



Mr Brendon Roberts  
Acting Team Leader  
Key Site Assessments  
Department of Planning and Environment  
GPO Box 39  
Sydney NSW 2001

**Attention:** Simon Truong

Dear Mr Roberts

**Redevelopment of the IMAX Theatre and Surrounding Public Domain Upgrades  
Darling Harbour (SSD 7388) - Notice of Exhibition**

Thank you for your letter dated 25 January 2016, requesting Transport for NSW (TfNSW) review and comment on the above development application.

TfNSW comments on the above development application are provided below.

**Proposed Car Stacker Operation**

Based on Section 8.1 of the Transport Impact Assessment prepared to support the above development, traffic generation for the hotel and serviced apartments is 67-77 veh/h during peak periods. With the inclusion of traffic generation for the proposed function centre, the traffic generation to the car park is expected to be approximately 90-100 veh/h during peak periods.

However, the queue length calculations have been undertaken for a vehicle arrival rate of 46 veh/h with a service rate of 83.5 veh/h. The following comments are provided in relation to the proposed car park operation:

- The access to the car stacker will be shared with service vehicles. TfNSW requests that the applicant confirm the service rate of 83.5 veh/h for the car stacker can be achieved with disruptions caused by service vehicle movements at the entrance to the car stacker. This needs to be provided with the evidence from the manufacturer of the proposed car stacker;
- The applicant provide 95<sup>th</sup> percentile queue length to service 100 vehicles in an hour in the car stacker and confirm that the vehicle queuing from the car stacker would not extend to Harbour Street and block traffic movement along Harbour Street; and
- The applicant provide a car stacker management plan to manage car parking in the event of mal-function of the car stacker.

## **Public Transport**

TfNSW requests that information in relation to taxi ranks, in particular the taxi rank in Wheat Road be included in the Section 2.4 of the Transport Impact Assessment.

## **Strategic Cycleway Network**

TfNSW requests that reference be made to the strategic cycleway network identified in the Sydney City Centre Access Strategy in the Section 2.4 of the Transport Impact Assessment.

## **Proposed Porte Cochere and Car Stacker Access Arrangements**

The proposed porte cochere and car stacker access arrangements have potential safety issues and may result in crashes in the road network adjacent to the proposed development due to the following reasons:

- The Transport Impact Assessment states that vehicles entering from Harbour Street will have priority over other movements, however it is not clear how this will be achieved, or how vehicles will be prevented from turning left to access the car stacker directly from Harbour Street;
- There are potential conflicts between the vehicles entering Wheat Road, bus services and the vehicles accessing the car stacker via loop road at the porte cochere;
- Confusing lane arrangements particularly in the area where there is three lanes between the two entry points;
- Potential conflicts between vehicle accessing the loading bays and the cars waiting to be serviced by the car stacker; and
- No designated turn-around area in front of the car stacker.

TfNSW requests that the applicant undertake a Stage 2 (Concept Plan) Road Safety Audit for the proposed access arrangements for the porte cochere and the car stacker, in accordance with Austroads *Guide to Road Safety Part 6: Road Safety Audit* by an independent TfNSW accredited road safety auditor. Based on the results of the road safety audit, the applicant shall review the design drawings and implement safety measures as required.

## **Bicycle Parking and End Trip Facilities**

TfNSW requests the following in relation to bicycle parking and end of trip facilities:

- Bicycle parking and end of trip facilities for pedestrian and bicycle riders in accordance with City of Sydney Council development control plans, standards and guideline documents;
- Bicycle facilities be located in secure, convenient, accessible areas close to the main entries incorporating adequate lighting and passive surveillance and in accordance with Austroads guidelines;

- Consideration be given for the connectivity, safety and accessibility for pedestrians and bicycle riders to existing pedestrian and bicycle networks/road networks and public transport; and
- Wayfinding strategies and travel access guides be developed to assist with increasing the mode share of walking and cycling.

### **Pedestrian Capacity Analysis**

Section 6.1.1 of the Transport Impact Assessment provides the detailed pedestrian level of service assessment for existing situation. However, no detailed pedestrian level service assessment for undertaken for future situation in Section 6.2 has been undertaken, in particular:

- The pedestrian capacity analysis should consider weekends and special events when pedestrian volumes are higher;
- The available width for pedestrians is reduced to the north-east of the current IMAX building. Analysis of this location should be undertaken to ensure sufficient width is maintained; and
- The pedestrian capacity analysis should include an assessment of the redesigned Spanish Steps and surrounding area to accommodate future demands.

TfNSW requests that the applicant provides a detailed pedestrian level service assessment for the construction period and the future situation.

### **Impacts on Erskine Street Intersections**

All vehicles leaving the site are expected to use the Sussex Street/ Erskine Street and Shelly Street/ Erskine Street intersections. No detailed traffic assessment has been undertaken to assess the performance of these intersections. TfNSW requests that assessment of these intersections be undertaken, taking into consideration the cumulative impact of other developments.

### **Taxi Rank within Wheat Road**

TfNSW requests that a dedicated area for the existing secure taxi rank to be accommodated within Wheat Road.

### **Porte Cochere and Loading Bay Management**

Based on Section 7 of the Transport Impact Assessment, the proposed development requires 17 loading bays. However, the proposed development only provides seven (7) loading bays on site. In addition, there are potential conflicts between service vehicles using the loading bays and cars waiting to use the car stacker. Therefore, service vehicle movements and car stacker operation need to be managed to minimise impact on the operation road network adjacent to the proposed development in particular along Harbour Street.

TfNSW requests that a detailed porte cochere/ loading bay management plan be developed to manage vehicle conflicts and the car stacker operation and provided for approval from CBD Coordination Office within TfNSW. The management plan should also identify how access to the site by heavy rigid vehicles will be prevented, as they cannot be accommodated on site.

In addition, swept turning path shows that a bus will not be able to pass if another vehicle has already stopped in the porte cochere. It also shows that a bus will not be able to make the last turn near the pedestrian bridge steps as indicated on the plan.

From the swept path analysis it does not appear that a bus could access the bus zone if there are vehicles parked on entire length of the western side of Wheat Road. The design of Wheat Road/ porte cochere should be revised to ensure buses can be accommodated.

Heavy vehicles should enter and exit in forward motion and would not be permitted to access the foreshore area as shown in Appendix A of the Transport Impact Assessment.

### **Construction Traffic Management Plan**

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, as well as the safety of pedestrians and cyclists particularly during commuter peak periods.

Demolition and reconstruction of the Spanish Steps is likely to have a significant impact on pedestrian access. A detailed assessment of the alternative access arrangements including capacity analysis, safety implications and wayfinding requirements is required. Pedestrian access including mobility access from the Druitt Street bridge must be maintained at all times.

The construction pedestrian and traffic management plan should be updated to include details on the following:

- Construction program;
- Any potential impacts to general traffic, cyclists, pedestrians and bus services within the vicinity of the site from construction vehicles during the construction of the proposed works;
- Cumulative construction impacts of projects including Sydney Light Rail Project. 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 should be clearly identified and included in the Construction Pedestrian Traffic Management Plan (CPTMP).

In addition, specific issues that should be addressed include:

- In general all work activities should be conducted behind the hoarding to minimise the interaction with general traffic;

- The CBD Coordination office should be included as a stakeholder and approval authority;
- Access to Wheat Road should be maintained at all times;
- During construction vehicles queuing to enter the site may block traffic on Harbour Street when operational considering the hoarding location. Further assessment or management plan should be undertaken to ensure that Harbour Street is not impacted at all by the construction activities;
- Alternative facilities to accommodate buses/ taxis throughout the various phases of the construction program, in particular the realignment of Wheat Road, have not been identified. Alternative facilities should be developed in consultation with TfNSW;
- The proposed hoardings may block the traffic signals on the approach to Harbour Street and should be reviewed;
- Details on the proposed modifications to pedestrian access during the stage 2 construction work should be identified; and
- The applicant is to work with the CBD Coordination Office on the location of any holding areas for construction vehicles and how it will be managed.

TfNSW requests that the applicant submit a copy of the final CPTMP to the Coordinator General, CBD Coordination Office for approval, prior to the commencement of any work.

TfNSW requests that the applicant consults with the CBD Coordination Office within TfNSW in relation to the above issues. TfNSW would be pleased to consider any further material forwarded from the applicant.

Thank you again for the opportunity of providing advice for the above development application. If you require clarification of any issue raised, please don't hesitate to contact Mark Ozinga, Principal Manager Land Use Planning and Development on 8202 2198.

Yours sincerely



Marg Prendergast  
**Coordinator General**  
**CBD Coordination Office**

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