

1 INTRODUCTION

This report supports State Significant Development Applications (SSD 12_5752) submitted to the Minister for Planning and Infrastructure pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The Application seeks approval for construction of key elements of the Sydney International Convention, Exhibition and Entertainment Precinct (SICEEP) Project at Darling Harbour, consisting of:

- Construction of the Public Private Partnership (PPP) component
The SICEEP Project will deliver Australia's global city with world class convention, exhibition and entertainment facilities that can compete effectively in the national and international events markets.
- Establishment of building envelopes and design parameters for a new neighbourhood and a community hub (referred to as The Haymarket).
The SICEEP project will develop The Haymarket into one of Sydney's most innovative residential and working districts.

Through the delivery of the overall Project, Darling Harbour will also become home to Australia's largest convention and exhibition facilities, Sydney's largest red carpet entertainment venue, and a hotel complex of up to 900 rooms

The SICEEP Project importantly forms a critical element of the NSW Government's aspiration to "make NSW number one again". The SICEEP Project also involves the creation of a new neighbourhood and a community hub.

1.1 BACKGROUND

The existing convention, exhibition and entertainment centre facilities at Darling Harbour were constructed in the 1980s and have provided an excellent service for Sydney and NSW.

The facilities however have limitations in their ability to service the contemporary exhibition and convention industry which has led to a loss in events being held in Sydney.

The NSW Government considers that a precinct-wide renewal and expansion is necessary and is accordingly committed to Sydney reclaiming its position on centre stage for hosting world-class events with the creation of the SICEEP Project.

Following an extensive and rigorous Expressions of Interest and Request for Proposals process, Darling Harbour Live (formerly known as 'Destination Sydney' - a consortium comprising AEG Ogden, Lend Lease, Capella Capital and Spotless) was announced by the NSW Government in December 2012 as the preferred proponent to transform Darling Harbour and create the new Sydney International Convention, Exhibition and Entertainment Precinct.

Key features of the Darling Harbour Live Preferred Master Plan include:

- Delivering world-class convention, exhibition and entertainment facilities, including:
 - Up to 40,000m² exhibition space;
 - Over 8,000m² of meeting rooms space, across 40 rooms;
 - Overall convention space capacity for more than 12,000 people;
 - A ballroom capable of accommodating 2,000 people; and

- A premium, red-carpet entertainment facility with a capacity of 8,000 persons.
- Providing up to 900 hotel rooms in a hotel complex at the northern end of the Precinct.
- A vibrant and authentic new neighbourhood at the southern end of the precinct, called 'The Haymarket', home to an IQ Hub focused on the creative industries and high-tech businesses, apartments, student accommodation, shops, cafes and restaurants.
- Renewed and upgraded public domain, including an outdoor event space for up to 25,000 people at an expanded Tumbalong Park.
- Improved pedestrian connections linking to the proposed Ultimo Pedestrian Network drawing people between Central, Chinatown and Cockle Bay Wharf as well as east-west between Ultimo/Pymont and the City.

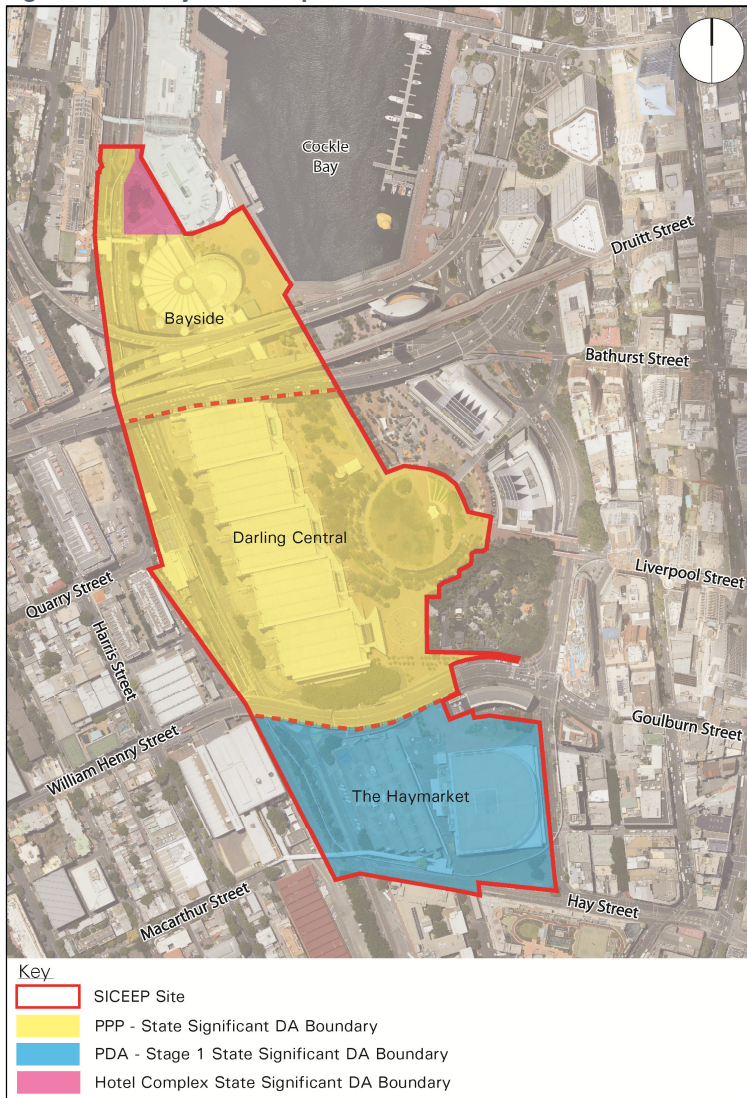
1.2 SITE DESCRIPTION

The SICEEP Site is located within the Darling Harbour precinct. Darling Harbour is a 60 hectare waterfront precinct on the south-western edge of the Sydney Central Business District that provides a mix of functions including recreational, tourist, entertainment and business.

With an area of approximately 20 hectares, the SICEEP Site is generally bound by the Light Rail Line to the west, Harbourside shopping centre and Cockle Bay to the north, Darling Quarter, the Chinese Garden and Harbour Street to the east, and Hay Street to the south.

The SICEEP Site has been divided into three distinct redevelopment areas (from north to south) – Bayside, Darling Central and The Haymarket, as shown in Figure 1-1.

Figure 1-1 Project Development Area



1.3 OVERVIEW OF PROPOSED DEVELOPMENT

The key elements of the SICEEP project consist of:

1.3.1 PRIVATE PUBLIC PARTNERSHIP (PPP)

The PPP Application Site area is located within Bayside and Darling Central as shown in Figure 1-1.

The proposed development involves construction of the PPP component of the SICEEP Project, comprising new, integrated and world-class convention, exhibition and entertainment facilities with associated retail and public domain upgrades.

The application more specifically seeks approval for the following development:

- Demolition of existing improvements on the site, including existing Sydney Convention Centre (part) and Sydney Exhibition Centre (SCEC);
- Associated tree removal and replanting;

- Construction of a new, integrated and world-class Convention, Exhibition and Entertainment Centre;
- Public domain improvements, including:
 - reinvigorating and expanding Tumbalong Park;
 - provision (part) of a new active north-south pedestrian connection (known as the Boulevard);
 - provision of new east-west connections, including Harbourside Place and Tumbalong Place;
 - Provision of a pedestrian bridge link from Quarry Street;
 - Retention of the tidal cascade water feature;
 - Reconfiguration and upgrade of Darling Drive (part);
 - Provision of a new square adjoining the Chinese Garden;
 - Provision of a new open space 'event deck' (connected with the Exhibition Centre);
 - Integrated art, play zones, water play and recreation areas;
 - Provision of retail kiosks;
- Provision of ground level parking within the Exhibition and Entertainment Centre facilities;
- Ground and elevated loading docks (accessed off Darling Drive) for Convention, Exhibition and Entertainment Centre facilities;
- Two vehicle drop off points off Darling Drive;
- Provision of signage; and
- Extension and augmentation of physical infrastructure / utilities as required.

1.3.2 THE HAYMARKET

The proposal relates to a staged development application and seeks to establish concept plan details for The Haymarket, located within the southern part of the SICEEP Site.

The Haymarket will include student housing, public car parking, a commercial office building, and four mixed use development blocks (retail/commercial/residential podium with residential towers above) centred around a new public square to be named Haymarket Square.

More specifically concept approval is sought for the following:

- Demolition of existing site improvements, including the existing Sydney Entertainment Centre (SEC), Entertainment car park, and part of the pedestrian footbridge connected to the Entertainment car park and associated tree removal;
- North-west block – construction of a part public car park and part commercial/office building;
- North-east block – construction of a mixed use podium (comprising retail, commercial, above ground parking, and residential);
- South-east block - construction of a mixed use podium (comprising retail, commercial, above ground parking, and residential);
- South-west block - construction of a mixed use podium (comprising retail, commercial, above ground parking, and residential);
- North block – construction of a low rise mixed use building comprising retail, commercial and residential;

- Student housing – construction of two buildings providing for student accommodation;
- Public domain improvements including a new square, water features, new pedestrian streets and laneways, streetscape embellishments, and associated landscaping. (It is intended that a Stage 2 DA seeking approval for parts of the part of the public domain (The Boulevard and Haymarket Square) will be lodged with the first residential stage);
- Darling Drive realignment; and,
- Car parking rates.

1.4 PLANNING APPROVALS STRATEGY

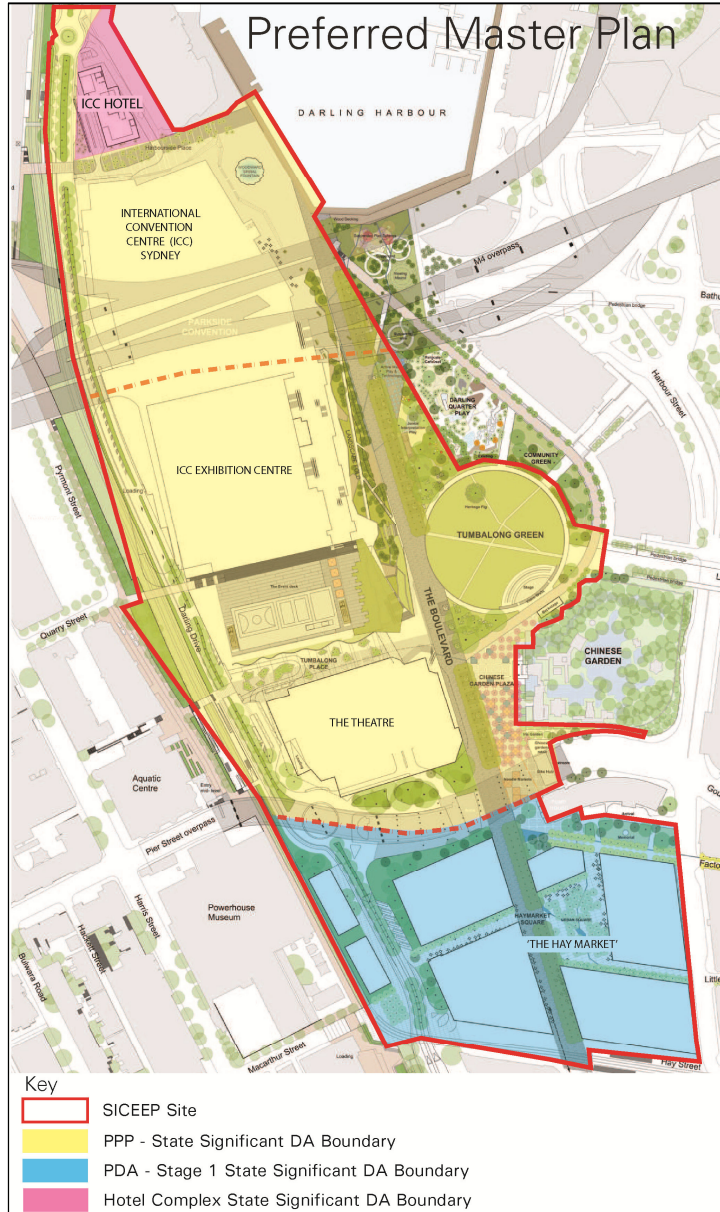
In response to separate contractual agreements with the NSW Government and staging requirements, Darling Harbour Live is proposing to submit a number of separate development applications for key elements of the overall Project.

The first application involves the PPP component of the SICEEP Project, comprising the convention centre, exhibition centre, entertainment facility, and associated public domain upgrades.

Development of The Haymarket is to be staged and accordingly a staged development application is to be lodged. Detailed development applications will follow seeking approval for specific aspects of The Haymarket in accordance with the approved staged development application.

A separate development application will also be submitted for the Hotel Complex.

Figure 1-2 Preferred Master Plan



1.5 SCOPE OF STUDY

This Transport and Traffic Assessment Study was undertaken to fulfil the Environmental Assessment Requirements issued by the Director General for development approval. This study assesses the traffic impacts associated with the proposal and outlines a Transport Management and Accessibility Plan (TMAP) for the precinct to ensure that the development achieves its preferred outcomes and objectives.

The Project Director General's Requirements (DGRs) for the SICEEP (SSD 5752-2012) were issued on 21 January 2013. The list comprised of General Requirements for the Preferred Master Plan and Specific Requirements for the individual SSDAs. Section 8 of the general

requirements relates to Transport and Accessibility (Construction and Operation) and requires reference to:

- Guide to Traffic Generating Developments (RTA)
- Planning Guidelines for Walking and Cycling
- NSW 2021
- Sydney's Light Rail Future
- Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development; and
- City of Sydney Chinatown Public Domain Plan.

The issues to be considered are outlined in Table 1-1.

Table 1-1 Director General Requirements

Issue Description	Relevant Section of Report
Address the impact of traffic and pedestrian volumes on surrounding road network including intersections using appropriate traffic modeling analysis based on the worst cumulative traffic impacts including a sensitivity analysis	Section 6, Section 7, Section 8, Section 9
Provide details of any upgrading or road improvement works required to accommodate the proposed development	Section 6.2.1
Address any impacts on the Light Rail corridor and Western Distributor viaducts	Section 6.3
Justify the level of car parking provided on the site	Section 5.4
Provide details of measures to encourage sustainable transport measures, including end of trip cyclist facilities, pedestrian and cycle connections and travel plans	Section 10
Address the impacts from construction traffic to the surrounding area and include the cumulative impact of construction activities from other sites in the locality	Section 9
Provide details of the parking provision and arrangements during the demolition/construction period	Section 9
Provide details of the pedestrian and cyclist connections to the surrounding area including west to Ultimo and east to the Central Business District	Section 5.7, 5.8 Section 3.3
Address road safety at key intersections and locations subject to heavy vehicle movements and high pedestrian activity	Section 8

In addition to the General Requirements, a list of Specific Requirements for each of the individual SSDAs were provided. Issues to be considered for SSDA 1 – Convention, exhibition and entertainment centre and associated public domain under Transport and Accessibility are listed in Table 1-2.

Table 1-2 Specific Requirements for SSDA1

Issue Description	Relevant Section of Report
Assess the traffic impacts on the surrounding area during peak operating events	Section 6
Details of vehicular access including VIP and other pick up/drop off entries and servicing requirements including management during event bump in/bump out periods	Section 5, Section 10
Address the impacts on public transport from both non-event and event uses including pedestrian access during major events and identify major pedestrian access during major events and identify major pedestrian movements to and from the site	Section 5, Section 7, Section 10
Identify the provision for taxis, coaches and buses accessing the site	Section 5.9
Address the impacts of existing bus operators and coach/bus access under the Pier Street viaduct and along Darling Drive	Section 5.9, Section 10.3.3
Address the management of heavy vehicles for loading/unloading during major events including truck access and management for back of house operations for event setup	Section 5.5
Investigate opportunities for additional bus layover/parking off Darling Drive during major events	Section 5.8
Address safety and security during major events including crowd management and access for emergency vehicles	Refer to Plan of Management

This report analysis covers the Whole of Precinct (WOP) and considers the accumulative impacts of the individual SSDAs.

1.6 STUDY OBJECTIVES

This study has been prepared in accordance with NSW Department of Transport's *Draft Interim Guidelines on TMAPs* and the *RMS Guide to Traffic Generating Developments*. The objectives of this study are to:

- Meet the DGRs
- Manage the transport impacts of the SICEEP development
- Help reduce reliance on private car
- Promote and maximise the use of sustainable modes of transport, i.e. public transport, walking and cycling.

1.7 PREVIOUS STUDIES

This assessment was undertaken on the basis of data and information collected at the time of preparation of the report and supplemented by traffic data and information contained in the following reports:

- Traffic and Transport Conditions Report, Darling Harbour South Master Plan, Sydney Harbour Foreshore Authority, (Halcrow), November 2010.
- Urban Design Report – Darling Harbour South Master Plan, Johnson Pilton Walker, Sydney Harbour Foreshore Authority, December 2010.
- Ultimo Pedestrian Network (UPN) Stage 2 Central Station to Darling Harbour Pedestrian Link, SHFA (Aspects Studios with Choi Ropiha Fighera).

In addition, the State provided two reports that covered the preliminary traffic analysis of baseline conditions of the SICEEP including the baseline traffic model developed in AIMSUN:

- Existing Traffic and Transport Conditions Report, Sydney International Convention, Exhibition and Entertainment Precinct, Infrastructure New South Wales (Mott MacDonald), May 2012.
- Traffic Management and Accessibility Plan, Sydney International Convention, Exhibition and Entertainment Precinct, Infrastructure New South Wales (Mott Macdonald), August 2012

The above report formed the basis for the network model and is attached in Appendix A

1.8 REPORT STRUCTURE

This report is structured to provide a full assessment of the transport and traffic issues relating to the Preferred Master Plan. This report is laid out in the following order:

- Section 1 provides an overview of the project, background information and the study objectives.
- Section 2 details the strategic context within which the assessment has taken place. This section provides a literature review of all relevant, state, regional, local and other documents.
- Section 3 establishes the existing transport context in the surrounding area. An assessment of the existing road network has been undertaken to establish road network characteristics, performance criteria and any existing road network deficiencies. The chapter also provides an overview of existing travel patterns in the locality as well as existing public transport, walk and cycle provisions.
- Section 4 presents the modelling approach and methodology to assess the road network impacts of the proposed development. This chapter outlines the scenarios that have been tested.
- Section 5 provides a more detailed overview of the project concept plan in terms of the development component, access arrangement etc.
- Section 6 documents the impact assessment.
- Section 7 provides an overview of the pedestrian analysis and the outcomes.
- Section 8 provides a summary of crash statistics collected by the RMS and discusses road safety issues associated with Darling Drive and Harbour Street corridors.

- Section 9 outlines the construction impacts and the draft construction traffic management plan; and,
- Section 10 summarises the recommended package of mitigation measures.
- Section 11 provides the conclusions for this study
- Section 12 lists the next steps