proponent shall apply for a special permit from the City of Sydney (CoS) for the use of any vehicles exceeding 12.5m in length, as requested by the Sydney Coordination Office (SCO).

4.5.2 Loading Dock

Use of the B4 loading dock for construction activities is proposed to occur under the same arrangements in place for DA1 and DA2 works. This arrangement is described below.

The majority of deliveries (approximately 80-90%) will occur within the single basement loading dock which can be accessed via a ramp off Macquarie Street. The dock accommodates four loading bays, of which, Bay 1 has been allocated to the Contractor for the duration of works; this arrangement is outlined in Figure 12.

The contractor anticipates that the loading dock will only be required for vehicles up to 12.5m in length (HRV). In the event that a larger vehicle is required, this can be achieved with additional manoeuvres and management of the adjacent docks to be kept clear, as adopted in the SOH Loading Dock Management Plan (LDMP).

As acknowledged in the previous section, any vehicles greater than 12.5m in length will require a permit from CoS.

In order to utilise the loading dock for deliveries, vehicles must be pre-booked prior to arrival using the existing SOH Vehicle Booking System 'Mobile Dock' to allow for the coordination of trucks within the site and to avoid any vehicle queuing on Macquarie Street. Moreover, a site office has been allocated within the loading dock to station a Logistics Manager/ Delivery Coordinator. This post shall communicate as necessary, to their counterparts who manage the construction vehicles at their respective origins and/or destinations.

No trucks may be queued or parked in the public road/streets in the CBD.

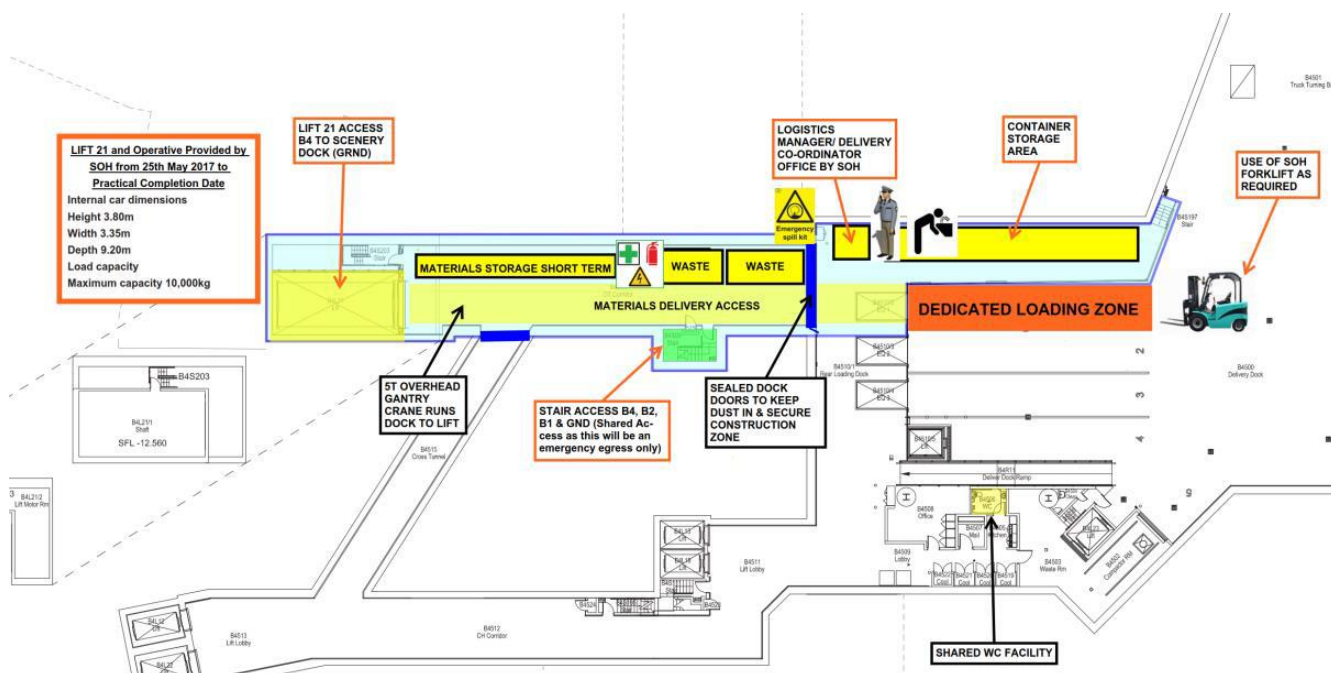


Figure 12 - Laing O'Rourke Loading Arrangement within B4 Loading Dock

4.5.3 Construction Traffic Activity

Based on traffic volume estimated provided by the SOH, the Sydney Opera House manages an average of 148 vehicle deliveries per day under regular operations (no construction activity). This traffic activity accounts for food deliveries to restaurants within the precinct, business operations for staff and resident businesses at the SOH, bump in and bump out activities for the performing arts venues as well as general building operation and maintenance.

During the construction works, the Concert Hall is anticipated to be closed for the following period ('dark' period):

- Concert Hall (capacity of 2700) – Closed from February 2020 with work expected to take 18 – 24 months.

During this period, traffic in the local road network is anticipated to be lower than average, despite construction traffic.

Notwithstanding, outside this closure period, the construction activity will result in increased traffic volumes on the local road network. The vehicle movements during these periods have been estimated with reference to knowledge provided by the SOH operations staff and Laing O'Rourke who were involved in providing construction planning and logistics advice in the early works stage.

The following considerations were made when estimating the construction traffic activity associated with the renewal works:

- Admin/management staff (24) assumed to all arrive during the standard day shift;
- Construction workforce assumed to be split evenly between day shift and night shift;
- Construction workforce is 40 on average, with a potential peak of 200 during critical stages of work;
- Assume 20% of workers drive to work, and park within proximate commercial car parks;
 - As a comparison, BTS Data indicates that 27% of staff in this area drive to work. During inductions, and upon engagement of sub-contractors, the contractor will encourage all employees and sub-contractors to seek alternative transport to the site where practicable. Workers will be made aware of the various public transport options that connect the site, as well as cycling routes.

Based on the above information, the daily traffic generation associated with the construction works is estimated in Table 3. In summary, the maximum anticipated daily volume of heavy vehicle and light vehicle trips over a 24-hour period are 56 and 80 respectively. These volumes represent only the critical construction activity periods, with average daily volumes anticipated to be significantly lower. Regardless, these movements are proposed to be widely spread out over a 24-hour period, and consideration will be given towards the type of vehicles and their timing to ensure that disruption to the road network and the local residents and businesses is minimised.

Table 3 - Construction Traffic Movements

Hour	Work Period	Estimated Construction Trip ² Generations	Peak Hourly Traffic ³	Proportion of Daily Traffic
22:00	NIGHT WORKS 22:00-07:00 (night shift)	Heavy Vehicle Trips: 2-6 trips (in & out) - Occurring throughout night works period (9 hours) - Typically limited to oversized/overmass vehicle deliveries to forecourt, including vehicles associated with concrete pumping works	2-6 trips / hr	30%
23:00				
00:00				
01:00				
02:00				
03:00				
04:00				
05:00				
06:00				
07:00	STANDARD HOURS 07:00-18:00 (day shift)	Heavy Vehicle Trips: 10-40 trips (in & out) - Occurring throughout standard works period (11 hours) - Typical construction traffic (deliveries, removals), primarily accessing the B4 loading dock.	10-40 trips / hr	60%
08:00				
09:00				
10:00				
11:00				
12:00				
13:00				
14:00				
15:00				
16:00				
17:00				
18:00	EVENING WORKS 18:00-22:00 (quiet period)	Limited staff on-site (quiet works/planning period) Heavy Vehicle Trips: 2-10 trips (in & out) - Occurring throughout evening works period (4 hours) - Typically, deliveries and removals - Typically occurring in B4 loading dock.	3 trips / hr	10%
19:00				
20:00				
21:00				
24 hr	Daily Trip Range	Heavy Vehicle Trips: 2 to 40	-	100%

² A trip is defined as a single movement into or out of the site

³ Taken as combined light and heavy vehicle trips, assuming staff arrive or leave within a single hour period, whilst heavy vehicle movements are distributed over the full shift period. i.e. peak volume is only sustained during the one-hour staff arrival and departure periods respectively.

4.5.4 Works Zone

No Works Zones are proposed in relation to the renewal works.

4.5.5 Construction Vehicle Routes

The proposed construction vehicle routes are outlined in Figure 13. It is noted that for Northern, North-Western, Western and Southern suburbs of Sydney, the M1/Eastern distributor provides direct and convenient access to the site. For vehicles approaching from the inner-western suburbs, the Western Distributor offers the most direct link, exiting onto Bathurst Street.

If any articulated vehicles are used, the northbound departure route must make a slight detour, as the slip lane allowing the left turn from Macquarie Street onto the M1 is too narrow to accommodate such vehicles. This route is outlined in Figure 14. Proposed routes for any vehicles longer than 12.5m will be determined as part of a special permit application to CoS, if and when required.

These routes shall be communicated to construction staff during the induction process. As a general requirement however, all drivers and associated companies are responsible for adhering to the road rules and regulations.

The proponent recognises that the CBD road network is often subject to changing conditions resulting from major organised events and construction works, and that these occurrences may at times impose restrictions to the works which may be carried out. In order to mitigate the impacts of such occurrences, the proponent, by way of the Delivery Coordinator, will monitor these events, by such means as:

- TfNSW provides an interactive map of Sydney's CBD, outlining current and future changes road conditions resulting from events or construction activities;
 - <http://mysydneycbd.nsw.gov.au>
- Maintaining updated schedules of cruise ships entering Sydney Harbour, resulting in higher-than-average pedestrian volumes.

If any external occurrences are anticipated to adversely impact construction traffic, the proponent shall liaise with SCO, to determine the appropriate course of action.

It is noted, that SOH has pre-existing monitoring systems in place to identify and manage major events within the CBD. This information shall be communicated with the contractors accordingly.

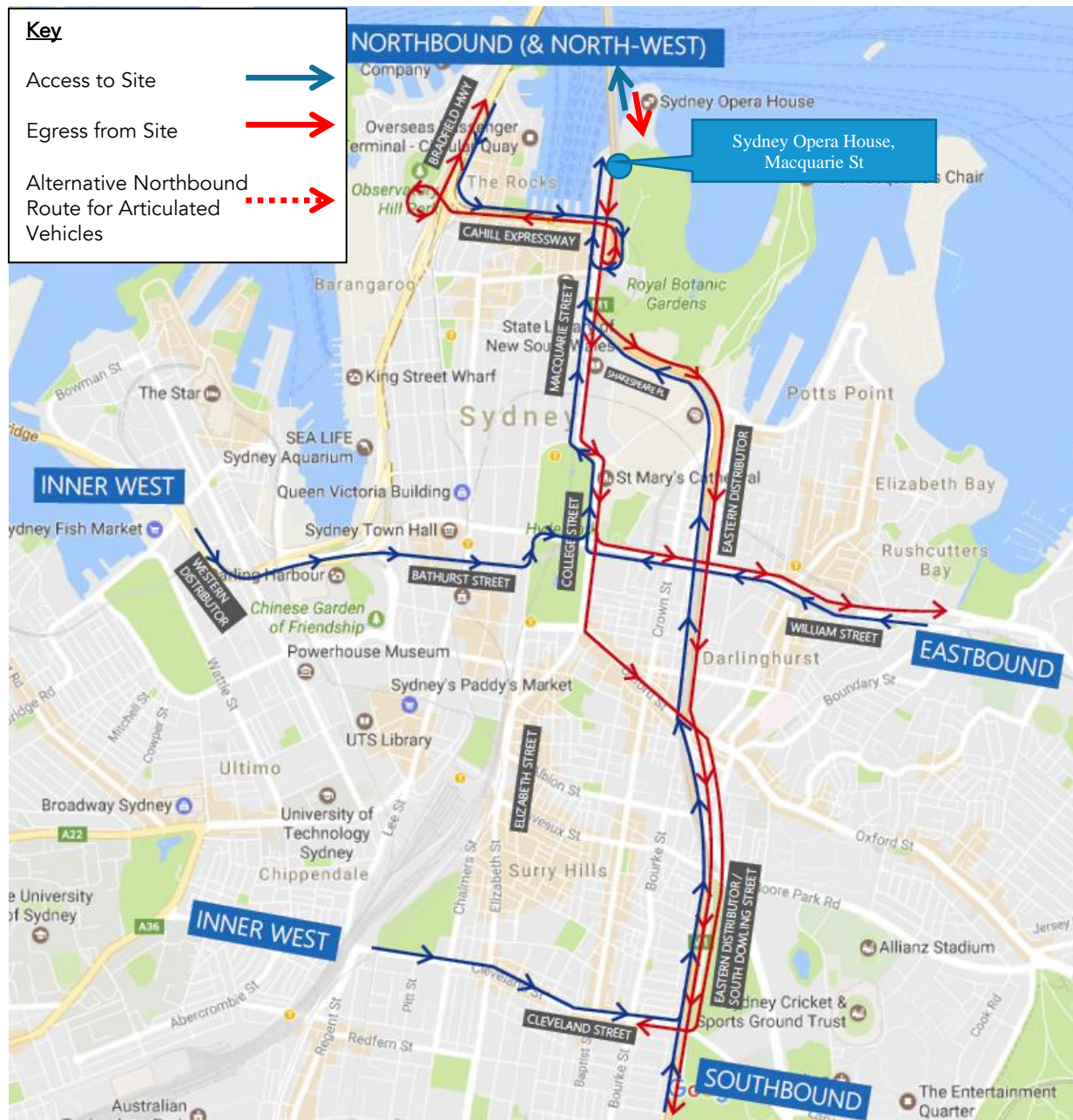


Figure 13 – Construction Vehicle Routes

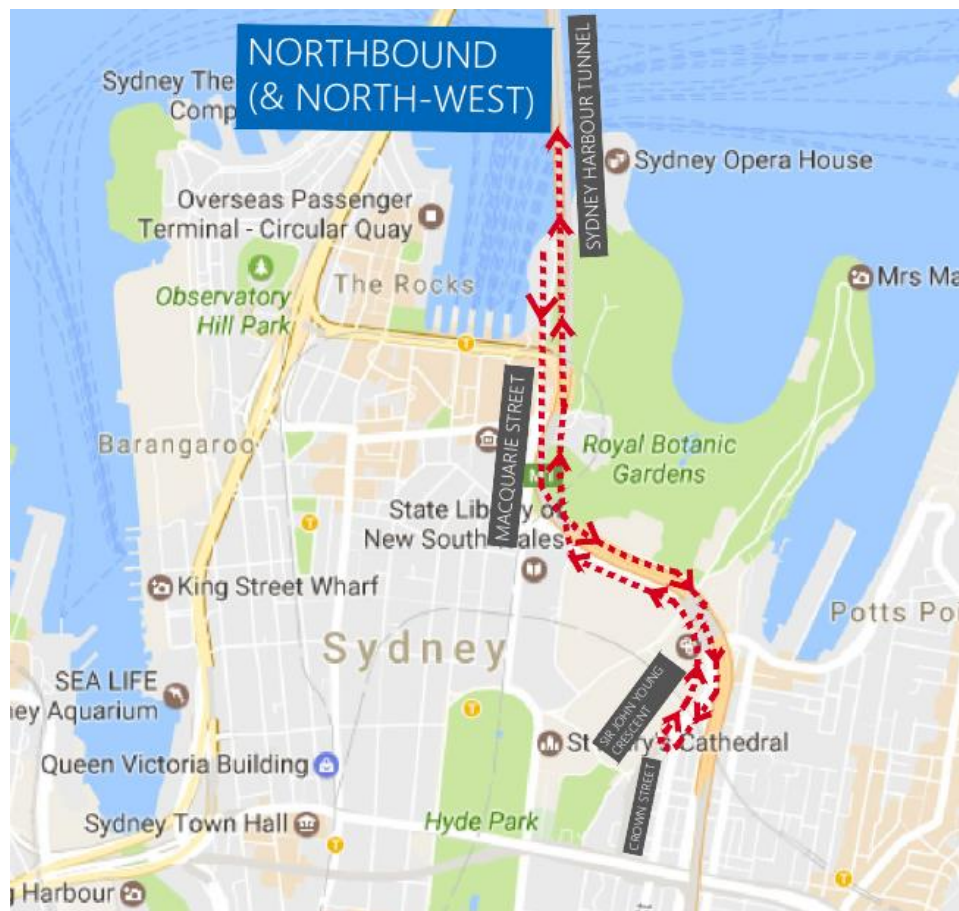


Figure 14 - Alternative Egress Route for Articulated Vehicles

4.5.6 Road Occupancies

No lane or road closures are proposed. In the event that works do require a lane or road closure, the proponent shall submit a Road Occupancy Licence (ROL) application to the Transport Management Centre (TMC) for approval, prior to carrying out the associated works. The proponent recognises that a minimum of 10 days is required for the assessment of an ROL and will manage this accordingly.

4.6 Construction Impacts

It is considered that as a general case, the *hourly* construction traffic volumes of this project will be low and where practicable, they will avoid commuter peak periods. The construction traffic routes outlined in Section 4.5.5 have been adopted as they only require the use of state or regional roads, suitable for heavy vehicles, and are consequently not anticipated to create adverse impacts towards to local residents and businesses along local road networks. In light of such, the general day-to-day operation of the project is not anticipated to create any significant construction impacts to the traffic conditions on the CBD road network.

4.6.1 Key Stakeholders

- TfNSW - Sydney Coordination Office (SCO);
- Department of Planning & Environment (DPE);
- Sydney Opera House (Applicant)

- Roads & Maritime Services (RMS);
- City of Sydney (CoS);
- State Transit Authority (STA); and
- Residents & Businesses along Macquarie Street.

4.6.2 Sydney Coordination Office

This plan has been prepared in consultation with the Sydney Coordination Office (SCO), to ensure that the project is appropriately integrated into the current transport environment of Sydney's CBD. SCO have endorsed the plan.

4.6.3 Roads & Maritime Services (RMS)

A copy of this CTMP has been provided to RMS, who have raised no objections.

4.6.4 City of Sydney (CoS)

A copy of this CTMP has been provided to CoS, who have raised no objections.

As per CoS requirements, a copy of the City's 'Standard Requirements for Construction Traffic Management Plan' has attached to this report, in Attachment 1.

4.6.5 Local Residents and Businesses

The proponent shall consult with the businesses and residents in the immediate locality (500m radius), via mail drops, which will provide an overview of the works, anticipated operating hours, dates of construction activity and any anticipated impacts such as increased truck volumes on the road network, or acoustics impacts (if any). The information should also include reference to any approval documentation on public display, as well as the proponent (or their representative) contact details.

This information should be distributed 14 days prior to carrying out works, and updates should be provided with similar advance notice in the event that any major changes to construction activities are required.

4.6.6 State Transit Authority (STA)

STA shall be notified of the construction works and will be provided with a contact to enable communications as necessary.

The relevant contact for bus network operations is Craig Dunn, who may be contacted via email at craig.dunn@tmc.transport.nsw.gov.au.

4.6.7 SOH Consultation Framework

As part of its ongoing operations, the Opera House undertakes targeted consultation with key stakeholders in relation to its Renewal projects and broader operations. The consultation policy is documented in the Consultation Framework, presented in Attachment 2.

4.7 Cumulative Construction Impacts

A review of proximate developments has been undertaken to assess the potential cumulative construction traffic impacts resulting from the SOH works, with reference to their respective CPTMP's where available. Key developments identified within the vicinity of the subject site include:

- The AMP Quay Quarter Sydney located at 33 Alfred Street;
- Opera Residences apartments located at 71-79 Macquarie Street, Sydney
- The Sandstone Project, Bridge St, Sydney

4.7.1 Quay Quarter Sydney

The Quay Quarter Sydney development involves the renewal of the existing 27 storey AMP office building at 33 Alfred Street, Sydney. The building works involve refurbishment of the existing curtain wall façade system, restoring east and west facing walls to their original finish and the general service upgrades.

The project delivery programme included within the CTMP (prepared by Pier Property Corporation in April 2017) states that construction works will be undertaken between 15 January 2021 and 28 February 2023. This delivery time frame coincides with the SOH Renewal Project from January 2021 to the project completion date in mid-2021, which results in an approximate overlap of six months.

According to the Quay Quarter CTMP, the estimated peak construction vehicle traffic volumes occur between April and December 2021 and range between 8-10 movements per hour, distributed along the routes outlined in Figure 15⁴. It is noted that these routes are partially shared with the SOH Renewal Project construction routes along Macquarie Street and the M1. It is noted that both projects require minimal to no use of local roads in order to access the respective sites. The CMP for Quay Quarter does indicate that temporary lane closures may be applied for under certain circumstances, such as the establishment of a tower crane. Wherever possible, such activities should be communicated between SOH project and the Quay Quarter project, in order to manage potential traffic disruptions.

⁴ Construction Management Plan, prepared by Pier Property Corporation 12 April 2017

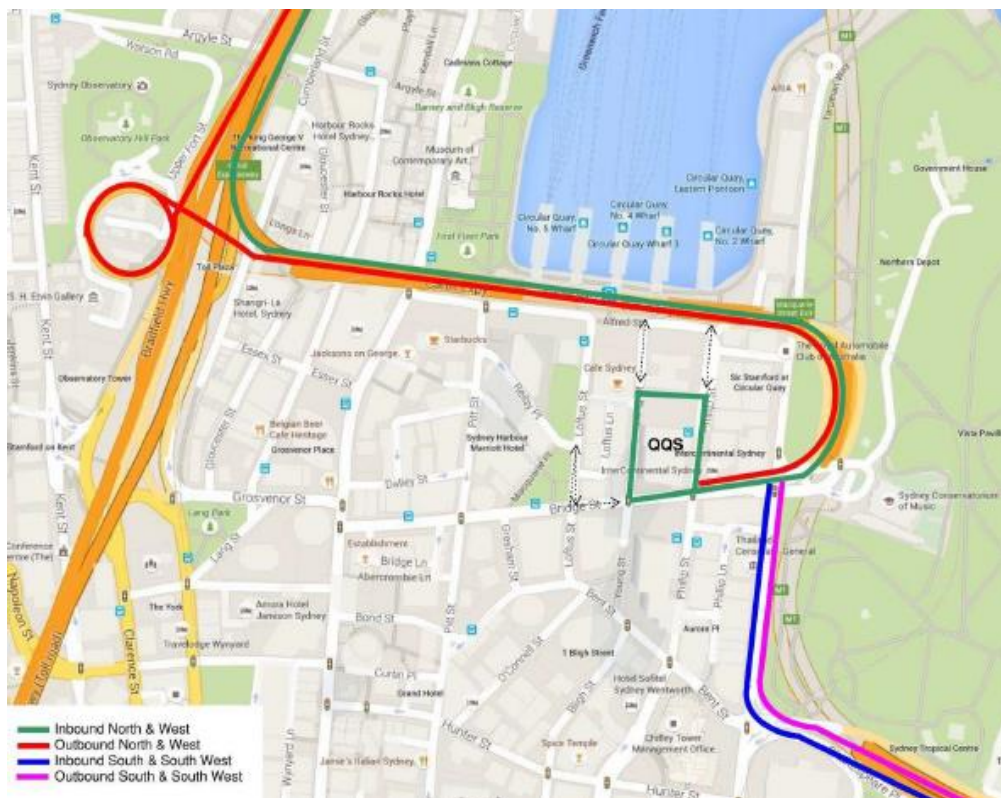


Figure 15 - Quay Quarter Construction Routes

4.7.2 Opera Residences Apartments

The Opera Residences project involves the bulk excavation and erection of a 20-storey mixed-use development, accommodating 109 residential/serviced apartments with associated communal areas, retail spaces and a six-level basement car park providing 103 parking bays. The proposed works also include the establishment of a through-site link from East Circular Quay to Macquarie Street and a colonnade to East Circular Quay.

The Notice of Determination issued by City of Sydney in March 2017 indicates that the construction works will occur over four key stages as follows:

- Stage 1 – Basement excavation
- Stage 2 – Basement structure to Circular Quay level
- Stage 3 – Above ground structure/new build (i.e. slabs, columns, cores, services, façade etc.)
- Stage 4 – Public Domain finishes (Colonnade and through-site link between Macquarie Street and East Circular Quay)

Wherever possible, the project managers of the Opera Residences development and the SOH Renewal Project will coordinate construction works to mitigate any potential impacts resulting from special traffic conditions, or higher-than-average traffic volumes.

It is noted that temporary access to the site is required via temporary driveways along Macquarie Street, to be controlled by traffic controllers. This access is only required during the early demolition phases, before being relocated to the existing access via Alfred Street.

No CPTMP for the Opera Residences was available for reference.

4.7.3 The Sandstone Project

The project description⁵ states that the Sandstone Project involves

- *“the demolition of existing improvements and alterations to the Lands and Education Buildings to facilitate their adaptive reuse for the purposes of ‘hotel or motel accommodation’, with ancillary licensed food and drink premises and retail premises;*
- *excavation and construction of three basement levels below the Education Building and a subterranean link beneath Loftus Street between the two buildings;*
- *construction of three additional levels above the Education Building up to a height of RL 60.03;*
- *removal of existing pitched roof elements and construction of a replacement roof structure on the Lands Building up to a height of RL 35.50;”*

The location of the buildings is outlined in Figure 16.

No CPTMP is currently available on public display, however the Construction Management Plan (CMP) indicates a total construction duration of 2.5 to 3 years, and as such, is likely to overlap with works associated with the Sydney Opera House Renewal project.

The CMP does not indicate traffic volumes, timings, and other details, but indicates loading and unloading will be primarily undertaken via craning materials between the works site and proposed Works Zones along Loftus Street, Young Street and Gresham Street. Traffic control is also proposed on these roads. SOH should be advised of any full or partial road closures associated with the Sandstone Project, as any resulting congestion could potentially affect Macquarie Street. Notwithstanding, traffic associated with the SOH project is unlikely to result in any considerable cumulative impact with the Sandstone Project, as SOH traffic remains almost exclusively limited to State and Regional Roads, avoiding local roads which are more sensitive to impacts from construction vehicles.

⁵ Application details from the NSW DPE Application Tracker

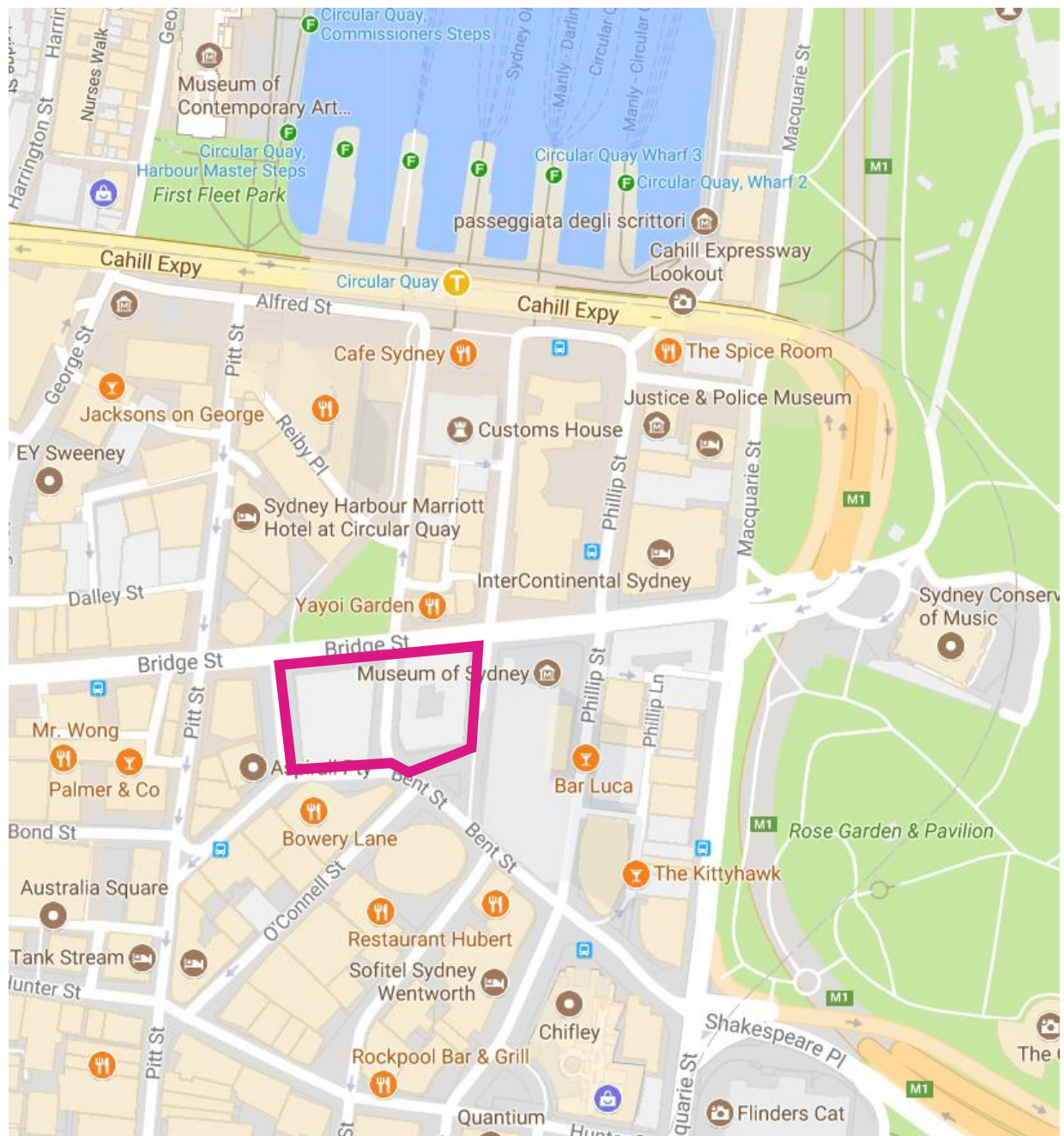


Figure 16 - The Sandstone Project Location (Lands and Education Buildings)

4.8 General Requirements

In accordance with Road and Maritime Services (RMS) requirements, all vehicles transporting loose materials will have the entire load covered and/or secured to prevent any large items, excess dust or dirt particles depositing onto the roadway during travel to and from the site. All subcontractors must be inducted by the lead contractor to ensure that the procedures are met for all vehicles entering and exiting the construction site. The lead contractors will monitor the roads leading to and from the site and take all necessary steps to rectify any road deposits caused by site vehicles.

Vehicles operating to, from and within the site shall do so in a manner, which does not create unreasonable or unnecessary noise or vibration. No tracked vehicles will be permitted or required on any paved roads

without permission from the relevant authorities. Public roads and access points will not be obstructed by any materials, vehicles, refuse skips or the like without prior approval from the relevant authority.

4.9 Traffic Control Measures

No traffic control plans are required at this stage – in the event that an activity requires a TCP, it shall be developed in accordance with the Australian Standards and the RMS Traffic Control at Works Sites Guidelines.

Any traffic controllers engaged on-site shall be accredited by RMS, and act in accordance with RMS Conditions, including:

- No stopping of traffic on public streets; and
- No stopping of pedestrians in anticipation of truck movements. Pedestrians may only be held for short periods, for their safety, whilst a truck is entering or leaving the site.

No marshalling or queuing of trucks shall be permitted on the public road.

4.10 Pedestrian Management Plan

Pedestrian access shall be maintained along Macquarie Street and the entire SOH public Boardwalk perimeter. No footpath closures or redirections are required for pedestrians or cyclists in the public domain.

In regard to construction vehicles entering the pedestrianised forecourt and Boardwalk, it has been established that these movements will be limited to overnight, off-peak periods where practicable, and be low in volume. Notwithstanding to ensure the safety of the public, the following measures will be taken for every truck movement.

4.10.1 Vehicle Spotters

Three spotters shall be assigned as an escort for each truck movement across any pedestrianised areas, including the Boardwalk. One spotter will be required to walk in front of the vehicle and to one side, with another spotter to be positioned to the rear of the vehicle and to one side such that they are visible to the driver in their reversing mirrors. The third spotter shall supervise the movement and provide additional assistance if and when required. These spotters will hold the relevant RMS traffic controller accreditation.

4.10.2 Driver Requirements

In general, the following rules also apply to all construction vehicles within the public domain:

- All movements shall be supervised by a vehicle spotter(s);
- No reverse manoeuvres shall be permitted, unless absolutely necessary;
- A 10km/h speed limit will be enforced;
- Hazard lights should be in use at all times, with headlights during inclement weather;
- Movements are to avoid peak pedestrian periods (i.e. beginning/end of shows);

4.10.3 Caution Signage

Temporary signage will be erected prior to any anticipated truck movements along the forecourt/Boardwalk, advising public of truck movements, and to exercise appropriate caution, as shown in Figure 17. This signage shall be located at the property access off Macquarie Street, where vehicles will leave the public road and enter the pedestrianised Boardwalk, as shown in Figure 18.

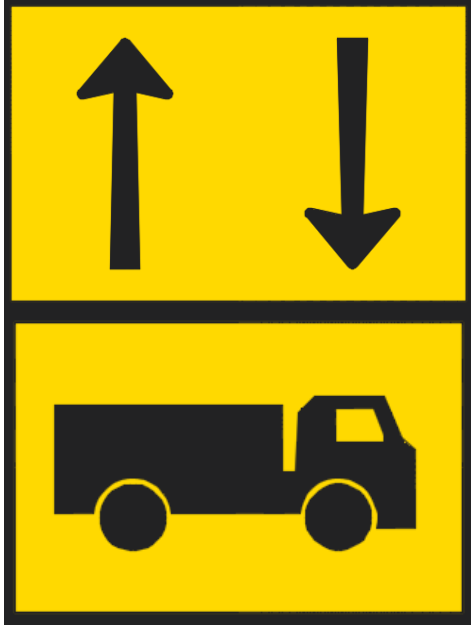


Figure 17 - Temporary Truck Caution Signage for Boardwalk and Forecourt

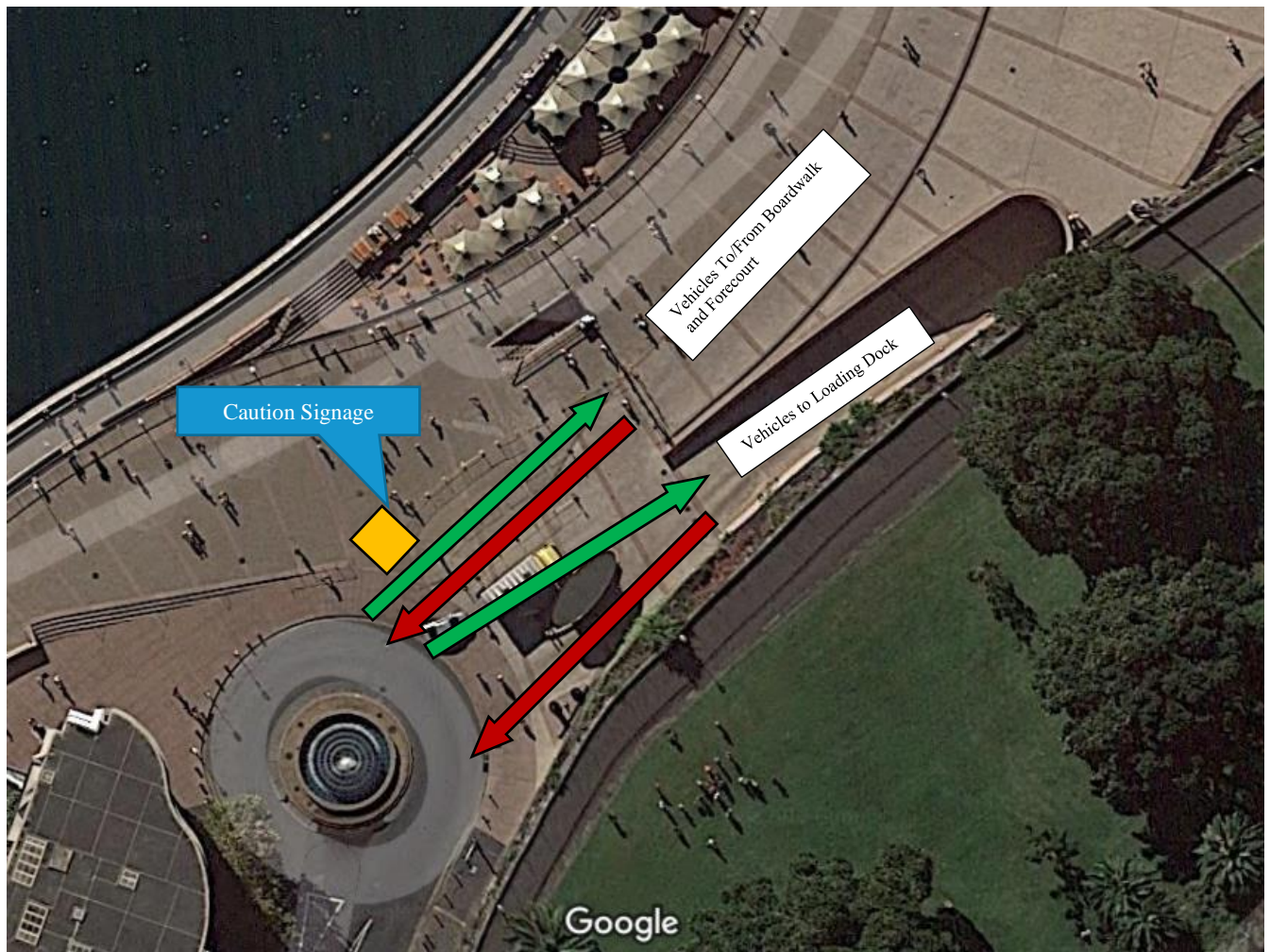



Figure 18 - Caution Signage Location (Macquarie Street Interface with Broadwalk)

4.10.4 Work Sites

Work sites will be established around the crane locations, as indicated previously in Figure 11. These sites shall be appropriately barricaded, separated and supervised whilst works are occurring, and work compounds, materials and equipment secured when not in use to prevent public access.

Pedestrian signage shall be erected on-site, to direct pedestrians around the works sites where required. If the site obstructs any paths (i.e. stairwells), this pedestrian signage will be erected prior to the obstruction to avoid creating no-through paths (noting that access around the entire perimeter of the SOH will be maintained for public).

	PEDESTRIANS (left arrow / right arrow)	t8-2	1200 x 300 mm
---	--	----------------------	---------------

4.10.5 Crane Set-up

In the case of the cranes access and set-up, which are isolated events, any traffic control and associated arrangements shall be prepared by a suitably qualified crane specialist.

It is anticipated that the 130t crane located in the eastern crane site of the SOH, associated with DA1 and DA2 works, will be relocated to the western crane site for commencement of DA3 works.

4.11 Special Deliveries & Oversized Vehicles

Should a special delivery or oversized vehicle be required in any event, a permit application will be made by the contractor for approval of the relevant authority, prior to proceeding with the associated works.

4.12 Contractor Parking

Employees and sub-contractors will be encouraged to use public and active transport to access the site and not park on public roads. As part of the induction program, staff shall be made aware of the numerous public transport options and cycling opportunities (See Section 3), and encouraged to use such alternative means of transport and not park on the public roads. Where alternative modes of transport are onerous for certain staff, car-pooling is to be encouraged where practicable.

To support alternative travel, secure areas shall be made available within the work compounds for tradesmen and staff to store equipment, overnight, making light travel via alternative modes more viable.

4.13 Work Site Security

The works site shall be fully bounded with barriers and anti-gawk screening to prevent pedestrian access. When not in use, the site shall be appropriately secured.

4.14 Induction

All staff and subcontractors engaged on site will be required to undergo a site induction. The induction will include permitted access routes to and from the construction site for all vehicles, as well as standard environmental, OH&S, driver protocols and emergency procedures. Additionally, the lead contractor will discuss CPTMP requirements regularly as a part of toolbox talks and advise workers of public transport and car-pooling opportunities.

4.15 Emergency Vehicle Access

The proposed traffic arrangements do not involve the closure of any local roads. Any emergency vehicles requiring to access the project site will do so via Macquarie Street. The Central Passageway at the SOH will be the primary access point for emergency vehicles.

The proponent has advised NSW Fire Brigade and Police Rescue of the works and will continue to work with emergency services throughout the works.

The first point of contact is Dianna Gordon, Emergency Manager of Sydney Metropolitan Region:

- Phone: (02) 9265 4726
- Email: gord2dia@police.nsw.gov.au

4.16 Taxi Notification

It is encouraged to advise the NSW Taxi Council of the works, via their website contact page (<https://www.nswtaxi.org.au/contact>) or via their land line (02) 9332 1266. NSW Taxi are able to distribute any relevant information to taxi drivers to plan their trips accordingly.

4.17 Contact Details for On-Site Enquiries and Site Access

The primary contact details for the site are:

Damian Fisher
Site Manager
Taylor Construction Group
Tel: 0421 239 997

4.18 Occupational Health and Safety

Any workers required to undertake works or traffic control within the public domain shall be suitably trained and will be covered by adequate and appropriate insurances. All traffic control personnel will be required to hold RMS accreditation in accordance with Section 8 of Traffic Control at Worksites.

5. Summary

This CPTMP has been prepared to outline the construction traffic measures to improve site safety to the public and workers and the construction process.

A review of the construction activity and available construction traffic routes has been undertaken, with consideration towards key stakeholders and key proximate developments of overlapping construction schedules. A particular emphasis was placed on the CSELR project, due to the high sensitivity it already imposes on the surrounding road network. It was noted that the construction traffic volumes generated by the development will predominantly occur in off-peak periods, and moreover, the routes will generally avoid the CSELR compounds as well as major STA bus hubs. As such, the cumulative construction impacts of the SOH Renewal Project with other developments under construction, are anticipated to be minor and within acceptable tolerances. Wherever possible, any major construction activities (crane deliveries, concrete pours) will be coordinated with the managers of nearby developments under construction.

It is envisaged that this document may require amendments as the project progresses, or as a result of any feedback from TfNSW or any other authority requirements. Any changes to the CPTMP however, shall be made in consultation with the SCO, and any other relevant authorities.

Attachment 1 - City of Sydney Standard Requirements for Construction Traffic Management Plan

The City of Sydney Standard Requirements for Construction Traffic Management Plan

The Applicant or contractor undertakes to follow and abide by the following requirements at all times during the demolition, excavation and construction works at **(Please Insert site address and DA No here)**

1. Details of routes to and from site and entry and exit points from site – site specific
2. Details of roads that may be excluded from use by construction traffic i.e. roads with load limits, quiet residential streets or access/turn restricted streets – site specific
3. The approved truck route plan shall form part of the contract and must be distributed to all truck drivers.
4. All vehicles must enter and exit the site in a forward direction (unless specific approval for a **one-off occasion** is obtained from the City's Construction Regulation Unit).
5. Trucks are not allowed to reverse into the site from the road (unless specific approval for a **one-off occasion** is obtained from the City's Construction Regulation Unit).
6. The Applicant must provide the City with details of the largest truck that will be used during the demolition, excavation and construction.

NOTE: No dog trailers or articulated vehicles (AV) to be used (unless specific approval for a **one-off occasion** is obtained from the City's Construction Regulation Unit).

7. Oversize and over-mass vehicles are not allowed to travel on Local Roads (unless approval for a **one-off occasion** is obtained from the City's Traffic Operations Unit). Requests to use these vehicles must be submitted to the City 28 days prior to the vehicle's scheduled travel date. For more information please contact the National Heavy Vehicle Regulator (NHVR) on 1300 696 487 or www.nhvr.gov.au.
8. No queuing or marshalling of trucks is permitted on any public road.
9. Any temporary adjustment to Bus Stops or Traffic Signals will require the Applicant to obtain approval from the STA and RMS respectively prior to commencement of works.
10. All vehicles associated with the development shall be parked wholly within the site. All site staff related with the works are to park in a designated off street area or be encouraged to use public transport and not park on the public road.
11. All loading and unloading must be within the development site or at an approved "Works Zone".

12. The Applicant must apply to the City's Traffic Works Co-ordinator to organise appropriate approvals for Work Zones and road closures.
13. The Applicant must apply to the City's Construction Regulations Unit to organise appropriate approvals for partial road closures.
14. The Applicant must apply to the Transport for NSW's Transport Management Centre for approval of any road works on State Roads or within 100m of Traffic Signals and receive an approved Road Occupancy Licence (ROL). A copy of the ROL must be provided to the City.
15. The Applicant must apply to the City's Construction Regulations Unit to organise appropriate approvals for temporary driveways, cranes and barricades etc.
16. The Applicant must comply with development consent for hours of construction.
17. All Traffic Control Plans associated with the CTMP must comply with the Australian Standards and Roads and Maritime Services (RMS) Traffic Control At Work Sites Guidelines.
18. Traffic Controllers are NOT to stop traffic on the public street(s) to allow trucks to enter or leave the site. They MUST wait until a suitable gap in traffic allows them to assist trucks to enter or exit the site. The Roads Act does not give any special treatment to trucks leaving a construction site - **the vehicles already on the road have right-of-way.**
19. Pedestrians may be held only for very short periods to ensure safety when trucks are leaving or entering BUT you must NOT stop pedestrians in anticipation i.e. **at all times the pedestrians have right-of-way on the footpath not the trucks.**
20. Physical barriers to control pedestrian or traffic movements need to be determined by the City's Construction Regulations Unit prior to commencement of work.
21. The Applicant must obtain a permit from the City's Construction Regulation Unit regarding the placing of any plant/equipment on public ways.
22. The Applicant must apply to the City's Building Approvals Unit to organise appropriate approvals for hoarding prior to commencement of works.
23. The CTMP is for the excavation, demolition and construction of building works, not for road works (if required) associated with the development. Any road works will require the Applicant or the contractor to separately seek approval from the City and/or RMS for consideration. Also WorkCover requires that Traffic Control Plans must comply with Australian Standards 1742.3 and must be prepared by a Certified Traffic Controller (under RMS regulations).
24. Please note that the provision of any information in this CTMP will not exempt the Applicant from correctly fulfilling all other conditions relevant to the development consent for the above site.

Attachment 2 - SOH Consultation Framework

Structured consultation during proposed works

The Opera House undertakes targeted consultation with the following key stakeholders in relation to its Renewal projects and broader operations:

- Resident performing companies;
- Onsite food and beverage and retail operators;
- Donors and partners;
- The accessibility community;
- The heritage and architectural communities;
- Local residents; and
- Relevant neighbouring authorities and Government agencies.

Briefings and consultation with these groups will continue at key milestones in the project and/or as required.

In relation to local residents and businesses, who have greater potential to be impacted by the Opera House's activities, the Opera House proposes to establish a Local Residents and Businesses Forum that would be administered as follows.

Local Residents and Businesses Forum

Objective

The Local Resident and Businesses Forum will provide an opportunity for local residents and businesses to be briefed on SOH operations, engage and ask questions of management. The forum will formalise existing dialogue between local residents and SOH.

This informative and interactive forum will focus on operational issues that have an impact on local residents and businesses.

Composition

The forum will be open to all residents of Bennelong Apartments, any resident of Kirribilli who has expressed concern about SOH operations and neighbouring small businesses at East Circular Quay.

The forum will be chaired by a member of the SOH executive team and be attended by relevant SOH management.

Agenda

The forum will involve a presentation by SOH based on known areas of interest, including Forecourt and Broadwalk programming, broader site activities, site amenity and construction logistics management. This will be followed by a question and answer session.

Attendees will be invited to send agenda items and questions to SOH in advance of the forum. This will allow these issues to be covered in the course of the SOH presentation or raised after .

Frequency

The forum will be held twice per year in the second and final quarters of the calendar year.

Location and Time

The forum will be held at Sydney Opera House, as either a morning or evening briefing in an appropriate venue.

Notification

Details of the forum, including date, time and location will be made available at least one month in advance of the forum.

Residents of Bennelong Apartments will receive an invitation via the building management team.

Residents of Kirribilli who have expressed concern about SOH operations and neighbouring businesses will receive an invitation directly from SOH.

Records

SOH will maintain a record of the issues discussed at the forum and their status.

Where specific issues are raised by attendees that cannot be resolved in the forum, SOH will invite the attendees to provide their contact details to allow SOH to respond directly after the forum.

During the course of the proposed Renewal works, SOH will provide an annual report on the issues raised in the Forum and their status to the DPE.

Attachment 3 - Green Travel Plan for Construction Workers



Construction Green Travel Plan

Sydney Opera House
Renewal Stage 1
For Sydney Opera House
12 December 2019

**parking;
traffic;
civil design;
communication;
ptc.**

Document Control

Sydney Opera House Renewal Stage 1, Construction Green Travel Plan

Issue	Date	Issue Details	Author	Reviewed
1	17 12 19	Final	CS/AM	AM
2				
3				
4				

Contact

Andrew Morse

+61 2 8920 0800

+61 414 618 002

andrew.morse@ptcconsultants.co

Contents

1. Introduction	1
1.1 Project Summary	1
1.2 Purpose of this Report	2
2. The Project	3
2.1.1 Construction Workforce	4
2.1.2 Work Shifts	4
2.2 Construction Traffic	4
2.2.1 Construction Vehicle Types	4
2.2.2 Construction Traffic Activity	4
3. Transport Options	7
3.1 Public Transport	7
3.1.1 Bus Services	8
3.1.2 Train Services	9
3.1.3 Ferry Services	10
3.2 CBD & South East Light Rail Project	10
3.3 Active Transport	12
4. Parking	13
4.1 Contractor Parking	13
Figure 1 - Subject Site & Surrounding Road Network	1
Figure 2 - Overview of Site and Works	3
Figure 3 - 800m Site Catchment	7
Figure 4 - Bus Service Map (source: Transport for NSW, 2016)	8
Figure 5 - Circular Quay Train Station walking distance	9
Figure 6 - Sydney Ferry Services Map (source: Transport for NSW, 2016)	10
Figure 7 - CBD and South East Light Rail Route Map	11
Figure 8 - Sydney Cycleways	12
Table 1 - Work Shifts	4
Table 2 - Construction Traffic Movements	6
Table 3 - Bus Services Summary	8

1. Introduction

1.1 Project Summary

The Sydney Opera House (SOH) is undertaking a series of construction projects, as part of the Sydney Opera House Renewal Stage 1 project.

SOH has engaged **ptc.**, to prepare a Green Travel Plan (GTP) for the construction workers which is to be read in conjunction with the Construction Pedestrian and Traffic Management Plan (CPTMP) to incorporate the works planned under the approved package of works known as the Concert Hall and Creative Learning Centre Project (DA3 – SSD8663).

This GTP will be submitted to the Department of Planning & Environment (DPE) as part of the response to the consent conditions. The location of the subject site is presented in Figure 1.

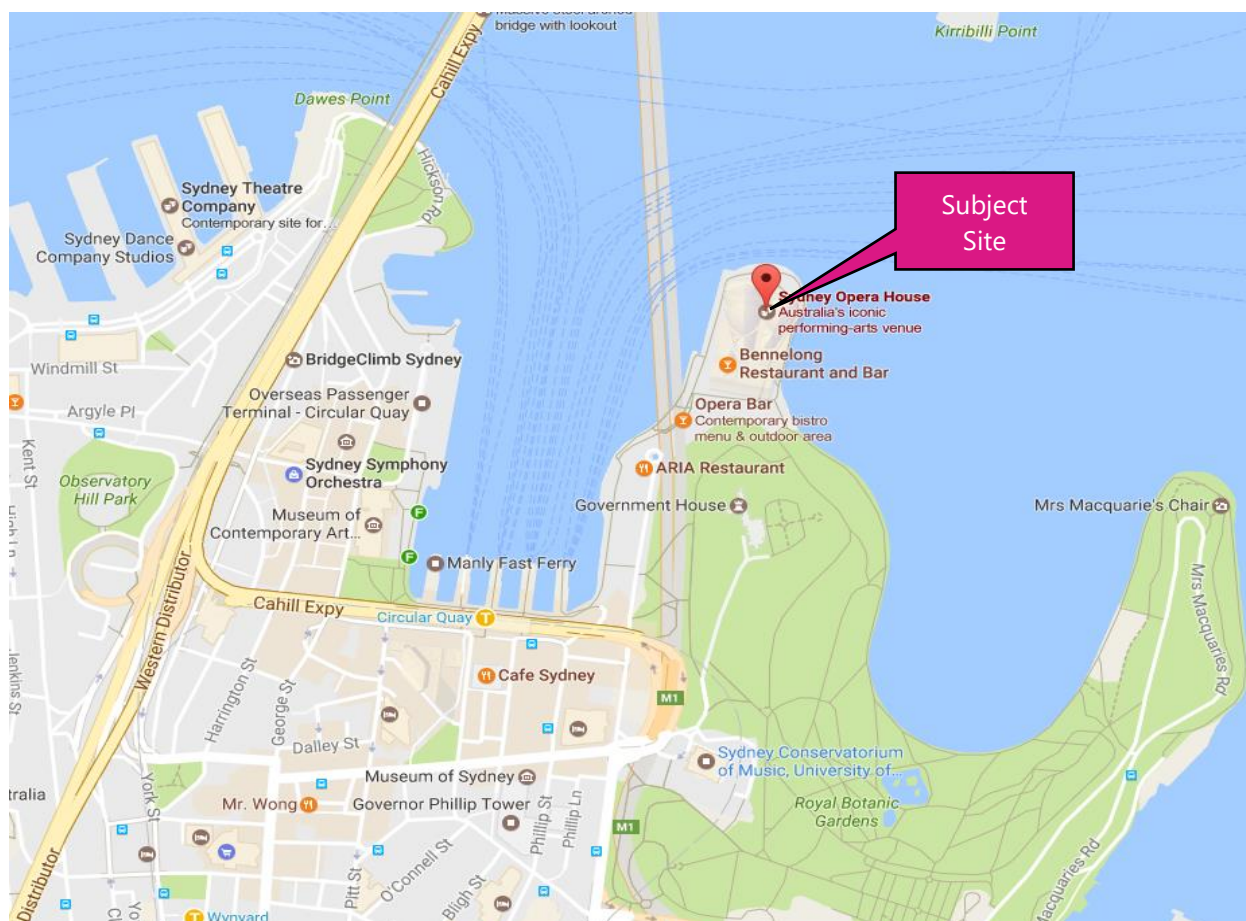


Figure 1 - Subject Site & Surrounding Road Network

1.2 Purpose of this Report

The purpose of this report is to outline the transport options and arrangements associated with the construction workforce, which seek to reduce the use of vehicles travelling to /from the site.

The report responds directly to the requirements of Condition B33 of the consent.

CONSTRUCTION PEDESTRIAN AND TRAFFIC MANAGEMENT SUB-PLAN

B33. Prior to the commencement of works, a Construction Pedestrian and Traffic Management Sub-Plan (CPTMP) prepared by a suitably qualified person shall be submitted to the Certifying Authority. The CPTMP should be prepared in consultation with the CBD Coordination Office, TfNSW, TfNSW (RMS) and Council.

*The Sub-Plan must include a **Green Travel Plan** for workers and detailed measures that would be implemented to minimise the impact of the development on the safety and capacity of the surrounding road network, minimise truck movements to and from the site as far as practicable during the peak periods of this consent.....*

2. The Project

The SOH Renewal Project involves various construction and upgrade works to the Sydney Opera House, which to date, have been allocated to four work packages, known as DA1, DA2, DA2a and DA3.

This revised CPTMP addresses the key traffic and pedestrian considerations for the following construction works:

- Safety, Accessibility and Venue Enhancement (SAVE) of the Joan Sutherland Theatre (JST), Entry Foyer Works (DA2 – SSD 7665 **approved**);
- Construction of a Function Centre & Ballet Rehearsal Room (DA2a – SSD 7881 **approved**); and
- DA3 Package of works (subject to approval), including:
 - Acoustic, technical and accessibility upgrades to the Concert Hall (CH); and
 - Dedicated facilities within the Opera House for creative learning, known as the Creative Learning Centre (CLC).

Details of the specific works, methodology, timing and more are provided in the Construction Management Plan submitted by SOH as part of this application.

The location of the DA3 work components are outlined in Figure 2.

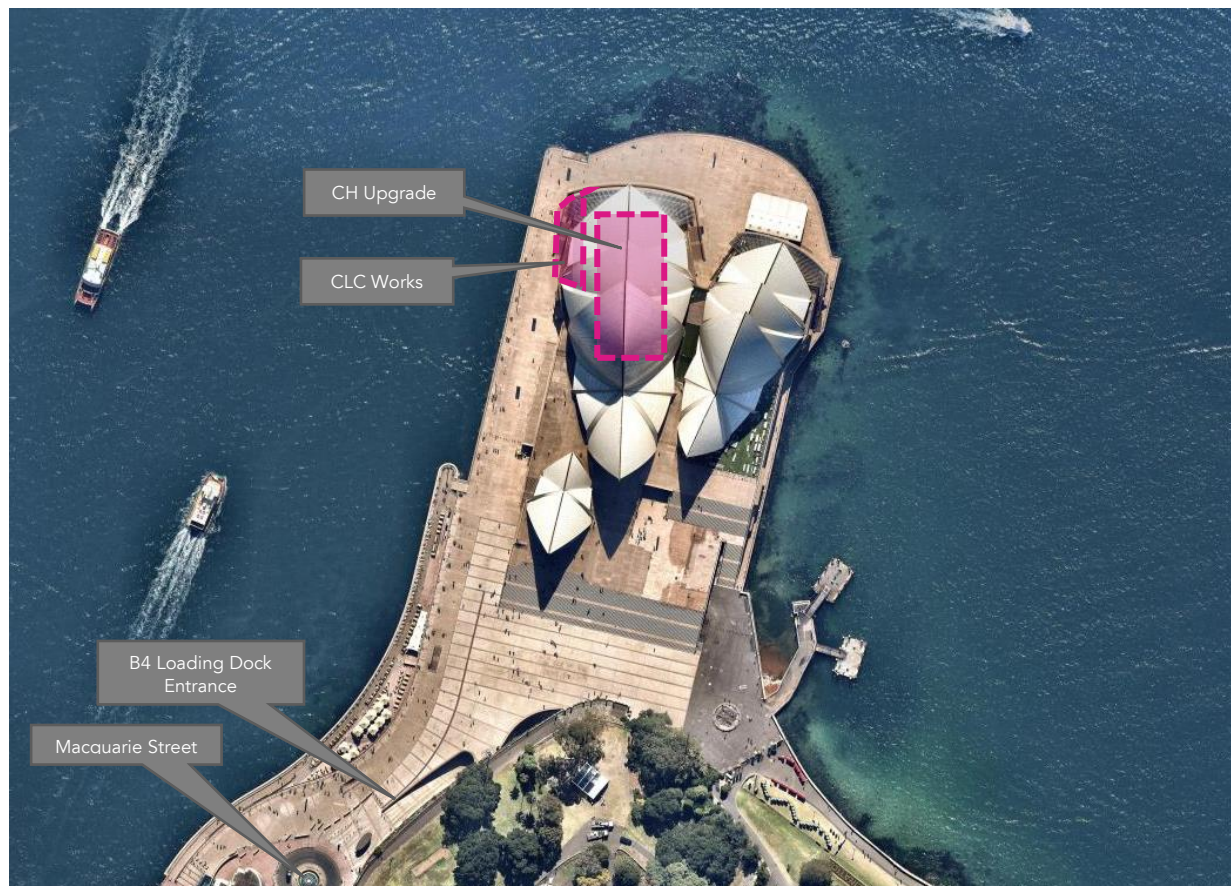


Figure 2 - Overview of Site and Works

2.1.1 Construction Workforce


The workforce will vary over the project lifespan, dependant on the requirements of each construction activity. The following figures have been provided to ptc.:

- Administration/Management Staff: 24;
- Construction Workforce (typical): 40; and
- Construction Workforce (peak): 200.

2.1.2 Work Shifts

Work shifts are primarily divided into a night shift and a day shift. This is outlined in the table extracted from the SOH Construction Management Plan in Table 1.

Table 1 - Work Shifts

Sydney Opera House Renewal Project																												
WORK DAY BREAKDOWN																												
HRS	23:30	00:30	01:30	02:30	03:30	04:30	05:30	06:30	07:30	08:30	09:30	10:30	11:30	12:30	13:30	14:30	15:30	16:30	17:30	18:30	19:30	20:30	21:30	22:30	23:30			
SHIFT RESTRICTIONS	23:30 - 10:30 Noisier works which will otherwise be disruptive to Opera House operations but not audible outside of the building, major materials handling, dust & vibration											10:30 - 18:00 General construction/no major noise generating activities								18:00 - 23:30 Planning and quiet activities which are compatible with live performances occurring in other venues within the site								
MONDAY																					NO WORK							
TUESDAY																												
WEDNESDAY																												
THURSDAY																												
FRIDAY																												
SATURDAY																												
SUNDAY	NO WORK																											

2.2 Construction Traffic

2.2.1 Construction Vehicle Types

The proposed works are envisaged to be carried out using a mix of commercial vehicles, ranging from small to heavy rigid vehicles (SRV to HRV). It is understood that some vehicles exceeding 12.5 metres in length will be required, including, but not strictly limited to:

- Articulated Vehicles (19m long) for material deliveries;
- Cranes (40 tonne and a 130 tonne crane)

The proponent shall apply for a special permit from the City of Sydney (CoS) for the use of any vehicles exceeding 12.5m in length, as requested by the Sydney Coordination Office (SCO).

2.2.2 Construction Traffic Activity

Based on traffic volume estimated provided by the SOH, the Sydney Opera House manages an average of 148 vehicle deliveries per day under regular operations (no construction activity). This traffic activity accounts for food deliveries to restaurants within the precinct, business operations for staff and resident businesses at the SOH, bump in and bump out activities for the performing arts venues as well as general building operation and maintenance.

During the construction works, the Concert Hall is anticipated to be closed for the following period ('dark' period):

- Concert Hall (capacity of 2700) – Closed from February 2020 with work expected to take 18 – 24 months.

During this period, traffic in the local road network is anticipated to be lower than average, despite construction traffic.

Notwithstanding, outside this closure period, the construction activity will result in increased traffic volumes on the local road network. The vehicle movements during these periods have been estimated with reference to knowledge provided by the SOH operations staff and Laing O'Rourke who were involved in providing construction planning and logistics advice in the early works stage.

The following considerations were made when estimating the construction traffic activity associated with the renewal works:

- Admin/management staff (24) assumed to all arrive during the standard day shift;
- Construction workforce assumed to be split evenly between day shift and night shift;
- Construction workforce is 40 on average, with a potential peak of 200 during critical stages of work;
- Assume 20% of workers drive to work, and park within proximate commercial car parks;
 - As a comparison, BTS Data indicates that 27% of staff in this area drive to work. During inductions, and upon engagement of sub-contractors, the contractor will encourage all employees and sub-contractors to seek alternative transport to the site where practicable. Workers will be made aware of the various public transport options that connect the site, as well as cycling routes, outlined in Section 3.

Based on the above information, the daily traffic generation associated with the construction works is estimated in Table 2. In summary, the maximum anticipated daily volume of heavy vehicle and light vehicle trips over a 24-hour period are 56 and 80 respectively. These volumes represent only the critical construction activity periods, with average daily volumes anticipated to be significantly lower. Regardless, these movements are proposed to be widely spread out over a 24-hour period, and consideration will be given towards the type of vehicles and their timing to ensure that disruption to the road network and the local residents and businesses is minimised.

Table 2 - Construction Traffic Movements

Hour	Work Period	Estimated Construction Trip ¹ Generations	Peak Hourly Traffic ²	Proportion of Daily Traffic
22:00	NIGHT WORKS 22:00-07:00 (night shift)	Construction Staff: 8 (avg) / 20 (max) trips in	22 trips / hr	30%
23:00				
00:00		Heavy Vehicle Trips: 2-6 trips (in & out)		
01:00		- Occurring throughout night works period (9 hours)		
02:00		- Typically limited to oversized/overmass vehicle deliveries to forecourt, including vehicles associated with concrete pumping works		
03:00				
04:00				
05:00				
06:00		Construction Staff: 8 (avg) / 20 (max) trips out		
07:00	STANDARD HOURS 07:00-18:00 (day shift)	Construction Staff: 13 (avg)/ 20 (max) trips in.	24 trips / hr	60%
08:00				
09:00				
10:00				
11:00		Heavy Vehicle Trips: 10-40 trips (in & out)		
12:00		- Occurring throughout standard works period (11 hours)		
13:00		- Typical construction traffic (deliveries, removals), primarily accessing the B4 loading dock.		
14:00				
15:00				
16:00		Construction Staff: 13 (avg)/ 20 (max) trips out.		
17:00				
18:00	EVENING WORKS 18:00-22:00 (quiet period)	Limited staff on-site (quiet works/planning period)	3 trips / hr	10%
19:00		Heavy Vehicle Trips: 2-10 trips (in & out)		
20:00		- Occurring throughout evening works period (4 hours)		
21:00		- Typically, deliveries and removals - Typically occurring in B4 loading dock.		
24 hr	Daily Trip Range	Heavy Vehicle Trips: 14 to 56 Staff Vehicle Trips: 42 - 80	-	100%

¹ A trip is defined as a single movement into or out of the site

² Taken as combined light and heavy vehicle trips, assuming staff arrive or leave within a single hour period, whilst heavy vehicle movements are distributed over the full shift period. i.e. peak volume is only sustained during the one-hour staff arrival and departure periods respectively.

3. Transport Options

This section outlines public transport accessibility to the site, which may be utilised by construction staff over the project duration. Staff inductions will include information on the available travel options that staff may take to access the site.

Circular Quay / Bennelong Point is perhaps one of the most accessible locations in Sydney by forms of transport other than private vehicles, while the use of private vehicles is discouraged by the limited on-street parking availability and the provision of public parking, which is limited to the Opera House Car Park.

There are multiple public transport options that fall within the walkable catchment for the Sydney Opera House as seen in Figure 3. These options include bus, train, and ferry services as well as an extensive cycle network. These services are discussed in further detail in the following sections.

The transport options include:

- Bus Services = 500 metres from the site
- Ferry Services = 500 metres from the site
- Train Services = 600 metre from the site
- Light Rail = 680 metre from the site
- Cycling (the construction site will include an EOTF, separate to the Opera House EOTF)

3.1 Public Transport

The NSW Planning Guidelines for Walking and Cycling (2004) suggests that an 800m catchment radius is an acceptable, walkable distance if the development is within an area with public transport links.

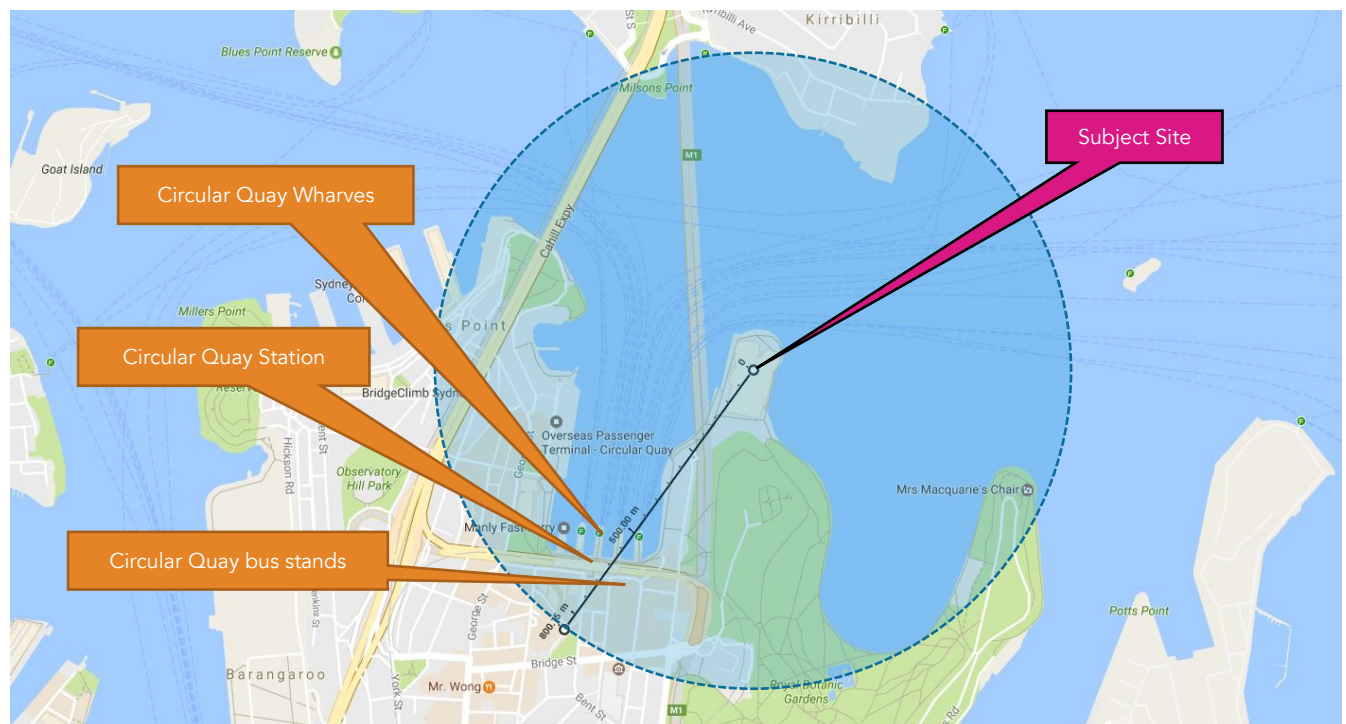


Figure 3 - 800m Site Catchment

3.1.1 Bus Services

An extensive range of bus services operate from Circular Quay at bus stands A to D. These bus stands are all located within the 800m walking catchment to the Sydney Opera House (see Figure 4). The Metrobus service M52 operates very frequently; every 10 min during peak and approximately every 20-30min off-peak daily. Other bus services also operate regularly, and a brief summary is provided in Table 3.

Table 3 – Bus Services Summary

Routes	Description
M52	Parramatta via Victoria Road, Top Ryde City, Town Hall station
301, 302, 303	Eastgardens, Sans Souci
333-399 (see Figure 4)	North Bondi, Coogee, Maroubra Beach, La Perouse, Little Bay, Maroubra Beach, South Maroubra
374	Coogee via Bream Street, Randwick, Moore Park and Surry Hills
500-520 (see Figure 4)	Ryde, Macquarie University, Eastwood, Parramatta

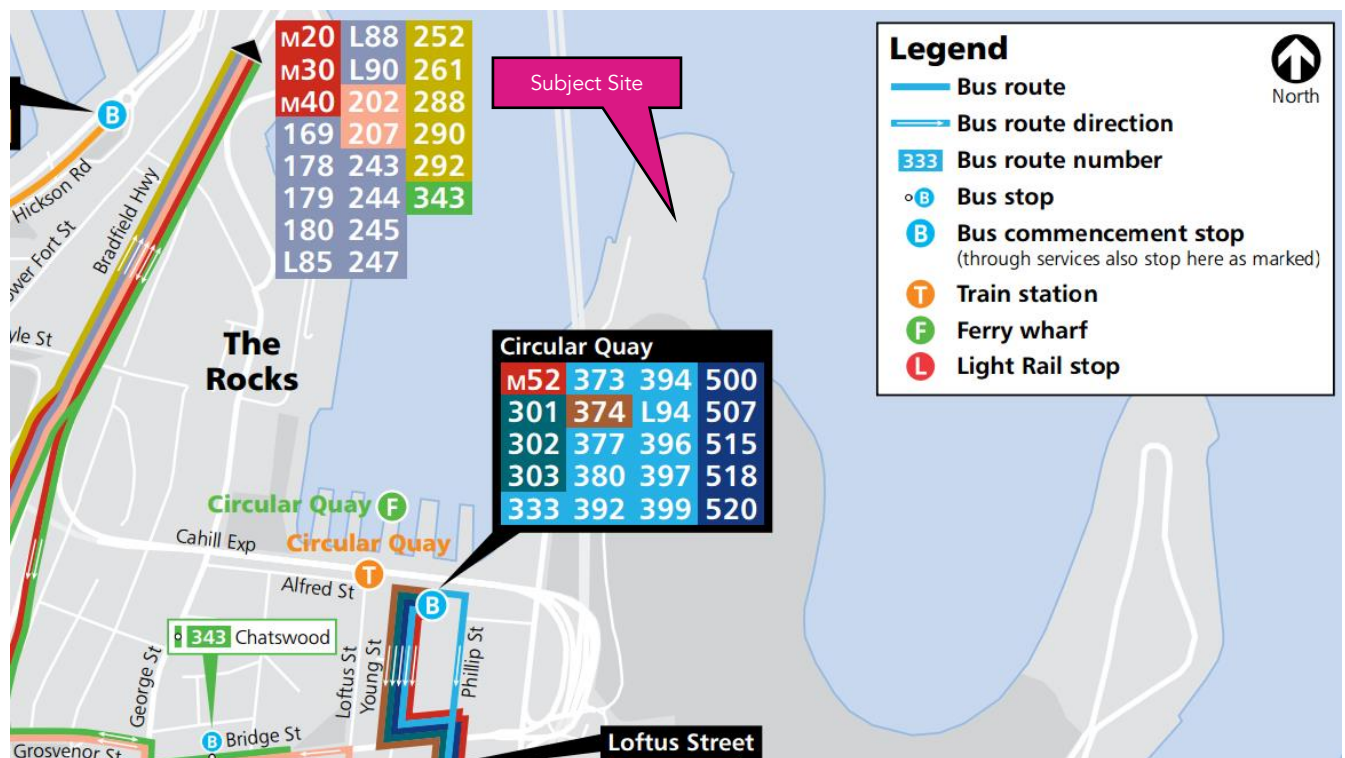


Figure 4 - Bus Service Map (source: Transport for NSW, 2016)

3.1.3 Ferry Services

All Sydney Ferry services operate to and from Circular Quay. Locations serviced by ferries include Manly, Taronga Zoo, Parramatta, Darling Harbour, Neutral Bay, Mosman Bay, and Watsons Bay. A map of the Sydney Ferry services is available in Figure 6.

Most ferry services arrive and depart every 30min with services becoming less frequent (every hour) on weekday evenings and on weekends.

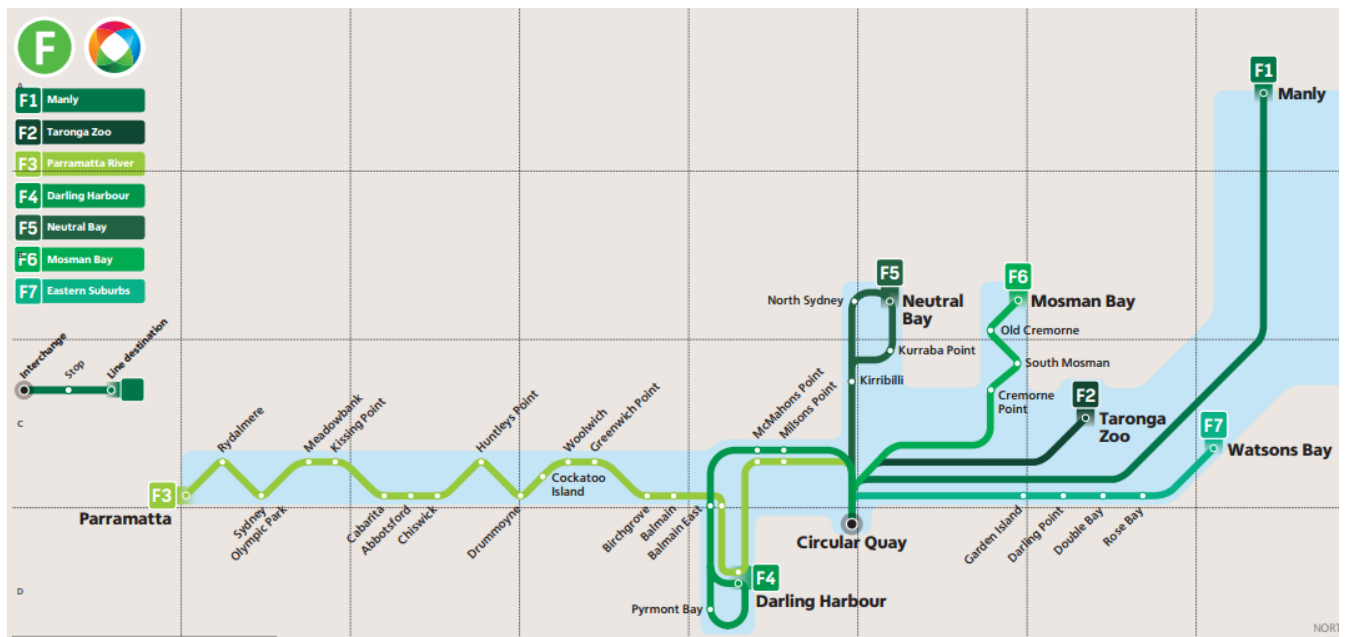


Figure 6 - Sydney Ferry Services Map (source: Transport for NSW, 2016)

3.2 CBD & South East Light Rail Project

The CBD & South East Light Rail Project (CSELR) started operating to the public on 14th December 2019 and extends from Circular Quay along George Street to Central Station, through Surry Hills to Moore Park, then to Randwick (the section to Kingsford is due to open in March 2020).

The route of the Light Rail is illustrated overleaf and we understand that services will run at a high frequency throughout the day.

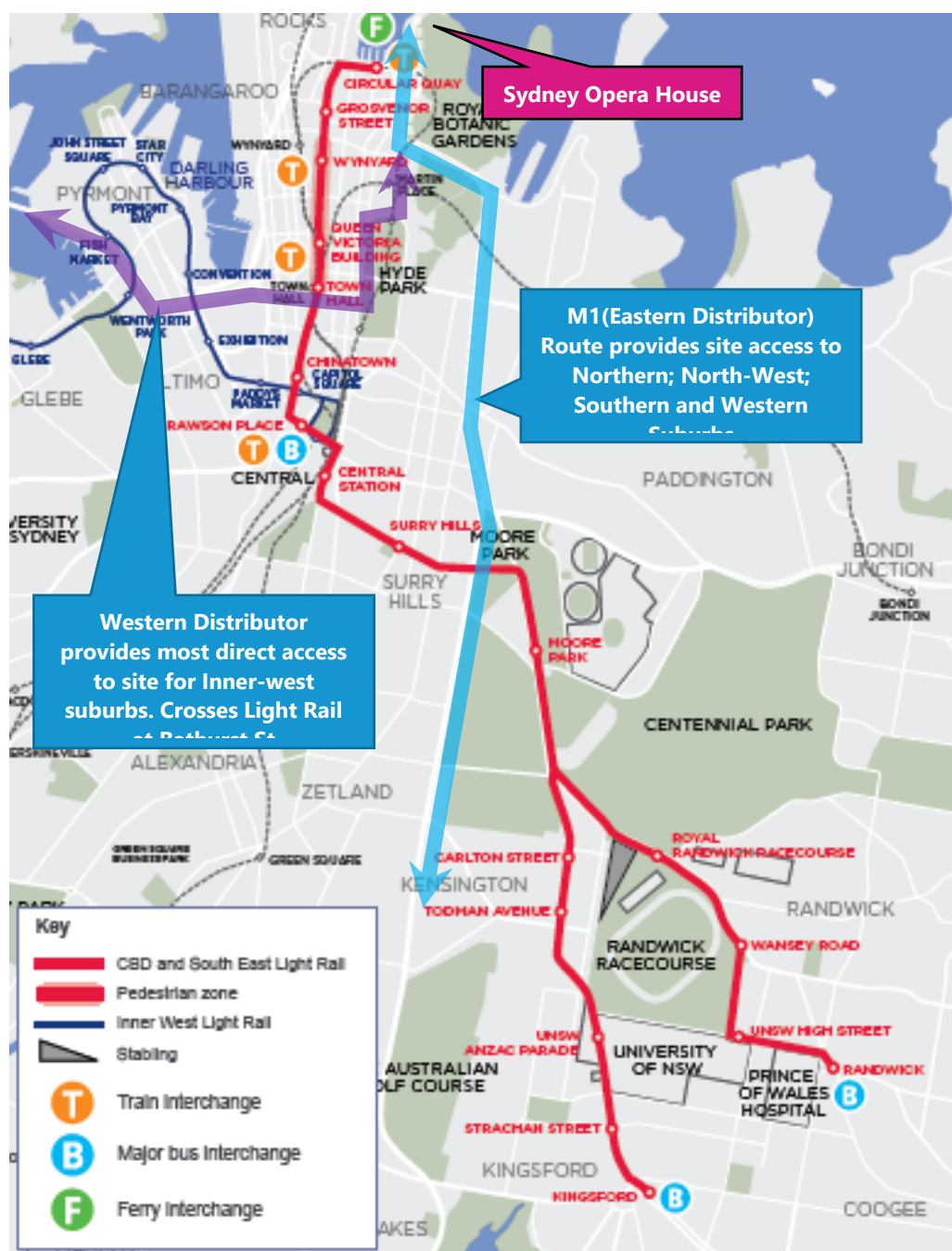


Figure 7 – CBD and South East Light Rail Route Map

3.3 Active Transport

There is an extensive network of cycleways near the SOH extending around the site and south to Circular Quay, providing access to the site for users using a combined train/bicycle mode of travel. There is also a dedicated cycleway along Sydney Harbour Bridge, providing an alternative for commuters travelling from northern suburbs.

The cycleways also continue south into and throughout the Royal Botanic Gardens which then link into a wider network servicing the greater CBD via cycleways and cycle lanes. Alternatively, there is also a bicycle friendly road which extends down Pitt Street, linking to the rest of the Sydney network. Figure 8 illustrates the cycle network around the site.

Similarly, pedestrian travel in the CBD and Bennelong Point area is strongly encouraged, with excellent footpath facilities, road crossings, lighting and signage provisions, and a focus on ambience, separating pathways as far as practicable from roads. Pathways regularly adjoin natural and built attractions, including the Harbour Bridge, Sydney Harbour, Sydney Opera House and the Botanic Gardens, amongst other features.

The construction site will include a bike lock up area and an End of Trip Facility (change rooms and showers are a compulsory requirement of the construction site). It is important to note that these facilities are separate to the EOTF provided for Opera House employees.

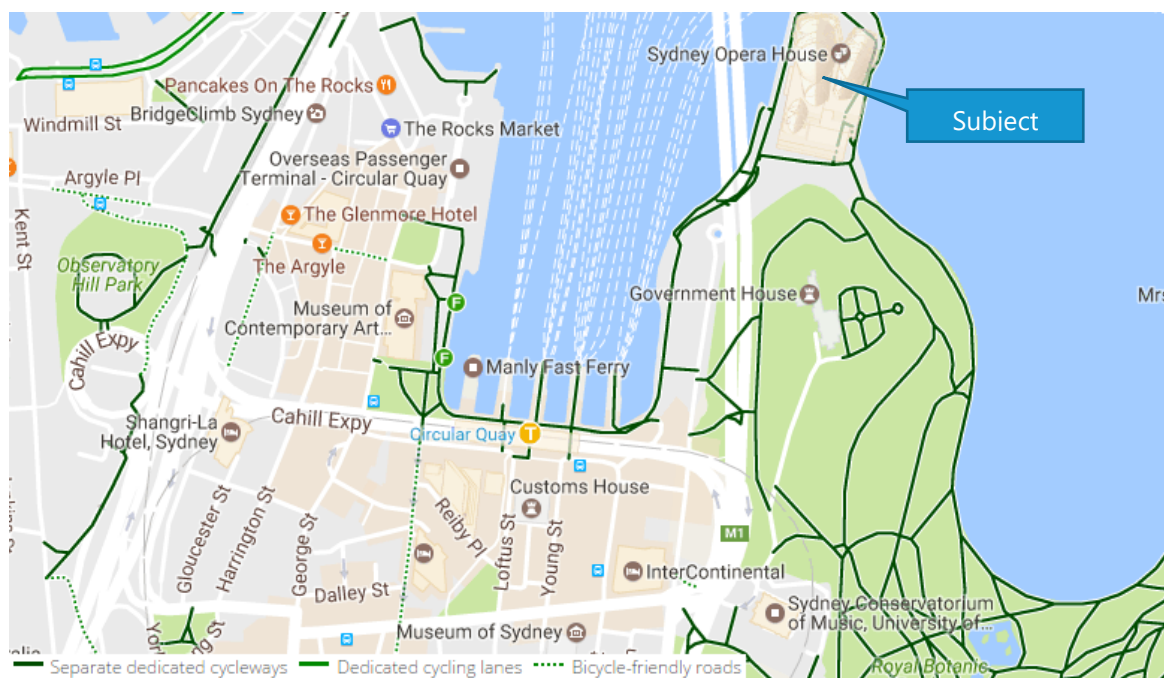


Figure 8 - Sydney Cycleways

4. Parking

Parking throughout Circular Quay is restricted to a very limited availability of short-term on-street parking and the SOH car park which is operated by Wilson as a commercial car park with relatively high hourly parking rates. While there is an early bird pricing structure, the majority of activity associated with the construction project will not qualify for these discounted rates.

In this regard, the limitation and pricing of parking in the vicinity of the site acts as a disincentive to drive to the site as it is not economically viable compared with the other transport options.

4.1 Contractor Parking

Employees and sub-contractors will be encouraged to use public and active transport to access the site and not park on public roads.

As part of the induction program, staff shall be made aware of the numerous public transport options and cycling opportunities (See Section 3), and encouraged to use such alternative means of transport and not park on the public roads. Where alternative modes of transport are onerous for certain staff, car-pooling is to be encouraged where practicable.

To support alternative travel, secure areas shall be made available within the work compounds for tradesmen and staff to store equipment, overnight, making light travel via alternative modes more viable.

Peter Doyle

From: Alex Karki <Alex.Karki@transport.nsw.gov.au>
Sent: Wednesday, 5 February 2020 14:12
To: Andrew Morse
Cc: George Mobayed; Brendan Pegg; Steven Nguyen
Subject: Endorsement : Opera House - Update on Progress with CPTMP
Attachments: 191219 - ptc. - DA3 CPTMP SOH Renewal Project.pdf

Importance: High

Hi Andrew

Thank you for the attached Construction Traffic Management Plan (CPTMP).

Several construction projects, including the Sydney Light Rail Project are likely to occur at the same time as this development within the CBD. The cumulative increase in construction vehicle movements from these projects could have the potential to impact on general traffic and bus operations in the CBD, and the safety of pedestrians and cyclists within the CBD particularly during commuter peak periods.

TfNSW endorses the content of the CPTMP that has been provided subject to following conditions:

- In the event that construction activities overlap with the performances or other events at the Sydney Opera House (SOH), it is recommended that pedestrian and traffic supervision be provided for the entry and egress of the patrons.
- Where traffic control is to be implemented, it is requested that the TMP/TCPs be forwarded to SCO and TfNSW (RMS) for review and approval.
- During the construction period, the proponent is to consult with nearby developers, SOH and SCO in regards to work days where high-than-average traffic volumes are expected and when performances or events are scheduled at the SOH.
-

TfNSW welcomes ongoing discussions on any issues that may arise during the development relating to traffic and transport.

Regards

Alex Karki
CBD Freight Policy & Planning Manager
Sydney Coordination Office
Transport Coordination, Greater Sydney
Transport for NSW

| M 0419 615 794 | P 02 8265 6649 W <http://mysydney.nsw.gov.au/>
Level 44, 680 George Street, Sydney, NSW 2002.



From: Andrew Morse [<mailto:andrew.morse@ptcconsultants.co>]
Sent: Wednesday, 5 February 2020 11:04 AM
To: George Mobayed <George.Mobayed@transport.nsw.gov.au>; Brendan Pegg <brendan.j.pegg@transport.nsw.gov.au>; Alex Karki <Alex.Karki@transport.nsw.gov.au>
Cc: Aleksandar Tancevski <Aleks.TANCEVSKI@rms.nsw.gov.au>
Subject: Re: FW: Opera House - Update on Progress with CPTMP

George, I'm sorry to push, but do you have any comments on the CTMP? If not, I can finalise and this then satisfies the conditions of consent.

Warm regards

Andrew

On 29/01/2020 2:28 pm, George Mobayed wrote:

Dear Gents,

Thanks for including me in the email. We are currently reviewing the CPTMP.

Hi Alex,

Could you please provide an update to Andrew.

Regards,
George

From: Andrew Morse [<mailto:andrew.morse@ptcconsultants.co>]
Sent: Wednesday, 29 January 2020 10:25 AM
To: Brendan Pegg
Cc: Aleksandar Tancevski ; George Mobayed
Subject: Re: FW: Opera House - Update on Progress with CPTMP

ok, thanks for the heads up Brendan, someone called Alex rang me at the end of last year on a terrible mobile connection, and I presumed it was Mr Tancevski.

George, It would be great if you could advise concurrence of the CTMP as Taylors are ready to start.

cheers all

Andrew

On 29/01/2020 10:05 am, Brendan Pegg wrote:

Hi Andrew,

I believe that you have sent this to the incorrect person as Aleks Tancevski is the Senior Manager Land Use Assessment and has not been involved in the CPTMP of the Opera House site.

TfNSW Sydney Coordination Office has been reviewing the CPTMP and would be the correct contact. George – can you please assist Andrew with the below.

Kind regards,

Brendan Pegg
A/Senior Manager Land Use Assessment
South East Precinct
Greater Sydney
Transport for NSW

M 0427 983 135
27-31 Argyle Street, Parramatta NSW 2150



I acknowledge the traditional owners and custodians of the land in which I work and pay my respects to Elders past, present and future.

From: Aleksandar Tancevski
Sent: Wednesday, 22 January 2020 1:44 PM

To: Brendan Pegg
Subject: FW: Opera House - Update on Progress with CPTMP

For your action

From: Andrew Morse
[\[mailto:andrew.morse@ptcconsultants.co\]](mailto:andrew.morse@ptcconsultants.co)
Sent: Wednesday, 22 January 2020 8:28 AM
To: Aleksandar Tancevski
Subject: RE: Opera House - Update on Progress with CPTMP

Aleks,

We spoke last week regarding the Opera House CTMP. Taylors have sent the following truck numbers and histograms, which hopefully assist you with the overlay of the other construction activity.

Council don't have any comments on the CTMP so its just RMS and TfNSW I'm waiting on for approval.

Regards

Andrew

We expect 14 deliveries per work shift. Delivery vehicles will be small utes and rigid trucks, Semi-trailers are expected only on the rare occasion. Each work shift starts at 11pm and finishes at 6pm the following day. Attached a shift calendar to assist.

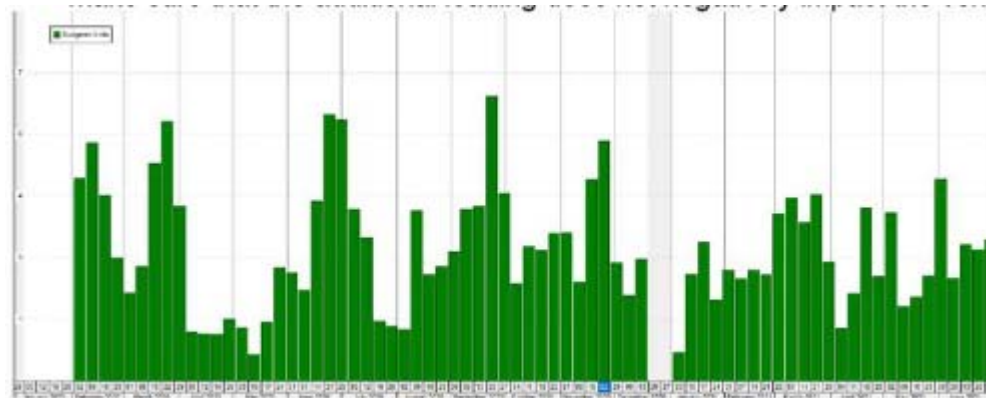
- Podium deliveries will be unloaded via a crane and we expect an average of 4 deliveries per morning to this location between 5am and 10am.
- Loading dock deliveries will be broken up into two different time periods the first being between 11am and 4pm and the second being between 11pm and

5am. We expect an average of 4 deliveries per period in the first and 6 deliveries per period in the second.

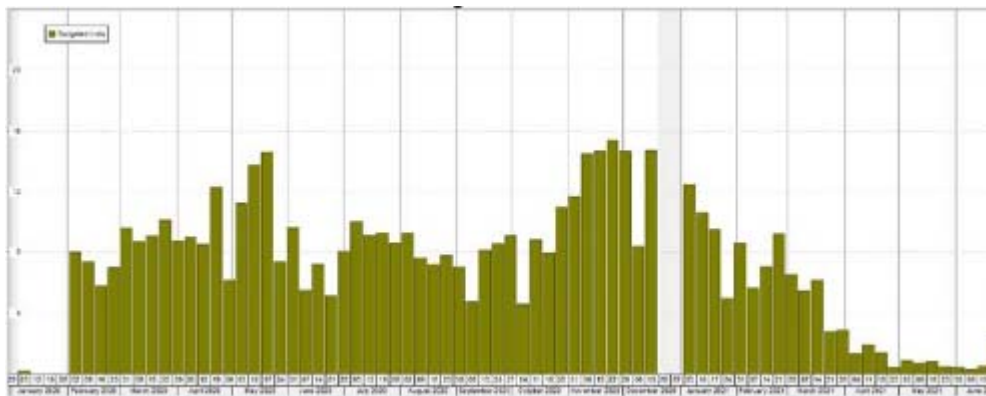
The below histogram indicates expected deliveries and at what time of day, This has been extracted from our program.

Hope this helps.

Podium Deliveries



Loading Dock Deliveries



--
[Andrew Morse](#)
Partner

ptc.

m +61 414 618 002
t +61 2 8920 0800

Suite 502, 1 James Place
North Sydney NSW 2060

ptc.'s 2019 year in review

- 3 newborns
- 400 new projects
- 20% more visits to our website
- 1 new office address
- 78% repeat business
- 1 graduation

ha
p'

Our office will be closed from 21st of December 2019 to 5th of January 2020.



The information contained in this e-mail is confidential and may be legally privileged. If the reader of this message is not the intended recipient you are hereby notified that any use, dissemination, distribution, or reproduction of this message is prohibited.



Before printing, please consider the environment

IMPORTANT NOTICE: This email and any attachment to it are intended only to be read or used by the named addressee. It is confidential and may contain legally privileged information. No confidentiality or privilege is waived or lost by any mistaken transmission to you. Roads and Maritime Services is not responsible for any unauthorised alterations to this email or attachment to it. Views expressed in this message are those of the individual sender, and are not necessarily the views of Roads and Maritime Services. If you receive this email in error, please immediately delete it from your system and notify the sender. You must not disclose, copy or use any part of this email if you are not the intended recipient.

--
[Andrew Morse](#)
Partner

ptc.

m +61 414 618 002
t +61 2 8920 0800

Suite 502, 1 James Place
North Sydney NSW 2060

ptc.'s 2019 year in review



3 newborns



400 new projects



20% more visits to our website



1 new office address



78% repeat business



1 graduation


**happy n
ptc.**

Our office will be closed from 21st of December 2019 to 5th of January 2020.



The information contained in this e-mail is confidential and may be legally privileged. If the reader of this message is not the intended recipient you are hereby notified that any use, dissemination, distribution, or reproduction of this message is prohibited.

This email is intended only for the addressee and may contain confidential information. If you receive this email in error please delete it and any attachments and notify the sender immediately by reply email. Transport for NSW takes all care to ensure that attachments are free from viruses or other defects. Transport for NSW assume no liability for any loss, damage or other consequences which may arise from opening or using an attachment.

 **Consider the environment. Please don't print this e-mail unless really necessary.**

--
[Andrew Morse](#)
Partner

ptc.

m +61 414 618 002
t +61 2 8920 0800

Suite 502, 1 James Place
North Sydney NSW 2060

ptc.'s 2019 year in review



**happy new year
ptc.**

Our office will be closed from 21st of December 2019 to 5th of January 2020.



The information contained in this e-mail is confidential and may be legally privileged. If the reader of this message is not the intended recipient you are hereby notified that any use, dissemination, distribution, or reproduction of this message is prohibited.

This email is intended only for the addressee and may contain confidential information. If you receive this email in error please delete it and any attachments and notify the sender immediately by reply email. Transport for NSW takes all care to ensure that attachments are free from viruses or other defects. Transport for NSW assume no liability for any loss, damage or other consequences which may arise from opening or using an attachment.

 **Consider the environment. Please don't print this e-mail unless really necessary.**

Peter Doyle

From: Amy Douglas <ADouglas@cityofsydney.nsw.gov.au>
Sent: Tuesday, 21 January 2020 13:18
To: Andrew Morse
Cc: Kaye Russell; Vanessa Cagliostro; Brendan Pegg; David Ballm; Alex Karki
Subject: RE: Sydney Opera House - DA3 Renewal - CTMP and Green Travel Plan for Review

Hi Andrew

I confirm the City of Sydney has reviewed the CTMP and has no comments to add.

For further queries you can contact Ganesh Vengadasalam on 9265 9333.

Regards,

Amy Douglas
Specialist Planner
Planning Assessments



Telephone: +612 9246 7857
cityofsydney.nsw.gov.au

From: Andrew Morse
Sent: Monday, 13 January 2020 4:33 PM
To: Kaye Russell ; Vanessa Cagliostro ; Amy Douglas ; Brendan Pegg ; David Ballm ; Alex Karki
Subject: Re: Sydney Opera House - DA3 Renewal - CTMP and Green Travel Plan for Review

Good afternoon all, I am just following up to see if there is any feedback on the CTMP as we require endorsement before works can begin.

Warm regards

Andrew

On 20/12/2019 1:17 pm, Kaye Russell wrote:

Hi Andrew

Due to the Christmas shutdown period TfNSW will not be able to provide you with a formal response to the CTMP.

Alex Karki will return to the office on 6/1/20 and will review the document and provide a response as soon as possible.

If you have any questions please contact Alex on 8265 6649.

Regards

Kaye Russell
Transport Planning Project Manager
Sydney Coordination Office
Transport Coordination, Greater Sydney
Transport for NSW

T 02 8265 6722 M 0435 961 672
Level 44 680 George Street Sydney NSW 2000



Use public transport... plan your trip at transportnsw.info
Get on board with Opal at opal.com.au

From: Andrew Morse [<mailto:andrew.morse@parkingconsultants.com>]
Sent: Tuesday, 17 December 2019 9:40 AM
To: Vaziz@cityofsydney.nsw.gov.au; adouglas@cityofsydney.nsw.gov.au; Brendan Pegg ; David Ballm ; Kaye Russell ; Alex Karki
Subject: Sydney Opera House - DA3 Renewal - CTMP and Green Travel Plan for Review

All, Following on from my email last week (I have added a few of you as the contact details have been passed on), Please see attached the final CTMP and associated Green Travel Plan for the recently approved DA3 package of works at the opera House. This report was issued in relation to the previous stages so many of you will have already seen it. The main changes are the GTP, and the moving of the Light Rail project from the construction section, to the public transport section (now in the GTP).

As per my email below, the Christmas break is putting a hole in the program, as the contractor is planning to start work in January. If there is any chance that this CTMP could be endorsed (as required by the conditions (see below)) it would be very much appreciated. I am available this week to discuss the content if required.

Warm regards

Andrew

From: Andrew Morse [<mailto:andrew.morse@parkingconsultants.com>]
Sent: Tuesday, 10 December 2019 5:15 PM
To: David Ballm ; Kaye Russell ; jfaull@cityofsydney.nsw.gov.au
Subject: Sydney Opera House - Construction Traffic Management Plan Endorsement.

All,

I have an interesting one for you. The Opera House lodged an application for renovations works back in 2017 and we prepared a CTMP in May 2018, which was included with the submission pack (I am not sure who it was distributed to during that phase so you may or may not have already seen our CTMP).

Anyway, they have just received the approval after a long delay sorting out heritage, and the conditions seek a CTMP, which we knew about, but it adds that we must have evidence of endorsement prior to construction as follows:

"A copy of the final CPTMP, to be endorsed by the CBD Coordination Office, TfNSW, TfNSW (RMS) and Council prior to the commencement of works, is to be provided to the Planning Secretary."

There is now a timing issue with this condition in that the project has been tendered and the construction team are gearing up for a commencement in January, but this condition may prevent that occurring.

I am making adjustments to our CTMP to reflect the condition (e.g. adding a Green Travel Plan) and the fact that the light rail will be finished and operating etc. Is there any chance that you will be able to provide some sort of endorsement by the end of Dec, if I issue the final CTMP this week?

Warm regards

Andrew

--


[Andrew Morse](#)
Partner

ptc.


m +61 414 618 002
t +61 2 8920 0800

Suite 502, 1 James Place
North Sydney NSW 2060

ptc.'s 2019 year in review

 3 newborns

 400 new projects

 20% more visits to our website

 1 new office address

 78% repeat business

 1 graduation

happy n
ptc.


Our office will be closed from 21st of December 2019 to 5th of January 2020.



The information contained in this e-mail is confidential and may be legally privileged. If the reader of this message is not the intended recipient you are hereby

in, hat a e, dissemination, distribution, or reproduction of this message is prohibited.

This email is intended only for the addressee and may contain confidential information. If you receive this email in error please delete it and any attachments and notify the sender immediately by reply email. Transport for NSW takes all care to ensure that attachments are free from viruses or other defects. Transport for NSW assume no liability for any loss, damage or other consequences which may arise from opening or using an attachment.

 **Consider the environment. Please don't print this e-mail unless really necessary.**

--
[Andrew Morse](#)
Partner

ptc.

m +61 414 618 002
t +61 2 8920 0800

Suite 502, 1 James Place
North Sydney NSW 2060

ptc.'s 2019 year in review



happy new year
ptc.

Our office will be closed from 21st of December 2019 to 5th of January 2020.

The information contained in this e-mail is confidential and may be legally privileged. If the reader of this message is not the intended recipient you are hereby notified that any use, dissemination, distribution, or reproduction of this message is prohibited.

This email and any files transmitted with it are intended solely for the use of the addressee(s) and may contain information that is confidential or subject to legal privilege. If you receive this email and you are not the addressee (or responsible for delivery of the email to the addressee), please note that any copying, distribution or use of this email is prohibited and as such, please disregard the contents of the email, delete the email and notify the sender immediately.
