

Environmental Impact Statement

The Ribbon, 31 Wheat Road, Sydney
IMAX Cinema Fit Out and Operation

Submitted to Department of Planning and
Environment

On behalf of Grocon (Darling Harbour)
Developments Pty Ltd

26 March 2019 | 17638



CONTACT

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15 March 2019

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15 March 2019

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VERSION NO.	DATE OF ISSUE	REVISION BY	APPROVED BY
1	15 March 2019	JBu	JBu

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Statement of Validity

Development Application Details

Applicant name	Grocon (Darling Harbour) Developments Pty Ltd
Applicant address	Level 4, 161 Castlereagh Street, Sydney NSW 2000
Land to be developed	31 Wheat Road, Sydney NSW 2000
Proposed development	Fit out of The Ribbon building for the approved IMAX Cinema, as described in Section 3.0 of this Environmental Impact Statement

Prepared by

Name	Jennie Buchanan
Qualifications	BPlan (Hons 1), MPIA
Address	173 Sussex Street, Sydney
In respect of	State Significant Development - Development Application

Certification

I certify that I have prepared the content of this EIS and to the best of my knowledge:

it is in accordance with Schedule 2 of the Environmental Planning and Assessment Regulation 2000;

all available information that is relevant to the environmental assessment of the development to which the statement relates; and

the information contained in the statement is neither false nor misleading.

Signature



Name Jennie Buchanan

Date 26 March 2019

Executive Summary

Purpose of this Report

This submission to the Department of Planning and Environment (DPE) comprises an Environmental Impact Statement (EIS) for a Development Application under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). It relates to the fit out and operation of the IMAX Cinema component of The Ribbon development, consistent with the uses and base building previously approved under SSD 7388.

Development within Darling Harbour with a capital investment value of more than \$10 million is State Significant Development (SSD) for the purposes of the EP&A Act. As the proposed development will have a Capital Investment Value exceeding \$10 million it qualifies as SSD.

A request for the issue of Secretary's Environmental Assessment Requirements (SEARs) was sought on 3 November 2017, with the SEARs subsequently issued on 29 November 2017. This submission is in accordance with the Department's guidelines for SSD applications lodged under Part 4 of the EP&A Act, and addresses the issues raised in the SEARs.

Overview of the Project

The Development Application (DA) seeks approval for the fit out works required for the IMAX Cinema component of The Ribbon development at Darling Harbour. The operation of this use is also sought under this DA.

The proposed works, which have been further detailed at **Section 3.0**, comprise the following:

- fit out of the IMAX Cinema component of The Ribbon, with a maximum capacity of 450 patrons;
- fit out of the associated front of house and back of house facilities at the site;
- fit out of the ancillary facilities and common areas at the site; and
- operation of the IMAX Cinema, including the above associated and ancillary uses.

Planning Context

Section 6.0 of the EIS considers all applicable legislation in detail. *Darling Harbour Development Plan No. 1* is the principal Environmental Planning Instrument applying to the site. The *Darling Harbour Development Plan No. 1* is to be taken to be a deemed State Environmental Planning Policy (SEPP) by operation of Part 3, Division 5, Clause 24 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation).

The principal aim of the *Darling Harbour Development Plan No. 1* is to define the type of development which may be permitted within the Darling Harbour Development Area.

Environmental Impacts and Mitigation Measures

This EIS provides an assessment of the environmental impacts of the project in accordance with the SEARs and sets out the undertakings made by Grocon (Darling Harbour) Developments Pty Ltd (Grocon) to manage and minimise potential impacts arising from the development.

Key environmental assessment considerations identified include, amongst others:

- operational impacts;
- construction impacts;
- compliance with the relevant BCA / Accessibility provisions; and
- waste management impacts.

All identified impacts are addressed in this EIS and are capable of being ameliorated through the implementation of appropriate mitigation measures, which have been outlined in **Section 7.0**.

Conclusion and Justification

The proposed Mitigation Measures have been prepared to inform the ongoing management of the proposal throughout the construction and operational phases. This Environmental Impact Statement fulfils the requirements of the EP&A Act and addresses the SEARs. Specifically, this statement demonstrates that the proposed works are consistent with the relevant Environmental Planning Instruments and the impacts generated by the proposal can be adequately managed.

In light of the above, and acknowledging the significant benefits generated by the proposal, which includes:

- the delivery of a key tourist and entertainment facility envisioned under SSD 7388;
- the generation of economic and employment growth; and
- the promotion of the ongoing growth of Darling Harbour as being one of Sydney's most innovative convention, entertainment and exhibition precincts;

We therefore recommend that the proposed development be approved.

1.0 Introduction

This Environmental Impact Statement (EIS) is submitted to the NSW Department of Planning and Environment (DPE) in support of a State Significant Development Application (SSDA) for the fit out of the IMAX Cinema at The Ribbon.

The Ribbon project site is located within the Darling Harbour Development Area, which is identified as a State Significant Site in Schedule 2 of *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP). As the proposed development will have a Capital Investment Value of more than \$10 million it is deemed to be State Significant Development (SSD) for the purposes of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

This EIS has been prepared by Ethos Urban on behalf of Grocon (Darling Harbour) Developments Pty Ltd (Grocon), and is based on the Architectural Plans provided by PMDL Architecture & Design (see **Appendix A**) and other supporting technical information appended to the report (see Table of Contents).

This EIS has been prepared in accordance with the requirements of Part 4 of the EP&A Act, Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation) and the relevant Secretary's Environmental Assessment Requirements (SEARs), which have been included at **Appendix C**. This EIS should be read in conjunction with the supporting information and plans appended to and accompanying this report.

1.1 Overview of Proposed Development

This application seeks approval for the fit out works and operation of the IMAX Cinema elements of The Ribbon development. Fit out or operation of other elements of The Ribbon development, including ground floor retail and serviced apartment / hotel do not form part of this application.

1.2 Background to the Development

The approvals relevant to The Ribbon development have been detailed at **Table 1** below.

Table 1 – History of approvals relevant to The Ribbon

Application	Details	Status
SSD 7388	Development consent granted by the Planning Assessment Commission on 28 July 2016 for the redevelopment of the IMAX building, including: <ul style="list-style-type: none"> • demolition of the existing IMAX building, tourist office and amenities block; • construction of a new 25 storey building and separate 2 storey building; • hotel, serviced apartments, retail and entertainment uses; • 170 car parking spaces within the podium and 239 bicycle spaces at ground level; • realignment of Wheat Road; • upgrade to the surrounding public domain including a new playground and relocation of heritage items; and • installation of a City Screen and signage zones. 	Approved
SSD 7388 (MOD 1 and MOD 2)	Applications relating to the staging of development consent at the site.	Withdrawn
SSD 7388 (MOD 3)	Modification application relating to the provision of a range of design changes at the podium of the development.	Approved
SSD 7388 (MOD 4)	Modification application comprising an extension to construction hours at the site, with no changes undertaken to the physical development.	Approved
SSD 7388 (MOD 5)	Modification application seeking to reflect an updated room number configuration and layout between the serviced apartment and hotel components of the development.	Approved
SSD 7388 (MOD 6)	Modification application relating to a number of minor changes to internal and external components of The Ribbon.	Approved

Application	Details	Status
SSD 7388 (MOD 7)	Modification application seeking to a series of design and management parameters to enable the provision of an open roof component above the hotel pool at the development. No changes contemplated by SSD 7388 MOD 7 would affect the development subject of this application.	Under Assessment
SSD 7388 (MOD 8)	Modification application seeking internal building changes to the IMAX Cinema component of the development. SSD 7388 MOD 8 has been undertaken in order to ensure consistency with the proposed development sought under this subject application.	Lodged Concurrently
SSD 7388 (MOD 9)	Modification application seeking a range of changes to the public domain surrounding the site, as well as the Sydney Harbour Foreshore Authority (SHFA) building to the south of The Ribbon building. No changes contemplated by SSD 7388 MOD 9 would affect the development subject of this application.	Forthcoming
SSD 8838	State Significant Development Application seeking fit out and operation of the hotel and serviced apartments components of the development at the site.	Approved

1.3 Objectives of the Development

Key development objectives which underpin this application are to:

- provide an IMAX Cinema commensurate with the nationally important tourism role of Darling Harbour, for the continued entertainment of visitors and guests at The Ribbon;
- ensure that the proposed fit out works do not result in any adverse environmental impacts during construction; and
- enable future cinema operations to not adversely affect the surrounding environment.

1.4 Strategic Need for the Proposal

The NSW Government has recognised that the previous convention, exhibition and entertainment facilities at Darling Harbour were facing increasing competition from similar facilities in the Asia-Pacific region and as such development is required which will contain facilities that:

- are suitable for contemporary conventions and are competitive with other facilities nationally and globally;
- are constructed to international best practice;
- are more flexible in their ability to respond to the changing needs of the convention, exhibition and event industry; and
- are designed for longevity.

This overarching renewal and redesign of the Darling Harbour Precinct has been evident through the complete renewal of facilities within the precinct over the past five years, and The Ribbon forms a key part of this process. The Ribbon will provide a contemporary facility which includes the provision of an IMAX cinema complex succeeding the previous IMAX Darling Harbour facility which was demolished for The Ribbon project.

More specifically, this SSDA is necessitated by virtue of Condition A5 of SSD 7388, which states as follows:

“A5 – This consent does not approve strata subdivision, fit out and operation of the retail tenancies, hotel, serviced apartment, function and entertainment uses, and outdoor seating. Separate approval/s for subdivision, fit-out and operation of the buildings and outdoor seating must be obtained for this development / use.”

As the IMAX Cinema comprises an entertainment use, separate consent is required for the fit out and use of this facility. Therefore, this application has been prepared to complement the development approved under SSD 7388, as well as the concurrently submitted modification application to SSD 7388 (SSD 7388 MOD 8).

1.5 Analysis of Alternatives

1.5.1 Analysis of Alternatives for Original Building Form

The former IMAX development was constructed in 1988 when the Darling Harbour precinct was undergoing an extensive program of urban renewal. As discussed at **Section 1.2** above, the new development scheme has since been approved, and the former building at the site has been demolished in preparation for The Ribbon development (under SSD 7388).

During the initial design development, a number of alternative design options were considered for the development including:

- Option 1: No redevelopment, leaving the existing building as is.
- Option 2: Providing a new building with the same building height and footprint as the former IMAX building.
- Option 3: Providing a new building form with a large ground floor base and a single tower.
- Option 4: Providing a new building form with two thin tall towers.
- Option 5: Providing a new building form with a wider built form cantilevering over the roadways.
- Option 6: Providing a development with a thinner mass and height comparable to the closest neighbouring buildings.
- Option 7: Expand the existing building footprint and height and construct a new building with a unique form.

Of these options, Option 7 was pursued and ultimately approved given that it would result in a landmark built form and would reduce the bulk of the development by breaking up the volume of the building, creating a fluid built form.

1.5.2 Analysis of Alternatives for IMAX Cinema Fit Out

When looking specifically at the proposed fit out under this DA, by virtue of the nature of works proposed, there are relatively few alternative options available. These comprise:

- do nothing;
- fit out of the space for an alternate purpose; and
- fit out of the space for an IMAX Cinema.

Do nothing

Doing nothing would result in an inappropriate built form outcome for The Ribbon project which would go against the substantial environmental assessment and construction work undertaken to date. It would also be inconsistent with the base approval of the site given that the development approved under SSD 7388 included the provision of an IMAX Cinema (but not the fit out and operation of the facility). Ultimately, this would be a substantial waste of capital investment, sunk cost and loss of the potential use of the site as a key entertainment and tourist destination in Sydney.

Fit out for an alternate purpose

Similarly, fit out of the space for uses other than the proposed IMAX Cinema purpose would be contrary to the significant work undertaken at the site to date. It would be inconsistent with the approval of this space for cinema uses under SSD 7388, and the construction work undertaken to deliver the cinema space at the site.

Given the highly customised and unique nature of cinema constructions, fit out for an alternate purpose would also be an inefficient and ineffective use of the space.

Fit out for IMAX Cinema

The effective result of this is that the proposed cinema fit out remains the only identifiable and realistic alternative at the site.

1.6 Secretary's Requirements

In accordance with section 4.39 of the EP&A Act, the Secretary of the DPE issued the requirements for the preparation of the EIS on 29 November 2017. A copy of the Secretary's Environmental Assessment Requirements (SEARs) is included at **Appendix C**.

Table 2 provides a detailed summary of the individual matters listed in the SEARs and identifies where each of these requirements has been addressed in this report and the accompanying technical studies.

Table 2 Secretary's Requirements

Requirement	Location in Environmental Assessment	
General		
The Environmental Impact Statement (EIS) must address the <i>Environmental Planning and Assessment Act 1979</i> and meet the minimum form and content requirements in clauses 6 and 7 of Schedule 2 the Environmental Planning and Assessment Regulation 2000.	Environmental Impact Statement	
Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development.	Section 6.0	
Where relevant, the assessment of the key issues below, and any other significant issues identified in the assessment, must include: <ul style="list-style-type: none">compliance with the Building Code of Australia;provision of an ESD report to provide assurance that the fit out and operation will not affect the 5-star green star rating of the base building.	Section 5.7 Section 5.8	
The EIS must also be accompanied by a report for a qualified quantity surveyor providing: <ul style="list-style-type: none">a detailed calculation of the capital investment value (CIV) of the development, including details of all assumptions and components from which the CIV calculation is deriveda close estimate of the jobs that will be created by the development during construction	Submitted under separate cover	
Key Issues	Report / EIS	Technical Study
1. Relevant EPIs, Policies and Guidelines Demonstrate that the project will comply with the requirements set out in the following provisions: <ul style="list-style-type: none">address the relevant statutory provisions applying to the site contained in the relevant EPIs, including:<ul style="list-style-type: none">State Environmental Planning Policy (State and Regional Development) 2011Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005Darling Harbour Development Plan No. 1demonstrate consistency with the terms of approval for the Ribbon Building Development (SSD 7388), as modified.	Section 5.2	All appendices
2. Compliance with the Building Code of Australia <ul style="list-style-type: none">Provide a Building Code of Australia assessment report demonstrating that the application complies with the relevant provisions of the Building Code of Australia.	Section 5.7	Appendix D
3. Fit Out The EIS shall address: <ul style="list-style-type: none">adequate provision of sanitary facilities for staff and patronscompliance with the Disability Discrimination Act and AS1428	Section 5.4	Appendix D Appendix K
4. Operation The EIS shall address: <ul style="list-style-type: none">the operational requirements of the IMAX Cinema in a Plan of Management, including but not limited to, hours of operation and special events, access by patrons, staff numbers, and food and beverage provision, deliveries, loading and waste management detail.	Section 5.5	Appendix E
5. Noise and Vibration impacts The EIS shall include a noise and vibration assessment prepared by a suitably qualified acoustic consultant which shall: <ul style="list-style-type: none">assess the noise and vibration impacts of the IMAX use on the hotel, serviced apartment and retail uses within the building	Section 5.6	Appendix F

Requirement	Location in Environmental Assessment	
<ul style="list-style-type: none"> • assess the noise and vibration impacts on the surrounding land uses and public domain • details of acoustic wall, floor and ceiling finishes for the cinema. 		
<p>6. Ecologically Sustainable Development (ESD)</p> <p>The EIS shall demonstrate:</p> <ul style="list-style-type: none"> • that the fit out and operation proposal maintains the ability of the building to achieve a 5 star Green star - Design and As Built v1 rating • that the fit out works respond to sustainable building principles and increase the energy efficiency of the IMAX Cinema by using low energy technologies. 	Section 5.8	Appendix G
<p>7. Construction Management</p> <p>The EIS shall address:</p> <ul style="list-style-type: none"> • community consultation, notification and complaints handling impacts of construction on adjoining development and proposed measures to mitigate construction impacts • noise impacts on and off site; • traffic and transport impacts during construction and how these impacts will be mitigated in terms of traffic, pedestrian, cycleway and public transport • waste management. 	Section 5.9	Appendix H
<p>8. Biodiversity</p> <ul style="list-style-type: none"> • the EIS shall provide an assessment of the proposal 's biodiversity impacts in accordance with the Biodiversity Conservation Act 2016, including the preparation of a Biodiversity Development Assessment Report where required under the Act. 	Section 5.10	Appendix N
<p>9. Consultation</p> <ul style="list-style-type: none"> • Undertake an appropriate and justified level of consultation in accordance with the Department's Major Project Community Consultation Guidelines October 2007. • Consult with the City of Sydney Council. 	Section 4.0	-
Plans and Documents	Report	Technical Study
<p>The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the Environmental Planning and Assessment Regulation 2000. Provide these as part of the EIS rather than as separate documents.</p> <p>In addition, the EIS must include the following:</p> <ul style="list-style-type: none"> • Architectural plans • Plan of Management • Noise and Vibration Assessment • BCA Statement • Accessibility Assessment • Construction Management Plan • Waste Management Plan including details of estimated was quantities, on site waste storage capacity and treatment and disposal or re-use of waste generated by the proposed development • Ecological Sustainable Development Report 	-	<p>Appendix A</p> <p>All appendices</p>

2.0 Site Analysis

2.1 Site Location and Context

The site is located at 31 Wheat Road, at the western edge of the Sydney Central Business District (CBD). Darling Harbour is a busy tourist, entertainment and retail precinct that consists of numerous restaurants, cafes and other attractions including the Sydney Aquarium and Sydney Wildlife World as well as Darling Park and Darling Quarter commercial office buildings.

The site's locational context is shown at **Figure 1**.

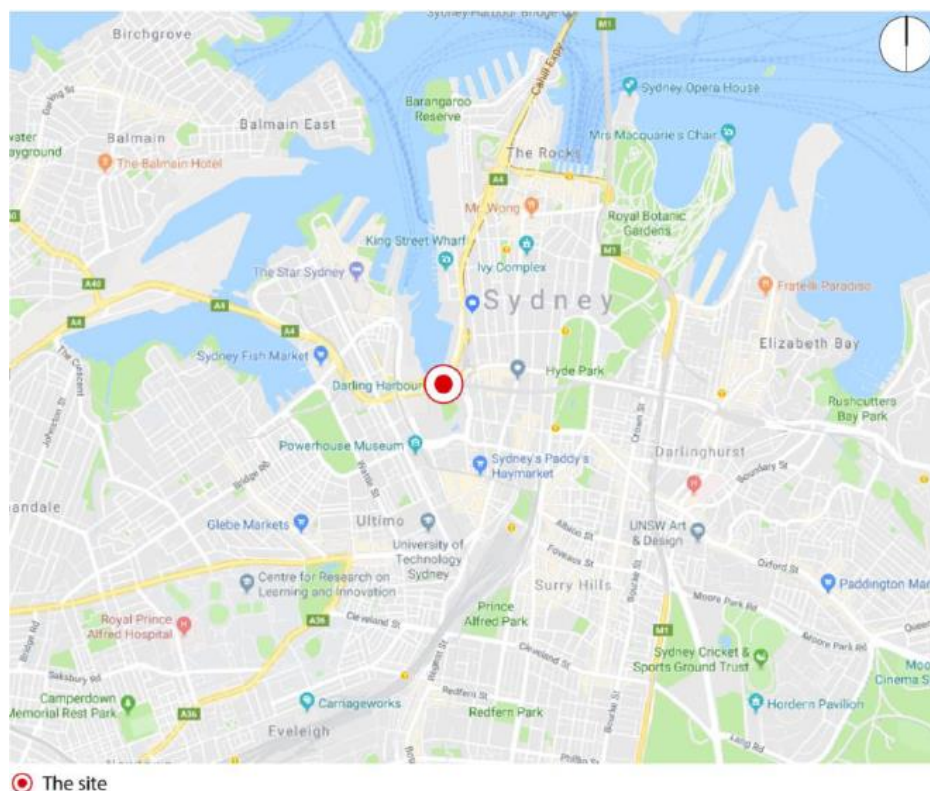


Figure 1: Locational context.

Source: Google Maps

2.2 Site Description

The site has a total lease area of 5,060m² with a total 'zone of influence' area of 10,885m² surrounding the proposed building.

The legal description of the site comprises the following:

- Lot 401-404 in DP862501;
- DP1048307; and
- DP1130038.

The registered owner of the site is the Sydney Harbour Foreshore Authority (SHFA). As of March 2019, the former IMAX building has been demolished with The Ribbon building currently undergoing active construction. A photomontage of The Ribbon as expected to be completed is shown in **Figure 2**. **Figure 3** and **4** demonstrate the current progress of construction at the site, as well as the relationship of the current hoarding to Cockle Bay Promenade, as of March 2019.



Figure 2: Artist's impression of The Ribbon upon completion
Source: Grocon



Figure 3: Current construction progress of The Ribbon (March 2019)



Figure 4: Current construction progress of The Ribbon (March 2019)

2.3 Site Access

Vehicular access arrangements to the site have been approved under SSD 7388 (as modified) and comprise the provision of a slip lane and internal accessway works from Harbour Street. Pedestrian access to the site will be gained from the pedestrian promenade along Cockle Bay to the north-west of the site.

The site benefits from excellent access to the surrounding public transport network, including proximity to Town Hall station and the Inner West Light Rail.

2.4 Surrounding Development

The Ribbon is located within a central portion of the Darling Harbour Entertainment Precinct, forming a key part of the overall tourist district. Specifically, the site is located in an area characterised by a range of recent commercial and tourist related developments under the Sydney International Convention, Exhibition and Entertainment Precinct (SICEEP) project. Darling Harbour has undergone recent significant urban renewal, with the creation of new facilities to upgrade and replace ageing development which previously existed at the site.

2.4.1 To the North

Immediately to the north of the site is the Western Distributor, with the site being located at the southern side of Cockle Bay. Further to the north of the site are the commercial premises along Cockle Bay Wharf, and Pyrmont Bridge is located beyond. This has been demonstrated at **Figures 5 and 6**.



Figure 5: Cockle Bay and Pyrmont Bridge



Figure 6: Western Distributor and Cockle Bay Wharf

2.4.2 To the East

Immediately to the east of the site is Harbour Street, which connects the Western Distributor to the southern half of the Sydney CBD (**Figure 7**). Beyond Harbour Street is the Ausgrid Substation building (**Figure 8**), with the Cross City Tunnel entrance also located in close proximity to the site. These features separate the site from the Sydney CBD, which is largely concentrated beyond the Western Distributor.

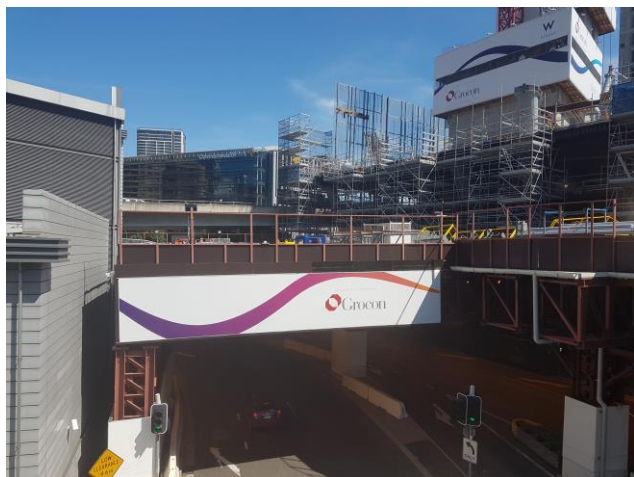


Figure 7: Harbour Street and Western Distributor

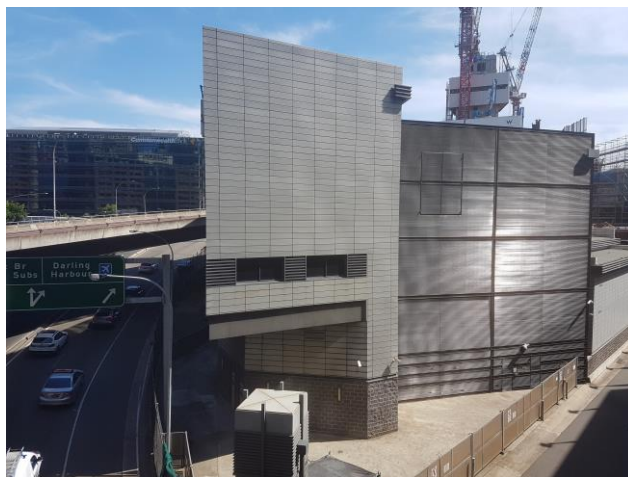


Figure 8: Ausgrid Substation building, located to the east of Harbour Street

2.4.3 To the South

Immediately to the south is the Western Distributor, as well as the on-ramps to the Harbour Street intersection. Beyond this intersection is a series of newly constructed mid-range offices occupied by the Commonwealth Bank, with ground floor retail (see **Figure 9**).

Further to the south of the site is a substantial area of public open space, comprising a children's playground, public promenade and Tumbalong Park. Beyond this is Haymarket and the Chinese Garden of Friendship.



Figure 9: Commercial offices to the south of the site

2.4.4 To the West

Immediately to the west of the site is the main north-south walking thoroughfare through Darling Harbour (**Figure 10**), providing a link between Cockle Bay and Haymarket. Beyond this is the International Convention Centre, as well as Harbourside Shopping Centre and Darling Drive.



Figure 10: Darling Harbour to the south of the site

3.0 Description of the Development

The proposed development comprises the fit out and operation of The Ribbon building for the approved IMAX Cinema development located at the site. Specifically, development includes the following elements:

- Fit out of the IMAX Cinema component of The Ribbon, with a maximum capacity of 450 patrons;
- Fit out of the associated front of house and back of house facilities at the site;
- Fit out of the ancillary facilities and common areas at the site; and
- Operation of the IMAX Cinema, including the above associated and ancillary uses.

No changes are proposed to either the external building façade, or the uses contained within the building, with both of these elements having been covered by SSD 7388 as amended. Furthermore, SSD 7388 MOD 8 has been lodged concurrently with this application, and proposes minor internal changes to the internal layout of The Ribbon to ensure consistency with SSD 8839 (this subject application). Accordingly, the proposed works have no external visual impacts on the development, and the proposal will not affect the established intensity of the development. This application instead seeks to complete the works envisaged under SSD 7388.

Architectural Plans of the proposed development have been provided at **Appendix A** and Indicative Fit Out Plans at **Appendix B** by PMDL Architecture & Design. In addition to the fit out works, approval is additionally sought regarding the operation of the development. The IMAX Cinema will be operated by World's Biggest Screens Pty Ltd (WBS or IMAX).

3.1 Fit Out

The new IMAX Cinema will serve a maximum capacity of 450 patrons. IMAX projection equipment is laser driven and consists of two projectors and 12 channel sound. The cinema is arranged with gradient seating to optimise sightlines. The screen has a width to height ratio of 1.43:1 and will measure 29.5 metres by 21 metres (for an area of 620sqm).

Patrons will enter the cinema through the IMAX Main Foyer on the ground floor to acquire cinema tickets, food and beverages. They then enter through a security area before journeying to the second floor for the IMAX cinema or first floor VIP area via stairs, escalator or lift. There is a gathering area on the west side of the second floor.

Patrons will exit the cinema on the east side, opposite the entry to the cinema on the western side. Patrons may exit by stairs or lift. Patrons exit via the main foyer on the ground floor. Indicative fit out plans have been provided at **Appendix B**, and further description of the fit out of the development is provided at **Appendix E**.

3.2 Usual Operations

The cinema will operate from 9:00am to midnight daily. Permanent staff will consist of the CEO, schools and marketing co-ordinator, accountant and operations officer/head duty manager. Casual staff include the Duty Manager, box office ticket/food and beverage sales personnel, operations persons including ushers one of which will be a trained projectionist.

Generally, the cinema will have 4 shows of 1 hour each of documentary films in the mornings followed by 3 commercial film exhibitions of approximately 2 hours each. On weekends and public holidays, the number of morning documentaries shown will reduce and commercial films replace them.

The CEO together with the Duty Managers set the weekly staffing rosters depending on patronage forecast estimates. Weekly admissions are expected to range from 4,100 to 17,000, with an expected average of 7,200. WBS will have 25 casual and 4 permanent staff in its employ. Casual staffing members will range from 9 to 15 depending on admissions.

Food and beverages will be available to all patrons on the ground floor and 3rd floor. WBS has a liquor license and may serve alcohol to patrons over 18 years. These operations, including Cinema Operations and ancillary operations of food and beverages, have been further detailed in the Plan of Management provided at **Appendix E**.

3.3 Special Events

The cinema may occasionally broadcast live showings of sports matches occurring outside the above hours of operation.

On certain occasions movies commencing at midnight will be exhibited. These generally occur at the release of major blockbusters and are subject to patron demand for such events.

Special Events are anticipated to occur no less than 6 times a year. Staffing levels will be adjusted during such events as necessary to maintain patron comfort and ease of access. This includes an increased number of ushers.

4.0 Consultation

Prior to the lodgement of the application, the City of Sydney was contacted with the intention of arranging a meeting in accordance with the SEARs. However, the City of Sydney declined the opportunity to meet in the case of this application and will instead provide commentary through the exhibition process post lodgement of the application.

It is noted that the proposed development will be placed on public exhibition for 30 days in accordance with clause 83 of the *Environmental Planning and Assessment Regulation 2000*. During the public exhibition period Council, as well as State agencies and the public will have an opportunity to make submissions on the project. Grocon will then be able to respond to any submissions received as required.

5.0 Environmental Assessment

This section of the report assesses and responds to the environmental impacts of the proposed DA. It addresses the matters set out in the SEARs (see **Section 1.6**). The Mitigation Measures at **Section 7.0** complement the findings of this section.

5.1 Secretary's Environmental Assessment Requirements

Table 2 in **Section 1.6** provides a summary which sets out the individual matters listed in the SEARs and identifies where each of these requirements have been addressed in this report and the accompanying technical studies.

5.2 Relevant EPIs, Policies and Guidelines

The relevant strategies, environmental planning instruments, policies and guidelines as set out in the SEARS are addressed in **Table 3** below.

Table 3 – Summary of consistency with relevant Strategies, EPIs, Policies and Guidelines

Instrument/Strategy	Comments
Greater Sydney Region Plan (A Metropolis of Three Cities)	<p>This DA is consistent with the Region Plan in that it will:</p> <ul style="list-style-type: none"> comprise the completion of development which will form a key part of the Harbour City in the form of a key entertainment facility; continue to support the provision of a diversity of jobs and skills for the city, consistent with Objective 18 of the plan; and contribute to the fulfilment of Objective 24 by assisting with the success of the visitor economy in the Harbour City.
Eastern Sydney District Plan	<p>The DA is consistent with the District Plan in that it will:</p> <ul style="list-style-type: none"> contribute to the growth of a stronger and more competitive Harbour CBD, in accordance with Planning Priority E7; and support the ongoing growth of the targeted tourism industry sector, in accordance with Planning Priority E13.
State Legislation	
EP&A Act	<p>The proposed development is consistent with the objects of the EP&A Act for the following reasons:</p> <ul style="list-style-type: none"> the proposal comprises the proper management of resources, and will not have any adverse impacts on the surrounding environment, the proposal will enable the promotion and co-ordination of the orderly and economic use and development of the site, the proposal will not adversely affect the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and the proposal employs the principles of ecologically sustainable development. <p>The proposed development is consistent with Division 4.1 of the EP&A Act, particularly for the following reasons:</p> <ul style="list-style-type: none"> the development has been declared to have state significance; the development is not prohibited by an environmental planning instrument; and the development has been evaluated and assessed against the relevant heads of consideration under section 4.15.
EP&A Regulation	<p>The EIS has addressed the specification criteria within clause 6 and clause 7 of Schedule 2. Similarly, the EIS has addressed the principles of ecologically sustainable development through the precautionary principle (and other considerations), which assesses the threats of any serious or irreversible environmental damage (see Section 8).</p> <p>As required by Clause 7(1)(d)(v) of Schedule 2, the following additional approvals will be required in order to permit the proposed development to occur.</p>

Instrument/Strategy	Comments																																		
	<table> <tr> <th>Act</th><th>Approval Required</th></tr> <tr> <td colspan="2">Legislation that does not apply to State Significant Development</td></tr> <tr> <td>Coastal Protection Act 1979</td><td>N/A</td></tr> <tr> <td>Fisheries Management Act 1994</td><td>N/A</td></tr> <tr> <td>Heritage Act 1977</td><td>N/A</td></tr> <tr> <td>National Parks and Wildlife Act 1974</td><td>N/A</td></tr> <tr> <td>Native Vegetation Act 2003</td><td>N/A</td></tr> <tr> <td>Rural Fires Act 1997</td><td>N/A</td></tr> <tr> <td>Water Management Act 2000</td><td>N/A</td></tr> <tr> <td colspan="2">Legislation that must be applied consistently</td></tr> <tr> <td>Fisheries Management Act 1994</td><td>No</td></tr> <tr> <td>Mine Subsidence Compensation Act 1961</td><td>No</td></tr> <tr> <td>Mining Act 1992</td><td>No</td></tr> <tr> <td>Petroleum (Onshore) Act 1991</td><td>No</td></tr> <tr> <td>Protection of the Environment Operations Act 1997</td><td>No</td></tr> <tr> <td>Roads Act 1993</td><td>No</td></tr> <tr> <td>Pipelines Act 1967</td><td>No</td></tr> </table>	Act	Approval Required	Legislation that does not apply to State Significant Development		Coastal Protection Act 1979	N/A	Fisheries Management Act 1994	N/A	Heritage Act 1977	N/A	National Parks and Wildlife Act 1974	N/A	Native Vegetation Act 2003	N/A	Rural Fires Act 1997	N/A	Water Management Act 2000	N/A	Legislation that must be applied consistently		Fisheries Management Act 1994	No	Mine Subsidence Compensation Act 1961	No	Mining Act 1992	No	Petroleum (Onshore) Act 1991	No	Protection of the Environment Operations Act 1997	No	Roads Act 1993	No	Pipelines Act 1967	No
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Protection of the Environment Operations Act 1997	No																																		
Roads Act 1993	No																																		
Pipelines Act 1967	No																																		
Biodiversity Conservation Act 2016	The proposed development includes the provision of a Biodiversity Assessment at Appendix N and has been further discussed at Section 5.11 below.																																		
SEPP 55	Under SSD 7388, it was previously determined that the development could be made suitable for the development proposed in accordance with SEPP 55. Given that this application comprises fit out works and operation of the cinema component of the development only, no further assessment is considered necessary.																																		
SEPP (Infrastructure)	In accordance with Schedule 1 of the Infrastructure SEPP, SSD 7388 was previously referred to RMS for comment. Given that the development was previously referred, and that the proposed development sought under this application comprises fit out / operation, with no additional intensification of the use, no further referral is required to the RMS.																																		
SEPP (State and Regional Development)	Pursuant to the State and Regional Development SEPP, a project in the Darling Harbour Development Area is determined to be State Significant if it has a CIV of \$10 million or more. The proposed development has a CIV exceeding \$10 million, and is therefore identified as SSD and considered to be development of State and / or regional development.																																		
Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005	The proposed development has been assessed against the provisions of the <i>Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005</i> (Sydney Harbour Catchment REP) below.																																		
Darling Harbour Development Plan No. 1	The site is covered by the <i>Darling Harbour Development Plan No. 1</i> , which permits the provision of entertainment facilities within the precinct. The proposed development is consistent with the objectives of the development plan, in that it encourages the development of tourist, recreational, entertainment and cultural uses in the area.																																		

Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

The Site is identified within the 'Foreshores and Waterways Area' of Sydney Harbour, and accordingly is subject to the provisions of the Sydney Harbour Catchment REP. Part 3, Division 2 of the REP refers to matters which are to be taken into consideration by consent authorities before granting consent for development. **Table 4** provides a breakdown of the application of each matter, as relevant to the proposed development.

Table 4 – Assessment of the proposal against the Sydney Harbour Catchment REP

Clause	Comment
21. Biodiversity, Ecology and Environment Protection	The proposal relates only to the provision of internal fit out works and operations at the site, and will therefore have no adverse impacts on biodiversity, ecology or the environment of Sydney Harbour. A Biodiversity Assessment has been provided to this effect at Appendix N .
22. Public Access to, and Use of, Foreshores and Waterways	The proposed fit out will be entirely within the envelope of the approved Ribbon building, and accordingly will have no impacts on access for the general public to the waterways of Sydney Harbour.
23. Maintenance of a Working Harbour	The proposal does not affect the provision of a working harbour in Sydney, or 'Working Waterfront' land.
24. Interrelationship of Waterway and Foreshore Uses	The proposal doesn't affect access to or uses within the waterway. Stormwater quality for The Ribbon has been addressed as part of SSD 7388.
25. Foreshore and Waterways Scenic Quality	The impact of The Ribbon development on the scenic qualities of Sydney Harbour was previously assessed under SSD 7388. The proposed fit out will not have any impact on this scenic impact.
26. Maintenance, protection and Enhancement of Views	The proposed internal fit out will have no impact on view corridors around the site.
27. Boat Storage Facilities	The proposal will have no impact on boat storage facilities.

5.3 Consistency with The Ribbon Development Consent (SSD 7388)

The proposed application has been designed to align with The Ribbon Development Consent (SSD 7388), as it is for the fit out and operation of the IMAX Cinema previously approved under the aforementioned SSD. An assessment of the SSD 7388 conditions relevant to the proposed development has been provided in **Table 5**.

Table 5 – Consistency with SSD 7388

Condition no.	Comment	Consistent
A5 – Limits of Approval	As the proposed use constitutes the fit out and operation of an entertainment use within The Ribbon development, it is not covered by the base approval and thereby separate approval is sought in the form of this application.	✓
B5 – Noise Assessment	A Noise Impact Assessment has been provided assessing internal noise impacts associated with the IMAX Cinema use of the site, which is a non-hotel/serviced apartment use.	✓
B26 – Access for People with Disabilities	The proposed IMAX Cinema is compliant with the Building Code of Australia (BCA) and Disability Discrimination Act (DDA) with regards to access for people with disabilities.	✓
B31 – Storage and Handling of Waste	The waste generated by the IMAX Cinema will be held in the waste storage rooms on the ground floor, which will hold all waste and recyclable material generated by the premises.	✓
C1 – Certified Plans	Proposal is not inconsistent with this clause.	✓
E7 – Ecologically Sustainable Development Drawings	The proposed fit out and operation of the IMAX Cinema will not impact on the 5-Star Green Star – Design and As-Built v1 rating of The Ribbon development.	✓
E19 – Waste Management	The Waste Management Plan for The Ribbon development (Appendix J) includes the IMAX Cinema.	✓

A Section 4.55(1A) Modification Application, SSD 7388 MOD 8, has been lodged concurrently with this application to ensure consistency between the base building and the proposed IMAX fitout and operation.

5.4 Fit Out

The Fit Out of the cinema will fully comply with the relevant SEARs, including Disability Discrimination Act and AS1428 compliance in addition to adequate provisions of sanitary facilities.

An access review has been undertaken by Morris-Goding Accessibility Consulting, and is provided at **Attachment K**. The review includes evaluation of ingress and egress, paths of travel, circulation areas, and sanitary facilities with regards for access for people with disabilities. This assessment found that with respect to all areas assessed, the proposed development is capable of compliance with all the necessary requirements, including the Disability Discrimination Act (DDA), Building Code of Australia (BCA), relevant Australian standards and the higher level of accessibility and inclusiveness as set by the project.

Each floor will contain adequate provision of toilet facilities, with sufficient facilities provided to meet Building Code of Australia guidelines (see **Appendix D**).

5.5 Operations Management

With regards to the relevant SEARs, articles to be addressed including hours of operation and special events, access by patrons, staff numbers, and food and beverage provision, deliveries, loading and waste management. These have been addressed in the attached Plan of Management provided at **Appendix E** and summarised in **Section 3.2** and **3.3** above. An assessment of these articles has been provided below in **Table 6**.

Table 6 – Assessment of IMAX Plan of Management

Article	Comment
Hours of operation	The proposed hours of regular operation as well as special events are consistent with comparable cinemas in Australia.
Access by patrons	Patron access is appropriate and accessible, and complies with the Disability Discrimination Act.
Staff numbers	Staffing numbers are appropriate with regards to estimated patronage and are consistent with comparable cinemas in Australia.
Food and beverage provision	The provision of food and beverages is consistent with other comparable cinemas in Australia. The provision of alcoholic drinks will only be for patrons of the cinema and not the general public at-large.
Deliveries	Deliveries will occur in the base building service zone with direct access to the IMAX back of house. The building has been designed to accommodate large and heavy equipment including projectors and screens and such facilities are therefore appropriate.
Loading and waste management	IMAX will collect its own waste. Rubbish will be collected by cinema staff at the conclusion of each session, which will then be bagged and moved to an interim waste college point within the ground floor Back of House via waste shoot. Afterward, waste will be transferred to the common waste disposal in the base building via mobile bins for final compacting and removal.

5.6 Noise and Vibration Impacts

As part of this SSDA, the Noise Impact Assessment employed across The Ribbon development has been developed by Acoustic Logic and is provided at **Appendix F**. It includes discussion on noise sources from within the development, including the IMAX Cinema.

As the IMAX Cinema sits below the serviced apartments in the building, a floor system separating the two uses will be composed of a minimum 200mm thick concrete slab and 2x16mm resiliently suspended ceiling. Assuming that a sound pressure level of up to 105dB(c) is achieved within the IMAX Cinema auditorium, there will be an internal noise level of less than 25dB(A) within the internal apartments. 25dB(A) is insignificant, and internal noise levels below 50-55dB(A) are unlikely to awaken people from sleep.

External noise impacts caused by the IMAX Cinema was considered in the Noise Impact Assessment as part of the external noise emissions of The Ribbon development. Due to the nature of the cinema development, it is not expected that there will be substantial external acoustic impacts from the development. Further discussion is provided at **Appendix F**.

5.7 Building Code of Australia (BCA) Compliance

A review of the proposal against the applicable requirements of the Building Code of Australia (BCA) 2016 has been undertaken by McKenzie Group, with the report provided at **Appendix D**. This includes assessment regarding fire protection, egress provisions, access for persons with disabilities, fire services and equipment, health and amenity, as well as energy efficiency.

The report concludes that the proposed IMAX Cinema fit out is capable of complying with the relevant BCA guidelines though certain items for review will require further assessment through the detailed construction documentation stage.

5.8 Ecologically Sustainable Development

As part of the proposed fit out works, a review of the plans has been undertaken by Cundell to determine the environmental sustainability of the proposed design. A statement has been provided at **Appendix G** and serves as a supplementary review of the fit out plans, in order to provide an updated commentary on the environmental sustainability of the development. The environmental sustainability report details the relevant sustainable building principles to the proposed fit out, and then provides a set of project responses to each applicable initiative. Relevant initiatives in relation to the proposed development include Indoor Environment Quality, Energy, Water and Materials.

These initiatives will contribute to the provision of an environmentally sustainable development at the site, with the proposed fit out works exceeding minimum requirements and representing excellence in sustainable development in Australia.

Cundell concluded that the fit out and operation proposed works will not affect the 5-Star Green Star – Design and As-Built v1 rating for the entire development.

5.9 Construction Management

The Construction Management Plan (CMP) employed across The Ribbon development is included at **Appendix H**. The report details the site, the development which will result, and the systems in place to ensure the minimisation of the impacts of the development during the construction period. The Construction Management Plan seeks to ensure that the development does not result in any adverse construction impacts, including to the following:

- Pedestrian and vehicular access;
- Road network performance;
- Acoustic impacts;
- Stormwater and erosion;
- Safety;
- Hazardous materials;
- Dust minimisation; and
- Waste transport and disposal.

This Construction Management Plan will also be adopted for the proposed fit out works of the IMAX Cinema.

5.10 Biodiversity

In accordance with the requirements of the SEARs, the Department has requested that:

“the EIS shall provide an assessment of the proposal's biodiversity impacts in accordance with the Biodiversity Conservation Act 2016, including the preparation of a Biodiversity Development Assessment Report where required under the Act.”

A Biodiversity Assessment has been prepared by Eco Logical, and is provided at **Appendix N**. The attached assessment demonstrates that the proposed development does not trigger either the Biodiversity Assessment Method (BAM), or the subsequent potential offsetting requirements under the Biodiversity Offsets Scheme (BOS).

On this basis, a Biodiversity Development Assessment Report is not required in this case. A letter of waiver for requiring a BDAR is provided at **Appendix I**. The proposed IMAX Cinema will not result in any adverse biodiversity impacts.

5.11 Waste Management

A Waste Management Plan for The Ribbon development, including the serviced apartments and IMAX Cinema, has been prepared by The Aquis Group, and is provided at **Appendix J**. The plan details the Total Waste Estimate for the IMAX Cinema and IMAX Retail, estimated at 2,350 and 9,379 litres/day respectively. The IMAX components of the development will utilize a waste room separate from the hotel / serviced apartment components of the building, consistent with the waste management practices identified under SSD7388.

The Waste Management Plan also details waste infrastructure to be provided, including a Shared AutoBaler for cardboard waste, MGB wheelie bins for paper and comingled waste, a crusher and 80L bins for glass, a Food Processing Unit and 120L bins for organic waste, a Compactor and 1100L MGB wheelie bins for residue, and a Tank and Caddy for used cooking oil.

5.12 Visual Impact

The proposed physical works comprise the internal fit out of the IMAX Cinema components of The Ribbon development only, and do not propose any external changes to the development. It is therefore not expected that the works will have any impact on the external appearance of the development. Rather, the internal fit out works will only provide for the fulfilment of the internal usage of the IMAX Cinema as previously approved under SSD 7388.

5.13 Services Adequacy

A Hydraulic Services report has been prepared by EFW Consulting Engineers and is attached at **Appendix L**. It is an assessment of the hydraulic infrastructure within the vicinity of the proposed development in order to determine the existing infrastructure which is affected by the proposal. Similarly, an Electrical and Telecommunications Services report has been prepared by Aecom and is provided at **Appendix M**. This report demonstrates an assessment of the development's impact on electrical and telecommunication services in the vicinity.

This report reflects the previous studies undertaken as part of SSD 7388, demonstrating that the services infrastructure adequacy was previously considered as part of the base DA. Given the nature of the proposed development as comprising the IMAX Cinema fit out and operation, no further assessment is considered necessary on this front, with all services provision ensured by Conditions B63 to B66. The proposed works, accordingly, can be adequately serviced by the works associated with the approval of SSD 7388.

5.14 Site Suitability

Within the context of The Ribbon development, the proposed fit out works are suitable for the site on the basis of the following:

- The proposed works will complete the IMAX Cinema element of The Ribbon development, consistent with the approved uses under SSD 7388.
- The proposal will result in only minor environmental impacts which can be appropriately managed and mitigated.
- The fit out works will enable the delivery of a high quality entertainment facility, which in the context of Darling Harbour will provide a strongly positive experience for visitors to the district.
- The works will contribute to furthering the popularity of one of the premier tourist precincts in Sydney.

5.15 Public Interest

The proposed IMAX Cinema fit out works are in the interest of the public on the basis of the following:

- The proposed works comprise the completion of the IMAX Cinema previously assessed under SSD 7388, with the fit out works allowing the cinema to be utilised. In this regard, the proposed development will enable the delivery of the wider public benefits previously considered by the Department for SSD 7388.

- The proposed works will deliver a high quality entertainment facility to Darling Harbour within the Sydney Central Business District, which will promote tourism and economic growth in the area.
- The works will contribute to the ongoing growth of Darling Harbour as being one of Sydney's most innovative convention, entertainment and exhibition precincts.
- The works will promote vibrancy and activity at Darling Harbour.

6.0 Environmental Risk Assessment

The Environmental Risk Assessment (ERA) establishes a residual risk by reviewing the significance of environmental impacts and the ability to manage those impacts. The ERA for The Ribbon development has been adapted from Australian Standard AS4369.1999 Risk Management and Environmental Risk Tools.

In accordance with the SEARs, the ERA addresses the following significant risk issues:

- the adequacy of baseline data;
- the potential cumulative impacts arising from other developments in the vicinity of the Site; and
- measures to avoid, minimise, offset the predicted impacts where necessary involving the preparation of detailed contingency plans for managing any significant risk to the environment.

Figure 11 indicates the significance of environmental impacts and assigns a value between 1 and 10 based on:

- the receiving environment;
- the level of understanding of the type and extent of impacts; and
- the likely community response to the environmental consequence of the project;

The manageability of environmental impact is assigned a value between 1 and 5 based on:

- the complexity of mitigation measures;
- the known level of performance of the safeguards proposed; and
- the opportunity for adaptive management.

The sum of the values assigned provides an indicative ranking of potential residual impacts after the mitigation measures are implemented.

Significance of impact	Manageability of impact				
	5 Complex	4 Substantial	3 Elementary	2 Standard	1 Simple
1 – Low	6 (Medium)	5 (Low/Medium)	4 (Low/Medium)	3 (Low)	2 (Low)
2 – Minor	7 (High/Medium)	6 (Medium)	5 (Low/Medium)	4 (Low/Medium)	3 (Low)
3 – Moderate	8 (High/Medium)	7 (High/Medium)	6 (Medium)	5 (Low/Medium)	4 (Low/Medium)
4 – High	9 (High)	8 (High/Medium)	7 (High/Medium)	6 (Medium)	5 (Low/Medium)
5 – Extreme	10 (High)	9 (High)	8 (High/Medium)	7 (High/Medium)	6 (Medium)

Figure 11 Risk Assessment Matrix

Risk Assessment						
Item	Phase	Potential Environmental Impact	Proposed Mitigation Measures and / or Comment	Significance of Impact	Manageability of Impact	Residual Impact
Environmental Construction Management	C	Construction impacts including noise, waste, dust, air quality and traffic.	<ul style="list-style-type: none"> Works are to be carried out in accordance with the Construction Management Plan. 	3	2	5 Low / medium
Compliance with the BCA	O	Ensuring that the development complies with the relevant provisions of the BCA	<ul style="list-style-type: none"> Development is to be considered in accordance with the provisions of the BCA, as detailed at Appendix D. 	3	1	4 Low / medium
IMAX Cinema Operational Impacts	O	Ensuring that the operation of the IMAX Cinema component does not result in any adverse impacts	<ul style="list-style-type: none"> Adherence to the submitted Plan of Management 	2	2	4 Low / medium
Infrastructure and Utilities	O	Ensuring that the IMAX Cinema is adequately serviced by utilities	<ul style="list-style-type: none"> During the post Development Consent stage, detailed design is to be undertaken to ensure adequate provision of utilities. 	2	2	4 Low / medium
Visual Impact	O	Visual impact from use of the proposed fit out works, from surrounding buildings and public spaces.	<ul style="list-style-type: none"> Impact is likely to be minimal and would not require mitigation measures 	1	1	2 Low
Waste Management	O	Ongoing management of waste from IMAX Cinema operations	<ul style="list-style-type: none"> In operation, the development is to be consistent with the submitted Waste Management Plan 	1	2	2 Low

7.0 Mitigation Measures

The collective measures required to mitigate the impacts associated with the proposed works are detailed in **Table 7** below. These measures have been derived from the previous assessment in **Section 5.0** and those detailed in appended consultants' reports.

Table 7 Mitigation Measures

Mitigation Measures
<p>Construction Management</p> <ul style="list-style-type: none"> The development is to follow the Construction Management Plan as detailed in Appendix H.
<p>BCA Compliance</p> <ul style="list-style-type: none"> The detailed design of the development is to be undertaken in accordance with the relevant Conditions of SSD 7388, and the Building Code of Australia Report as detailed in Appendix D.
<p>Accessibility</p> <ul style="list-style-type: none"> The detailed design of the development is to be undertaken in accordance with the findings of the Accessibility Review, found at Attachment K.
<p>Operational Impacts</p> <ul style="list-style-type: none"> The proposed development is to follow the Plan of Management to minimise operational impacts as detailed in Appendix E.
<p>Noise and Vibration Impacts</p> <ul style="list-style-type: none"> The detailed design of the development is to be undertaken with the findings of the Noise Impact Assessment, found at Appendix F.
<p>Waste Management</p> <ul style="list-style-type: none"> Construction and operation of the development will be undertaken in accordance with the Waste Management Plan at Appendix J.

8.0 Justification of the Proposal

In general, investment in major projects can only be justified if the benefits of doing so exceed the costs. Such an assessment must consider all costs and benefits, and not simply those that can be easily quantified. As a result, the EP&A Act specifies that such a justification must be made having regard to biophysical, economic and social considerations and the principles of ecologically sustainable development.

This means that the decision on whether a project can proceed or not needs to be made in the full knowledge of its effects, both positive and negative, whether those impacts can be quantified or not.

The proposed development involves only the fit out of the IMAX Cinema at the site. The assessment must therefore focus on the identification and appraisal of the effects of the proposed change over the site's existing condition.

Various components of the biophysical, social and economic environments have been examined in this EIS and are summarised below.

8.1 Social and Economic Impacts

The proposed development will have the positive economic impact of enabling the completion of the development contemplated under SSD 7388. This will provide additional employment during the construction phase of the development, as well as enable the delivery of a key tourist and visitor entertainment facility that will realise much of the substantial economic benefits envisaged under the base building DA.

The proposed development will have the positive social impact of rebuilding an IMAX Cinema on the site, helping activate the area around the precinct and serving as a major tourist attraction.

8.2 Biophysical Impacts

This environmental impact statement and the provided Biodiversity Assessment (**Appendix N**) both demonstrate that the proposal will not result in any adverse biophysical impacts.

8.3 Ecologically Sustainable Development

The EP&A Regulation lists 4 principles of ecologically sustainable development to be considered in assessing a project. They are:

- The precautionary principle;
- Intergenerational equity;
- Conservation of biological diversity and ecological integrity; and
- Improved valuation and pricing of environmental resources.

An analysis of these principles follows.

Precautionary Principle

The precautionary principle is utilised when uncertainty exists about potential environmental impacts. It provides that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. The precautionary principle requires careful evaluation of potential environmental impacts in order to avoid, wherever practicable, serious or irreversible damage to the environment.

This EIS has not identified any serious threat of irreversible damage to the environment and therefore the precautionary principle is not relevant to the proposal.

Intergenerational Equity

Inter-generational equity is concerned with ensuring that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations. The proposal has been designed to benefit both the existing and future generations by:

- implementing safeguards and management measures to protect environmental values;
- contributing to the overall tourism appeal of Darling Harbour; and
- facilitating job creation and the provision of a key visitor and tourist facility in a key location in Sydney.

The proposal has integrated short and long term social, financial and environmental considerations so that any foreseeable impacts are not left to be addressed by future generations. Issues with potential long term implications such as waste disposal would be avoided and/or minimised through construction planning and the application of safeguards and management measures described in this EIS and the appended technical reports.

Conservation of biological diversity and ecological integrity

The principle of biological diversity upholds that the conservation of biological diversity and ecological integrity should be a fundamental consideration.

The proposal would not have any significant effect on the biological diversity and ecological integrity of the study area.

Improved valuation, pricing and incentive mechanisms

The principles of improved valuation and pricing of environmental resources requires consideration of all environmental resources which may be affected by a proposal, including air, water, land and living things. Mitigation measures for avoiding, reusing, recycling and managing waste during construction and operation would be implemented to ensure resources are used responsibly in the first instance.

Additional measures will be implemented to ensure no environmental resources in the locality are adversely impacted during the construction or operational phases.

9.0 Conclusion

This EIS has been prepared to consider the environmental, social and economic impacts of the proposed development. The EIS has addressed the issues outlined in the SEARs (**Appendix C**) and accords with Schedule 2 of the EP&A Regulation.

Having regard to biophysical, economic and social considerations, including the principles of ecologically sustainable development, the carrying out of the project is justified for the following reasons:

- The proposal is permissible with consent and meets all requirements of the relevant planning controls for the site.
- The proposal is consistent with The Ribbon development approved under SSD 7388 (as modified), and will fulfil the intent of the previous DA to enable the completion of the IMAX Cinema fit out component of the development.
- The proposed development will ensure that The Ribbon will provide a high-class entertainment cinema facility with the world's largest screen within Sydney's leading tourist precinct.
- The proposed development will ensure the provision of adequate management of the premises, both during construction and operation.

Given the merits described above it is requested that the application be approved.