

# Sydney Football Stadium

Stage 2 DA

Architectural Design Statement

Report by Cox Architecture

20 AUGUST 2019





Cox Architecture Pty Ltd  
ACN 002535891  
Nominated Architects  
Joe Agius No. 6491  
Russell Lee No. 6367

PO Box Q193  
Sydney NSW 1230  
Level 6, 155 Clarence Street  
Sydney NSW 2000 Australia  
Tel: +61 2 9267 9599  
Fax: +61 2 9264 5844  
[coxarchitecture.com.au](http://coxarchitecture.com.au)



# Contents

<hr/> <div>Introduction05</div> <div>Introduction</div> <div>Background</div> <div>Overview of Proposed Development</div> <div>Site Description</div> <div>Assessment Requirements</div> <div>Conditions</div> <hr/>	<div>The Evolution of the Modern Stadium</div> <div>Design Excellence</div> <div>Heritage and Archaeology</div> <div>Environmental Impacts</div> <div>Noise and Acoustic Privacy</div> <div>Wind Impacts on Surrounding Areas</div> <div>Reflectivity</div> <div>Privacy</div> <div>Services</div> <div>Waste Management</div> <div>Loading Zones</div> <div>Mechanical Plant</div> <div>ESD Principles</div> <div>Access and Circulation</div> <div>Pedestrian and Bicycle Circulation</div> <div>Emergency Vehicle Access</div> <div>Service Access and Circulation</div> <div>Vehicular Access and Movement</div> <div>Modes of Operation</div> <div>Day to Day</div> <div>SFS Event Mode</div> <div>Double Header</div> <div>Special Events</div> <div>Accessibility</div> <div>Precinct Context</div> <div>Within the Stadium</div> <div>Solar Access and Overshadowing</div> <hr/>	<hr/> <div>Stage 1 Consent Conditions Checklist79</div> <hr/>
<div>Site Analysis13</div> <div>Site Boundary</div> <div>Site Analysis Plan</div> <div>Access and Movement</div> <div>Cultural and Heritage Significance</div> <div>Precinct Wide Connections</div> <div>Urban Context</div> <div>Precinct</div> <hr/>		<div>Appendices83</div> <div>Architectural Drawings</div> <hr/>
<div>Vision19</div> <div>Master Plan</div> <div>Stadium Siting</div> <div>Functional Planning</div> <div>Seating Bowl</div> <div>Architectural Design</div> <div>The Concourse</div> <div>Place making</div> <div>The Facade</div> <div>The Roof</div> <div>Roof Design</div> <div>Highly Sculptural</div> <div>More with Less</div> <div>Reducing Mass</div> <div>Materials</div> <div>Naturally Illuminating</div> <div>Contextual, Local and of its Place</div> <div>Detailing</div> <div>Integrated Photovoltaics</div> <div>Roof Composition</div> <div>Roof Access and Lighting</div> <div>Elevations</div> <div>Bulk, Massing and Modulation within the Approved Envelope</div> <div>Ground Level Interfaces</div> <div>Innovation in Design and Delivery</div> <div>Future Proofing</div>	<div>Consistency with Stage 1 DA Urban Design Guidelines55</div> <div>Key Moves</div> <div>Access and Movement</div> <div>Precinct Access and Egress</div> <div>Active Transport</div> <div>Vehicular Access and Movement</div> <div>Circulation within the Site</div> <div>Building Height and Massing</div> <div>Public Realm and Open Space</div> <div>Security and Safety</div> <div>Activation</div> <div>Wayfinding, Signage and Interpretation</div> <div>Architectural Expression</div> <div>Design Excellence</div> <div>Key Views</div> <div>Materiality &amp; Lighting</div> <div>Cultural and Heritage Significance</div> <div>Sustainability</div>	







# Introduction



Artist's Impression



# Introduction

## Introduction

This report supports a State Significant Development (SSD) Development Application (DA) for the redevelopment of the Sydney Football Stadium, which is submitted to the Minister for Planning pursuant to Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act). The redevelopment is being conducted in stages comprising the following planning applications:

- Stage 1 – Concept Proposal for the stadium envelope and supporting retail and functional uses as well as development consent for the carrying out of early works, including demolition of the existing facility and associated structures.
- Stage 2 – detailed design, construction and operation of the stadium and supporting business, retail and functional uses.

Development consent was granted for the Concept Proposal and detailed approval to carry out early works and demolition (SSD 18\_9249) by the Minister for Planning on 6 December 2018.

This report relates to the Stage 2 application and considers the detailed design, construction and operation of the new Sydney Football Stadium pursuant to the approved Concept Proposal.

Infrastructure NSW is the proponent of the Stage 2 DA.

## Background

The Sydney Football Stadium (SFS) is a significant component of the sports facilities that comprise the Sydney Cricket and Sports Ground. Completed in 1988, the SFS has hosted numerous sporting events in its 30 years of operation for a number of sporting codes including football (soccer), rugby league and rugby union as well as occasional music concerts.

The NSW Stadia Strategy 2012 provides a vision for the future of stadia within NSW, prioritising investment to achieve the optimal mix of venues to meet community needs and to ensure a vibrant sports and event environment in NSW. A key action of the strategy included development of master plans for Tier 1 stadia and their precincts covering transport, integrated ticketing, spectator experience, facilities for players, media, corporate and restaurant and entertainment provision. SFS is one of three Tier 1 stadia within NSW, the others being Stadium Australia (Olympic Park) and the Sydney Cricket Ground.

In order to qualify for Tier 1 status, a stadium is required to include:

- Seating capacity greater than 40,000;
- Regularly host international sporting events;
- Offer extensive corporate facilities, including suites, open-air corporate boxes and other function/dining facilities; and
- Be the home ground for sporting teams playing in national competitions.

On 6 December 2018, development consent was granted for the Concept Proposal and Early Works/ Demolition stage of the SFS redevelopment (SSD 18\_9249). This consent permitted the completion of demolition works on the site and established

the planning and development framework through which to assess this subsequent Stage 2 application. Specifically, State Significant Development Consent SSD 18\_9249 encompassed:

1. A Concept Proposal for:
  - A maximum building envelope for the stadium with capacity for 45,000 seats (55,000 patrons in concert mode) and 1,500 staff.
  - Urban Design Guidelines and a Design Excellence Strategy to guide the detailed design of the stadium at Stage 2.
  - General functional parameters for the design and operation of the new stadium, including:
    - Range of general admission seating, members areas, premium box/terrace, function/lounge and corporate suite options;
    - Administration offices;
    - New roof with 100% drip-line coverage of all permanent seating;
    - Flood lighting, stadium video screens and other ancillary fittings;
    - Food and beverage offerings;
    - Facilities for team, media, administration and amenity such as changing rooms, media rooms and stadium; and
    - Provision for ancillary uses within the stadium and surrounds.



- Principles and strategies for transport and access arrangements.

- Indicative staging of the development.

2. Detailed consent for the following works:

- The demolition of the existing SFS and ancillary structures, including the existing Sheridan, Roosters, Waratahs and Cricket NSW buildings down to existing slab level.
- Site and construction management, including use of the existing MP1 car park for construction staging, management and waste processing, and provisions for temporary pedestrian and vehicular access management.
- The protection and retention of Tree 125 (Moreton Bay Fig adjacent to Moore Park Road) and Tree 231-238 cluster (Hills Weeping Fig and others near Paddington Lane) and all existing street trees located outside of the site boundary, with the removal of all other vegetation within the proposed future building footprint.
- Works to make the site suitable for the construction of the new stadium (subject to this separate Stage 2 application).

## Overview of Proposed Development

The application represents the next phase in the SFS redevelopment. It seeks consent for the detailed design, construction and operation of the new stadium as 'Stage 2' of the redevelopment, which includes:

- Construction of a new stadium with up to 45,000 seats (55,000 capacity in concert-mode), including playing pitch, grandstands, sports and stadium administration areas, food and drink kiosks, corporate facilities and all other aspects of a modern stadium;
- Operation and use of the stadium and surrounding site area for a range of sporting and entertainment events;
- Vehicular and pedestrian access and circulation arrangements, including excavation to deliver a partial basement level for storage, internal loading and servicing at the playing pitch level;
- Reinstatement of the MP1 car park following the completion of construction, including enhanced vehicle rejection facilities and direct vehicular connection to the new stadium basement level;
- Public domain improvements within the site boundary, including hard and soft landscaping, to deliver a range of publicly accessible, event and operational areas;
- Provision of new pedestrian and cycling facilities within the site;
- Signage, including building identification signage, business identification signage and a wayfinding signage strategy; and
- Extension and augmentation of physical infrastructure/ utilities for the development within the site.

The proposed development is consistent with the approved Concept Proposal pursuant to State Significant Development Consent SSD 9249.



# Introduction

## Site Description

The site is located at 40-44 Driver Avenue, Moore Park within the Sydney Cricket Ground Precinct. It is bound by Moore Park Road to the north, Paddington Lane to the east, the existing SCG stadium to the south and Driver Avenue to the west. The site is located within the City of Sydney local government area.

The site is legally described as Part Lots 1528 and 1530 in Deposited Plan 752011 and Lot 1 in Deposited Plan 205794. The site is Crown Land, with the SCSGT designated as the sole trustee under the Sydney Cricket and Sports Ground Act 1978. The site is wholly contained within designated land controlled by the Sydney SCSGT under Schedule 2A of the Sydney Cricket and Sports Ground Act 1978.

In a broader context, the site is largely surrounded by Centennial and Moore Parks, the Fox Studios and Entertainment Quarter precincts and the residential suburb of Paddington. Located approximately 3km from the Sydney CBD and approximately 2km from Central Station, the site is connected to Sydney's transport network through existing bus routes and will benefit from a dedicated stop on the soon to be completed Sydney CBD and South East Light Rail.

The locational context of the Site is shown in Figure 1, whilst the site boundaries and existing site features are shown in Figure 2.

### Legend

- Site Boundary
- Centennial / Moore Park
- Light Rail
- LGA Boundaries



Figure 1: Regional Site Context Plan



Legend

- Site Boundary
- Light rail
- Centennial / Moore Park
- Victoria Barracks
- Fox Studios
- Entertainment Quarter
- Sydney Boys and Girls High School

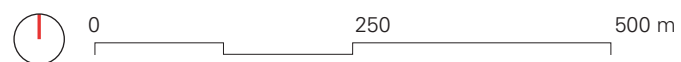


Figure 2: Site Area and Local Plan



# Introduction

## Assessment Requirements

The Department of Planning and Environment have issued Secretary’s Environmental Assessment Requirements (SEARs) to the applicant for the preparation of an Environmental Impact Statement for the proposed development. This report has been prepared having regard to the SEARs as follows:

SEAR	Page number
Built Form and Urban Design	
Address the height, bulk and scale, and setbacks of the proposal in relation to the approved building envelope.	Page 26
Assess the height, bulk, scale and setbacks of the proposed stadium in relation to the locality and the surrounding development topography and streetscape, having regard to the heritage significance of the surrounding locality.	Page 26
Assess how the proposed built form is consistent with and located within the maximum building envelope approved under SSD 9249.	Page 26
Assess how the proposal achieves consistency with the Sydney Football Stadium Urban Design Guidelines (SSD 9249).	Page 55
Address design quality, with specific consideration of the overall site layout, streetscape, public spaces design and layout, proposed level changes and connections across the site, entrances, plazas, concourse and relationship to Driver Avenue, parklands and Moore Park Road, open spaces, façade, rooftop, massing, setbacks, building articulation, materials, colours, landscaping and Crime Prevention Through Environmental Design Principles.	Overall site layout - Page 20 Streetscape - Page 26 Public spaces design and layout - Refer to Landscape Report Proposed level changes and connections across the site - For connections refer to pages 35-40; for level changes refer to Landscape Report Entrances - Pages 20, 36, 38 and 39 Plazas - Refer to Landscape Report Concourse and relationship to Driver Avenue, parklands and Moore Park Road - Page 20 and refer to Landscape Report Open Spaces - refer to Landscape Report Façade, rooftop, massing, setbacks, building articulation, materials, colours - Pages 22-27 Landscaping - refer to Landscape Report Crime Prevention Through Environmental Design Principles - Refer to CPTED Report

SEAR	Page number
Detail how services, including but not limited to waste management, loading zones and mechanical plants, are integrated into the design of the development.	Page 32-33. Also refer to Waste Report
Assess how the proposal will achieve equity of access throughout the development with identified routes for people with a disability	Page 40 Also refer to Access Report
Provide details of the urban design strategy for the vehicular and pedestrian access to the site including wayfinding and equitable design outcome for all users. This should include strategies for event and non-event days. Assess how the proposal achieves effective circulation for day to day activity, match day and event mode to demonstrate crowd control and movement.	Vehicular and pedestrian access - Pages 36-37 Wayfinding - Refer to Wayfinding Strategy Equitable design - Pages 40-41; Also refer to Access Report Circulation for day to day activity, match day and event mode - Pages 38-39
Assess how effective pedestrian circulation for day to day activities will be achieved on the event days when public access within the site would be allowed in addition to the patrons. This should include details of wayfinding, crowd control and movement.	Page 38
Provide details of the method for the incorporation of sustainability into design.	Pages 34, 76-77 Also refer to ESD Report

CP-BF	Built Form and Urban Design	Where addressed
CP-BF1	The Final Urban Design Guidelines prepared by SJB Urban Design (August 2018) are to be adopted for the project and inform the Design Excellence Process and Stage 2 Development Application.	Page 55
CP-BF5	Shadow diagrams are to be included in the Stage 2 Development Application showing the actual shadow impacts of the detailed stadium in comparison to the maximum building envelope.	Page 42
CP-BF6	Any ground level retail premise uses within the stadium are to be detailed in the Stage 2 Development Application and subject to separate approval for use.	Page 70



Conditions

In addition, this report addresses the future assessment requirements set out in Schedule 2 of the State Significant Development Consent SSD 9249 as below. A checklist of where these conditions have been addressed is detailed in a table in Section 5 of the report.

Condition Number	Condition
	Design Excellence
C1	The future development application must demonstrate design excellence having regard to the following matters:
C1a	a high standard of architectural design, materials and detailing appropriate to the building type and location;
C1b	the form and external appearance of the proposed development to improve the quality and amenity of the public domain;
C1c	how the proposed development addresses the following matters:
C1c (i)	any heritage and archaeological issues and streetscape constraints or opportunities;
C1c ii)	an increased appreciation and integration of heritage values of the site into the design and operation of the development;
C1c (iii)	the bulk, massing and modulation of buildings within the approved envelope including street frontage heights
C1c(iv)	environmental impacts such as acoustic privacy, solar access to adjoining buildings and public spaces, noise, wind impacts on surrounding areas and reflectivity;
C1c(v)	the achievement of the principles of ecologically sustainable development;
C1c(vi)	pedestrian, cycle, vehicular and service access and circulation requirements, including the permeability of any pedestrian network;

Condition Number	Condition
C1c(vii)	the impact on, and any proposed improvements to, the public domain;
C1c(viii)	achieving appropriate interfaces at ground level between the building and the public domain;
C1c(ix)	innovation in design and delivery;
C1c(x)	future proofing the development so that it can adapt to foreseeable changes in events, patronage, transport, access etc; and
C1c(xi)	excellence and integration of landscape design.
C4	The future development application must include artist’s perspectives and photomontages.
C5	The building envelope of the stadium proposed in the future development application must be consistent with the approved plans listed in Schedule 2, condition A2.
C6	The building envelope of the stadium proposed as part of the future development application is restricted to a maximum height of RL 85m Australian Height Datum (AHD) and a maximum depth of RL 39.3m AHD.
	Solar Access
C14	The future development application must be supported by solar access diagrams to address whether adequate solar access is provided, between 9am and 3pm during winter solstice, to the SCG playing field (immediately south of the proposed building footprint) and all other adjoining buildings including the public open spaces adjoining the site at Moore Park.



