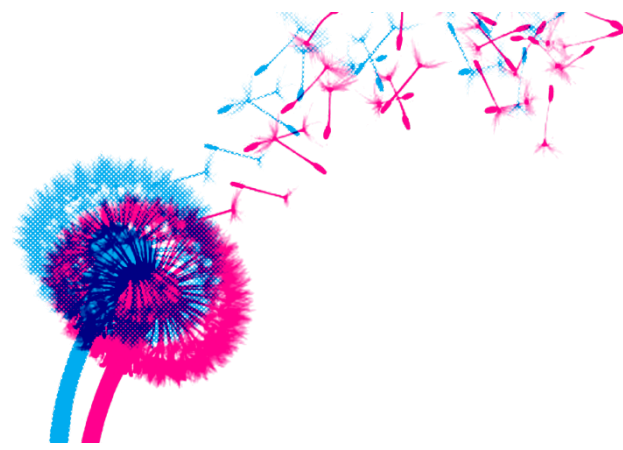


SFS Response to Submissions

(SSD9249)

Response to Submissions Report

September 2018



Response to Submissions

Concept Proposal and Stage 1 Demolition Works

40-44 Driver Avenue, Moore Park

Submitted to NSW Department of Planning and
Environment

On behalf of Infrastructure NSW

13 September 2018 | 218018

CONTACT

Michael Oliver	Associate Director, Planning	moliver@ethosurban.com	02 9956 6962
----------------	------------------------------	------------------------	--------------

Reproduction of this document or any part thereof is not permitted without prior written permission of Ethos Urban Pty Ltd.

This document has been prepared by:



Anna Nowland 13 September 2018

This document has been reviewed by:



Michael Oliver 13 September 2018

Reproduction of this document or any part thereof is not permitted without written permission of Ethos Urban Pty Ltd. Ethos Urban operates under a Quality Management System. This report has been prepared and reviewed in accordance with that system. If the report is not signed, it is a preliminary draft.

VERSION NO.	DATE OF ISSUE	REVISION BY	APPROVED BY
Final	13 September 2018	AN	MO

Ethos Urban Pty Ltd
ABN 13 615 087 931.
www.ethosurban.com
173 Sussex Street, Sydney
NSW 2000 t 61 2 9956 6952

Contents

1.0	Introduction	3
1.1	Purpose of this report	4
1.2	Planning Process	4
1.3	Sydney Football Stadium Redevelopment – Concept Proposal and Stage 1 Demolition	6
2.0	Public Exhibition and Submissions	7
2.1	Approach to General Public Submissions	7
2.2	Analysis of Public Submissions	7
2.3	Organisations and Stakeholder Groups	14
2.4	Submissions by Public Agencies	14
3.0	Further Consultation	16
3.1	Consultation Activities During Formal Exhibition of the EIS	16
3.2	Outcomes of Stakeholder Meetings and Consultation	16
3.3	Aboriginal Community Consultation	18
3.4	Summary of Feedback Received from the Community	18
4.0	Clarification, Additional Information and Further Assessment	19
4.1	Project description	19
4.2	Built Form	19
4.3	Transport, traffic and parking	23
4.4	Noise and vibration assessment	24
4.5	Heritage	25
4.6	Construction management	26
5.0	Final Mitigation Measures	30
5.1	Mitigation Measures – Concept Proposal	30
5.2	Mitigation Measures – Stage 1 Demolition	33
6.0	Conclusion	38

Figures

Figure 1	Planning process diagram	5
Figure 2	Summary of key issues identified in public submissions	13
Figure 3	Location of additional views assessed in Addendum Visual Impact Assessment	21
Figure 4	Location of private views selected for further visual assessment	22

Contents

Tables

Table 1	Breakdown of submitters by postcode/suburb	7
Table 2	Summary of public submissions by issue raised	9
Table 3	SIDRA intersection analysis for event scenarios	24
Table 4	Environmental Performance Objectives	28
Table 5	Mitigation Measures – Concept Proposal	30
Table 6	Mitigation Measures – Stage 1 Demolition	33

Attachments

Attachment 1	Detailed Response to Agency Submissions
Attachment 2	Detailed Response and Clarifications for Department of Planning and Environment
Attachment 3	Summary and Response to Issues Raised in Public Submissions
Attachment 4	Final Urban Design Guidelines
Attachment 5	Addendum Transport Impact Statement
Attachment 6	Addendum Noise and Vibration Impact Assessment
Attachment 7	Addendum Heritage Impact Statement
Attachment 8	Methodology Statement – Working Near Busby's Bore
Attachment 9	Addendum Social Impact Assessment
Attachment 10	Final Erosion and Sediment Control Plans
Attachment 11	Air Quality Impact Assessment
Attachment 12	Addendum Visual Impact Assessment
Attachment 13	View Impact Analysis
Attachment 14	Site Layout Plan

1.0 Introduction

A State Significant Development (SSD) Development Application (DA) for the staged redevelopment of the Sydney Football Stadium (SFS) at 40-44 Driver Avenue, Moore Park was publicly exhibited for a period of 28 days between 14 June 2018 to 11 July 2018.

A total of 726 submissions were received from 705 members of the general public, including 16 from community stakeholder groups, representatives or key organisations, and 14 submissions were received from Local and State government agencies in response to the exhibition of the SSD DA. The following were identified as the key issues raised in the submissions:

- the need for the project;
- government expenditure;
- transparency and due process;
- operational traffic and circulation;
- the removal of trees;
- impacts to Centennial Park and/or Moore Park;
- the impacts of demolition and construction works;
- operational parking;
- the building envelope;
- sustainability;
- the proposed capacity of the stadium and the number of events;
- the heritage significance of the existing SFS;
- impacts on the heritage of surrounding buildings and/or conservation areas;
- matters regarding the detailed design of the stadium;
- pedestrian connectivity;
- issues specific to facilities and memberships under the Sydney Cricket and Sports Ground Trust (SCSG Trust);
- anti-social behaviour;
- the design excellence process; and
- matters relating to other projects such as Westconnex or Sydney Light Rail.

In addition to the public exhibition of the Concept Plan application by the Department of Planning and Environment (the Department), Infrastructure NSW also undertook additional consultation during the exhibition period. This consultation comprised:

- Letters to 16 key stakeholders such as businesses, Council representatives, resident action groups, community representatives, providing stakeholders an update about the project and offering to discuss the SSD DA. Meetings were held with a number of stakeholders.
- Emails to all interested community members (approximately 250) who registered their details at an information session, pop up stall, emailed the project team or called the community information line.
- A postcard drop to 23,000 local residents on 18 and 19 June 2018. The postcard provided instructions on how to make a submission to the Department.
- Door knocking along Moore Park Road to 146 properties on 29 June 2018, to provide residents with more information about the exhibition process and provide instructions on how to make a submission to the Department.

- Updates to project websites (<https://yoursay.sfsredevelopment.nsw.com/> and <http://nsw.com/sfs>) to provide information on the process, next steps and how to make a submission.

The proponent, Infrastructure NSW, and its consultant team have reviewed and considered the Department and public agencies' comments and the public submissions and responded to the issues raised. A considered, detailed response to agency submissions is provided at **Attachment 1**, a response to the Department is provided at **Attachment 2**, and a summary and response to issues raised in public submissions is provided at **Attachment 3**.

1.1 Purpose of this report

This report to the Department comprises a Response to Submissions (RTS), in relation to those submissions received from the Department, Local and State government agencies and the general public during the public exhibition of a SSD DA for the staged redevelopment of the SFS. The report should be read in conjunction with the Environmental Impact Statement (EIS) dated June 2018 and the appended technical studies.

1.2 Planning Process

The proposed development is subject to a staged SSD DA process, pursuant to Clause 4.22 of the *Environmental Planning and Assessment Act 1979* (EP&A Act), being a common approach for the delivery of large-scale projects within NSW. The staging and planning process for the development is summarised in **Figure 1** below.

Stage 1

The first phase of the process ('Stage 1') involves establishing the overarching concept for the site, including the stadium envelope and land uses, and seeks consent to commence early works on the site comprising demolishing the existing stadium and associated structures, and the use of the Sydney Cricket Ground Members car park for construction staging. This is discussed further in **Section 1.3** below.

Stage 2

The second phase of the process ('Stage 2') involves seeking consent for the detailed design, construction and operation of the stadium and all associated public domain and structures. This application will be required to demonstrate consistency with the planning and development framework established in the Stage 1 DA. This includes the approved building envelope, Urban Design Guidelines, Design Excellence Strategy, and the series of strategies and principles founded in the technical studies that accompany the Stage 1 DA (i.e. traffic and parking, noise management, etc.). Ongoing stakeholder and community consultation will occur at various stages throughout this process.

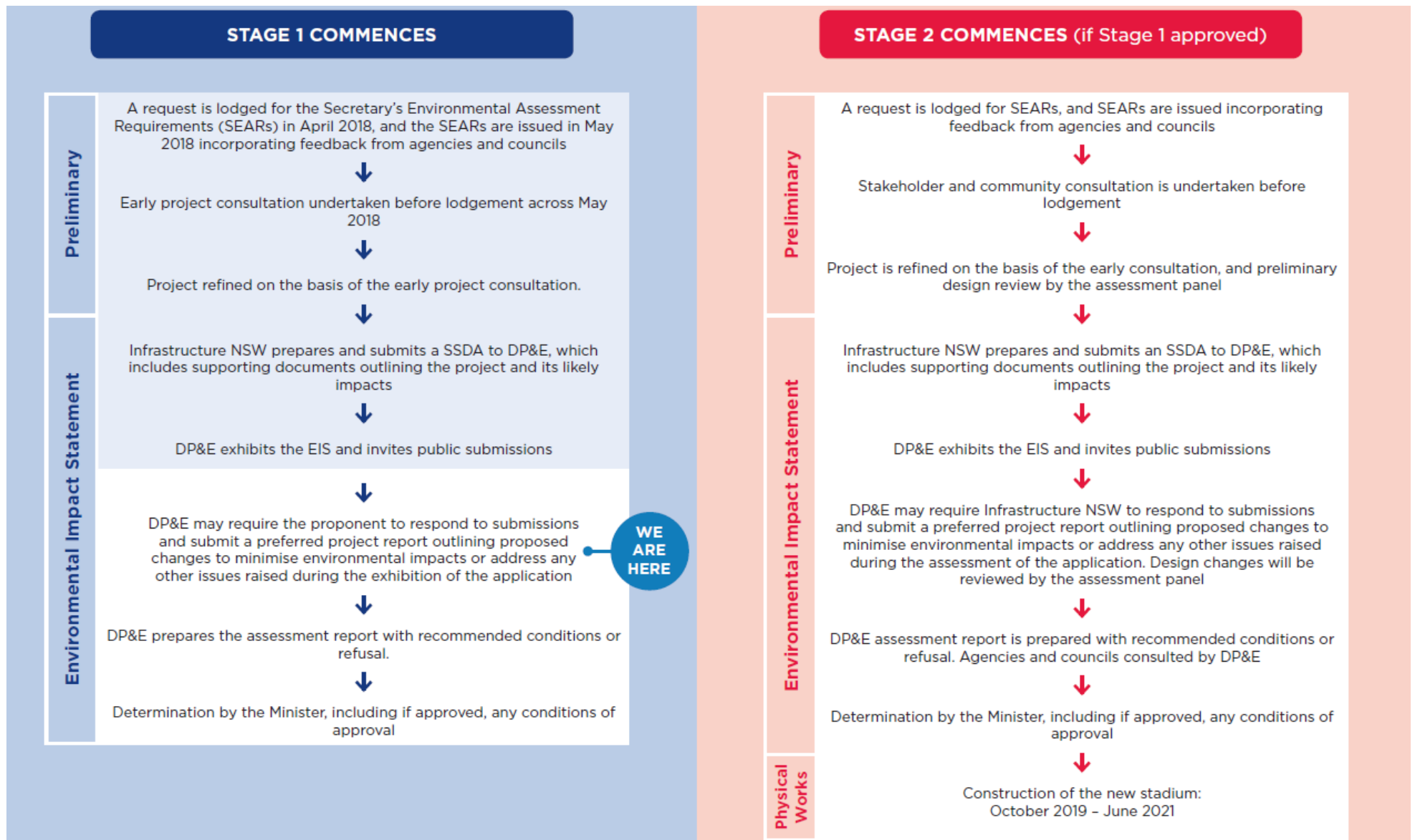


Figure 1 Planning process diagram

1.3 Sydney Football Stadium Redevelopment – Concept Proposal and Stage 1 Demolition

The SSD DA seeks consent for a Concept Proposal and detailed Stage 1 works (demolition) for the redevelopment of the SFS.

The Concept Proposal establishes the planning and development framework that will inform the future detailed design, construction and operation of the stadium (exclusively on SCSG Trust land), which will be considered under a separate and future detailed SSD DA at Stage 2 of the project. The Concept Proposal component of the application specifically comprises the following:

- Land use.
- Maximum building envelope.
- Maximum stadium capacity of 45,000 seats (55,000 patrons in concert mode) and 1,500 staff.
- Urban Design Guidelines and Design Excellence Strategy to guide the detailed design.
- 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 administration offices; and
 - Provision for ancillary uses within the stadium and surrounds.
- Principles and strategies for transport and access arrangements.
- Indicative staging of the development.

The SSD DA also sets out and seeks consent for the first stage of physical works on the site, which comprises demolishing the existing stadium and associated works. The construction of the new stadium will be considered under a separate and future detailed SSD DA, at Stage 2 of the project. The Stage 1 physical works component of the application specifically comprises the following:

- Demolition of the existing Sydney Football Stadium 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.
- 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 existing street trees, and removal of all other vegetation within the proposed future building footprint.
- Make good of the site suitable for construction of the new stadium (subject to separate Stage 2 SSD DA).

There are no changes to the project description arising from the review and response to submissions, as discussed further in the sections below and the appended technical studies.

2.0 Public Exhibition and Submissions

2.1 Approach to General Public Submissions

Each submission from a member of the general public, including local residents, local or special interest groups, and other interested persons has been summarised. Because a large number of submissions raise similar issues, rather than addressing each submission individually, the issues raised in submissions have been summarised and, where possible, bundled into Issue Categories. A description of these 'Issue Categories' is described in **Section 2.2.2** below.

It is noted that of the submissions received, 9.5% were template letters which had been adapted from key points distributed by the Lord Mayor of Sydney, State Member for Sydney, the National Trust of Australia, and other resident organisations.

2.2 Analysis of Public Submissions

This section provides an understanding of who has made submissions as well as a brief analysis of the numerical significance of issues raised in submissions from the general public. This analysis has not been carried out to discount issues that are raised in fewer submissions but is instead intended to help the decision makers understand which issues are of more concern to more people.

A total of 726 public submissions were received from 705 individuals and community organisations during the exhibition period for the project, of which 678 objected to the SSD DA, 15 supported the SSD DA, and 12 neither supported nor objected to the SSD DA. Where multiple submissions were received from the same individual, these were recorded together as a single submission.

2.2.1 Geographic Distribution of Submissions

Of the submissions made by members of the general public, almost half of the submissions (47%) were originating from postcodes within a 5 kilometre radius of the SFS. Those submissions that originated from outside of this catchment area accounted for close to a quarter of the submissions received (22%). Outside of those submissions with undisclosed addresses, the most common postcodes were from the immediately surrounding suburbs of Paddington, Centennial Park and Moore Park (14%), and from Surry Hills and Darlinghurst (8%). This indicates that whilst there is a larger local interest in the project, the SSD DA has also appealed to a wider audience within greater NSW, as well as limited submissions (0.6%) from outside of NSW.

A breakdown by suburb of these submissions is included at **Table 1**.

Table 1 Breakdown of submitters by postcode/suburb

Postcode / Suburb	Number of Submitters
Undisclosed	221
2021 (Paddington, Centennial Park, Moore Park)	100
2010 (Surry Hills, Darlinghurst)	54
2000 (Sydney, Sydney South, Dawes Point)	27
2016 (Redfern)	22
2025 (Woollahra)	20
2031 (Clovelly, Randwick)	11
2034 (Coogee, South Coogee)	10
2037 (Glebe)	9
2022 (Bondi Junction, Queens Park)	9
2011 (Elizabeth Bay, Potts Point, Woolloomooloo)	8
2204 (Marrickville, Marrickville South)	7
2017 (Waterloo, Zetland)	7
2015 (Alexandria)	7

Postcode / Suburb	Number of Submitters
2042 (Newtown)	6
2065 (Crows Nest, Greenwich, Naremburn, St Leonards)	5
2027 (Darling Point, Edgecliff)	5
2028 (Double Bay)	4
2026 (Bondi Beach, North Bondi)	4
2024 (Bronte, Waverly)	4
2008 (Chippendale)	4
2035 (Maroubra)	4
2066 (Lane Cove, Lane Cove North)	4
2033 (Kensington)	3
2049 (Lewisham, Petersham)	3
2030 (Vaucluse, Watsons Bay)	3
2070 (Lindfield)	3
2088 (Mosman)	3
2023 (Bellevue Hill)	3
2114 (West Ryde)	3
2040 (Lilyfield)	3
2193 (Canterbury, Hurlstone Park)	3
2041 (Balmain)	3
2280 (Florville, Marks Point, Valentine)	3
2780 (Katoomba)	3
2560 (Ambarvale, Appin, Leumeah)	3
Other (locations with less than 2 submissions)	114
Total	705

2.2.2 Analysis of Issues Raised

Table 2 below provides a summary of the issues raised in the public submissions received during the exhibition period¹. For each Issue Category that has been identified, the table provides a high-level description of the matters raised in the submissions, a summary of the response and a reference to where these issues have been covered in the detailed documentation.

The identified issues have been addressed in the detailed submissions response table at **Attachment 3**, and (where relevant) have been discussed further in **Section 4** of this report which provides additional information and/or assessment where warranted.

¹ i.e. a tally of the frequency that an issue is raised – a single submission could discuss a number of issues

Table 2 Summary of public submissions by issue raised

Issue Tag	Issue Description	Response Summary	Reference to Information
Expenditure	Comments relating to the spending of taxpayer money, and alternative uses for funds.	The project expenditure decision is a matter for the NSW Government, and not relevant to the planning assessment process.	<ul style="list-style-type: none"> Section 2.0 of EIS Section 1 of RTS Attachment 3
Project need	Comments relating to the business case and the benefit cost ratio, the stadiums historical upkeep and maintenance, the case for corporate facilities, the need for the project in view of limited stadium attendance, the location of the stadium, and operational concerns of the existing stadium.	<ul style="list-style-type: none"> The NSW Government considered that the upgrades required to make the existing stadium relevant for future use were not cost-effective compared to the construction of a new stadium that is purpose built and adaptable to meet future requirements. The stadium capacity is necessary to host peak events and accommodate major international sporting fixtures which attract major events and investment. The site of the existing SFS within the broader sporting and entertainment precinct is considered to be appropriate, and complementary to facilities at Olympic Park rather than an alternate. Safety issues with the stadium are currently managed through a series of operational overlays (active management) that are not sustainable or economic over the longer-term. 	<ul style="list-style-type: none"> Section 2.0 of EIS Section 2 of RTS Attachment 3
Transparency and due process	Comments regarding the NSW Parliamentary Inquiry, the process and timing of community consultation, the imminence of the NSW State election, the need for a Community Consultative Committee, the participation of community and technical groups, the availability of information, the role of the SCSG Trust and Cabinet, commercial interests in the Entertainment Quarter, and the NSW Government's criteria for major projects.	<ul style="list-style-type: none"> The NSW Government has made the decision to proceed with the project and has both undertaken consultation activities prior to lodgement, and to ensure all local residents were aware of the formal public exhibition and understood how to make a submission. The Department of Planning and Environment will determine the need for a Community Consultative Committee (CCC) as part of its assessment of the Stage 1 Application. The SCSGT is responsible for operating and managing the stadium precinct pursuant to the <i>Sydney Cricket and Sports Ground Act 1978</i>. Infrastructure NSW is managing the planning, procurement and project delivery on behalf of the NSW Government. 	<ul style="list-style-type: none"> Section 4.0 of EIS Section 3.0 of RTS Section 3 of RTS Attachment 3
Impacts on Centennial Park and/or Moore Park	Comments concerning land within Moore Park including the use of Moore Park for event parking, that the project will result in a loss of green space, impacts to the permeability of Moore Park from the stadium design and increased events, and the lack of funding for Transport for NSW, the Centennial and Moore Park Trust and the City of Sydney to integrate with the stadium.	<ul style="list-style-type: none"> No works are proposed to Moore Park. All works will be contained within land administered by the SCSGT. The Centennial and Moore Park Trust is responsible for the use of Moore Park East for event parking. Infrastructure NSW will work with Transport for NSW, the Centennial and Moore Park Trust and the City of Sydney through the Moore Park Working Group to identify opportunities to improve integration to enhance the experience of the new stadium. 	<ul style="list-style-type: none"> Sections 5.0, 6.4, 6.5 and 6.6 of EIS Section 4.2 of RTS Section 6 of RTS Attachment 3
Tree removal	Comments regarding the removal of trees, and the cumulative loss of trees within the locality in association with other projects.	It is necessary to remove some existing trees due to their location within the proposed stadium footprint. The proposed development will provide for a net increase in the number of trees on the site post-development.	<ul style="list-style-type: none"> Sections 5.0 and 6.4.2 of EIS. Section 7 of RTS Attachment 3

Issue Tag	Issue Description	Response Summary	Reference to Information
Operational traffic and vehicle circulation	Comments concerning either the permeant or temporary closure of Driver Avenue, congestion resulting from increased capacity or events, and presence of existing traffic congestion meaning the site is not suited to the proposal.	<ul style="list-style-type: none"> Driver Avenue is located outside of the project boundary and is controlled by the Centennial and Moore Park Trust, and subject to the Moore Park Master Plan 2040. The proposed stadium would not involve an increase beyond the capacity of the existing stadium (and hence maximum attendance), for which suitable transport arrangements are in place. The site has a long history as a major sporting and events precinct, and the proposed redevelopment of the stadium is consistent with this. 	<ul style="list-style-type: none"> Sections 5.1 and 6.6 of EIS Section 4.3 of RTS Section 9 of RTS Attachment 3
Demolition traffic and parking	Comments relating to the management and lack of parking for construction workers, the use of the MP1 car park as a construction compound forcing people to park in local areas, and trucks and workers contributing to congestion.	<ul style="list-style-type: none"> Parking for demolition contractors will be provided on-site within the construction compound, which has been included as a mitigation measure. Truck movements are assessed as having minimal impact on congestion within the local area in the context of the existing volumes of traffic. A detailed Construction Pedestrian and Traffic Management Plan will be prepared prior to the commencement of works. 	<ul style="list-style-type: none"> Sections 5.2 and 6.6 of EIS Section 4.3 of RTS Section 8 of RTS Attachment 3
Demolition / construction impacts other than traffic and parking	Comments concerning noise and dust, the potential impacts on the Moore Park cycleway, and the associated impacts from relocating sporting activities to other locations.	<ul style="list-style-type: none"> The proposed development will not result in adverse dust impacts, subject to implementation of standard mitigation measures. Infrastructure NSW are aware of the proposal to construct the Moore Park Cycleway. Should this coincide with the stadium redevelopment, Infrastructure NSW and the appointed contractor will collaborate with the City of Sydney to minimise potential conflict between the projects. The relocation of sporting activities to other locations does not form part of this planning application. 	<ul style="list-style-type: none"> Sections 5.2, 6.5, 6.6, 6.7, 6.8, 6.12 and 6.13 of EIS Section 10 of RTS Attachment 3 Section 4.3 and 4.6 of RTS.
Operational parking	Comments regarding the requirement for additional public parking during events, and suggestions for the permeant removal of parking within the MP1 car park and car parking within Moore Park East.	<ul style="list-style-type: none"> Additional parking would increase traffic congestion and be inconsistent with the project objective to reduce private car dependence. It is proposed to reinstate the MP1 car park upon completion of the redevelopment in order to provide on-site car parking for operational reasons as well as day-to-day staff and member use. The Centennial and Moore Park Trust is responsible for the use of Moore Park East for event parking. 	<ul style="list-style-type: none"> Section 6.6 of EIS Section 11 of RTS Attachment 3 Section 4.4 of this report.
Building envelope	Comments relating to the scale of the building envelope and associated visual, wind and overshadowing impacts, and assurances that the future stadium will be designed and constructed to fit within the building envelope.	<ul style="list-style-type: none"> The proposal will not result in adverse environmental impacts, as detailed in the Visual Impact Assessment, Shadow Diagrams and Wind Design Principles provided with the publicly exhibited EIS and the Addendum Visual Impact Assessment accompanying this report. Should the Concept Proposal be approved, the detailed Stage 2 Development Application must not be inconsistent with this consent pursuant to the requirements of Section 4.24 of the <i>Environmental Planning and Assessment Act 1979</i> (EP&A Act). 	<ul style="list-style-type: none"> Sections 5.1 and 6.4 of EIS Section 4.2 of RTS Section 16 of RTS Attachment 3

Issue Tag	Issue Description	Response Summary	Reference to Information
Sustainability	Comments regarding the use of energy and resources required for the staged redevelopment of the stadium, and that the project should set a positive precedent for the conservation of resources, the reduction of waste and landfill, and the reduction of greenhouse gas emissions.	<ul style="list-style-type: none"> Refurbishment of the stadium is not considered to be a cost-effective or long-term solution for the provision of sporting infrastructure at the site. The new stadium will incorporate best-practice in terms of sustainability for demolition, construction and operations. 	<ul style="list-style-type: none"> Sections 6.11, 6.12, 6.16 and 6.21 of EIS Section 12 of RTS Attachment 3
Other projects such as Westconnex and Sydney Light Rail	Comments concerning the negative impact of congestion, tree removal, and other construction and operational impacts arising from Westconnex and Sydney Light Rail, and concerns for the capacity of the Sydney Light Rail to accommodate for the new stadium.	<ul style="list-style-type: none"> The redevelopment of the stadium seeks to improve usage of public transport, walking and cycling in order to reduce car-dependence and congestion. Tree removal associated with the Sydney Light Rail or Westconnex is outside of the scope of this application. Sydney Light Rail will be supplemented by event-specific transport arrangements (i.e. shuttle buses) as required. 	<ul style="list-style-type: none"> Sections 6.4.2 and 6.6 of EIS Section 14 of RTS Attachment 3
Stadium capacity and the number of events	Comments to the effect that the increased stadium capacity and number of events will have adverse impacts on the surrounding area, that the stadium should be smaller owing to a historically low attendance rate, and that the stadium should reduce the number of general admission seats.	<ul style="list-style-type: none"> It is proposed to maintain the existing limit on concert events (being the loudest type of event) in order to limit potential impacts. There is no existing limit on other sporting events hosted at the SFS. It is necessary to ensure that the new stadium provides capacity to host peak events and attract major national and international sporting fixtures in order to maximise the economic and social returns of the project. The new stadium design would improve operational efficiency for smaller (Club mode) events. 	<ul style="list-style-type: none"> Sections 2.0 and 5.1 of EIS Section 18 of RTS Attachment 3
Operational noise	Comments regarding noise impacts during events, existing and future crowds leaving the precinct after an event, and the noise generated by an increase in events.	<ul style="list-style-type: none"> The Noise and Vibration Assessment provided at Appendix K of the publicly exhibited EIS concludes that the project would not result in any worsening of noise impacts from stadium operations. The management of post-event crowds will be subject to the future Stage 2 planning application. 	<ul style="list-style-type: none"> Section 6.7 of EIS. Section 4.4 of RTS. Section 13 of RTS Attachment 3
Heritage of existing SFS	Comments concerning the heritage significance of the existing SFS, and the stadiums association with Australia's Bicentenary celebrations.	The existing SFS is not a statutorily heritage listed item either on a state or local register. Key memorabilia and moveable items (i.e. Walk of Fame) will be retained and reinstated as part of the detailed design where appropriate.	<ul style="list-style-type: none"> Sections 6.9 and 6.10 of EIS Section 4.5 of this report. Section 4 of RTS Attachment 3
Heritage of surrounding buildings and/or conservation areas	Comments concerning the building envelopes relationship with heritage conservation areas within Paddington, the potential for the demolition/construction process to impact on heritage features of the SCG, Moore Park, and/or Busby's Bore, and the visual scale of the stadium impacting on Moore Park, Centennial Park and/or the Sydney Cricket Ground.	<ul style="list-style-type: none"> The Heritage Impact Statement provided at Appendix L of the EIS concludes that the proposed development would not result in any significant adverse heritage impacts on nearby heritage conservation areas. A Methodology Statement for demolition activities is provided at Attachment 8 of the Response to Submissions which will ensure that there are no physical impacts on heritage items. The Addendum Visual Impact Assessment (Attachment 7), demonstrate that the visual impacts of the proposal would be acceptable. 	<ul style="list-style-type: none"> Sections 6.9 and 6.10 of EIS Section 4.5 of this report Section 5 of RTS Attachment 3

Issue Tag	Issue Description	Response Summary	Reference to Information
Detailed design issues	Comments relating to the planning process and the lack of detail available at this stage, and any other matter concerning the future detailed design of the stadium such as external lighting, materiality, and the architectural design.	The detailed design is subject to the competitive design process, and will be detailed in the Stage 2 Development Application.	<ul style="list-style-type: none"> Sections 1.0, 5.1, 6.1 and 6.2 and 6.4 of EIS Section 17 of RTS Attachment 3
Matters specific to the SCSG Trust	Comments concerning the lack of details on the design and/or planning process of new offices and associated buildings for the SCSG Trust, the loss of existing members facilities, the role of the SCSG Trust in the delivery process, and the loss of value derived from memberships.	<ul style="list-style-type: none"> Details regarding new offices would be subject to the Stage 2 Development Application. The SCSGT is responsible for making alternative arrangements for member's facilities. Memberships are a commercial matter between members and the SCSGT, and not relevant to this planning application. 	<ul style="list-style-type: none"> Section 6.13 of EIS Section 19 of RTS Attachment 3
Anti-social behaviour	Comments relating to the risk of anti-social behaviour, violent intoxicated patrons, and crowd controls associated with the operation of the stadium.	The detailed design of the Stadium and surrounds will be assessed against the principles of <i>Crime Prevention Through Environmental Design</i> to reduce the opportunities for crime, and stadium operation will include crowd management procedures to reduce the incidence of anti-social behaviour.	<ul style="list-style-type: none"> Section 6.13 of EIS Section 21 of RTS Attachment 3
Design excellence	Comments regarding the design process including the design being dictated/restricted by the budget, and that no modifications should occur after the design excellence competition to ensure that cost-cutting does not occur.	The Design Excellence Strategy included at Appendix D of the EIS has been endorsed by the NSW Government Architect as being a suitable approach to achieve design excellence. It includes design integrity measures to ensure that the design competition scheme is delivered.	<ul style="list-style-type: none"> Sections 5.1, 6.1, 6.3 and 6.4 of EIS Section 20 of RTS Attachment 3

A statistical profile of the issues raised in the submissions has been compiled in order to provide an understanding of the high-level issues which are more important to more people. The results of the analysis are included in **Figure 2**. These illustrate that the most important aspects of the proposal to the general public comprise:

- the need for the project;
- government expenditure;
- transparency and due process;
- operational traffic and circulation;
- the removal of trees; and
- impacts to Centennial Park and/or Moore Park.

These issue categories are discussed further in **Attachment 3** and **Section 4** of this report.

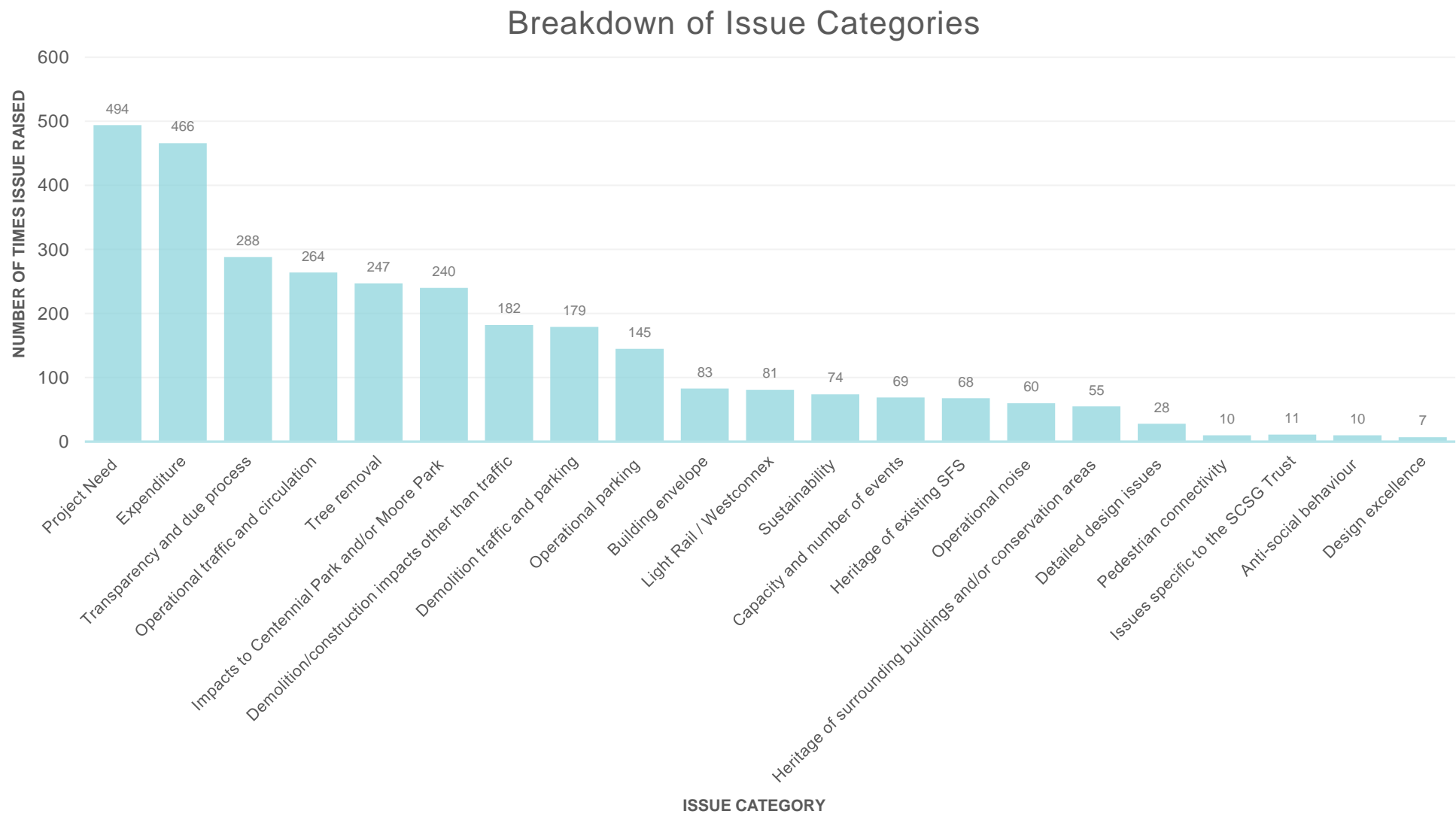


Figure 2 Summary of key issues identified in public submissions

Note: Figures are inclusive of objections, support and comments.

2.3 Organisations and Stakeholder Groups

As part of the submissions received from the general public, several were identified as being from community stakeholder groups and representatives, including:

- National Trust of Australia;
- Lord Mayor of Sydney, Clover Moore;
- State Member for Sydney, Alex Greenwich MP; and
- The Paddington Society;
- Centennial Park Residents' Association;
- Centennial and Moore Park Community Consultative Committee;
- Eastern Suburbs Resident Action Groups / Save the Parks Campaign;
- Poate and Furber Roads Residents' Association;
- Keep Sydney Beautiful;
- Saving Moore Park Inc.;
- David Shoebridge MLC.

These submissions raised issues that are generally consistent with those issues raised in the public submissions objecting to the SSD DA, as outlined in the **Section 2.2** above. As the submissions by the National Trust, Lord Mayor of Sydney and the State Member for Sydney formed the basis of a number of 'template' submissions made by the general public, a detailed response to these submissions is provided at **Attachment 3**.

Further, a number of submissions were received from organisations including:

- Sydney FC;
- Esports High Performance Centre;
- Sydney Roosters;
- NSW Waratahs; and
- Rugby Australia.

These organisations were all supportive of the SSD DA, and had generally been adapted from key points within the Sydney Cricket and Sports Ground Trust submission discussed in the section below.

2.4 Submissions by Public Agencies

Submissions were received from 14 public agencies during the public exhibition phase:

- City of Sydney Council;
- Transport for NSW;
- NSW Roads and Maritime Services;
- Centennial Park and Moore Park Trust;
- Sydney Cricket and Sports Ground Trust;
- NSW Government Architect's Office;
- NSW Department of Industry;
- Office of Environment and Heritage;
- Heritage Division;

- Sydney Airport Authority;
- Environment Protection Authority;
- NSW Police;
- NSW Fire and Rescue; and
- Sydney Water.

With the exception of the City of Sydney Council, none of the agencies objected to the SSD DA. A detailed response to issues raised in these submissions is provided at **Attachment 1**.

3.0 Further Consultation

3.1 Consultation Activities During Formal Exhibition of the EIS

The Department of Planning and Environment placed the SSD DA on exhibition from 14 June 2018 until 11 July 2018. During this time, the project team undertook a number of consultation activities to ensure all local residents were aware of the formal public exhibition and understood how to make a submission.

Activities included:

- Letters to 16 stakeholders providing them with an update about the project and offering to discuss the SSD DA. Meetings with the following stakeholders and agencies were held:
 - Centennial Park and Moore Park Trust;
 - Trust Advisory Group;
 - Government Architect NSW;
 - Meeting with Aboriginal Stakeholders;
 - Sydney Water
 - Transport for NSW;
 - City of Sydney; and
 - Moore Park Events Operation Group.
- Emails to all interested community members (250) who registered their details at an information session, pop up stall, emailed the project team or called the community information line;
- Postcard drop to 23,000 local residents on Monday 18 Tuesday 19 June 2018 (same distribution as pre-consultation). The postcard provided instructions on how to make a submission to the Department;
- Door knocking along Moore Park Road to 146 properties on Wednesday 29 June 2018 to provide residents with more information about the exhibition process and provide instructions on how to make a submission to the Department; and
- Updates to <https://yoursay.sfsredevelopment.insw.com/> and <http://insw.com/sfs> to provide information about the process, next steps and how to make a submission.

3.2 Outcomes of Stakeholder Meetings and Consultation

The table below summarises the discussions with key agencies and stakeholders that were held during the exhibition period.

Detailed responses to formal agency submissions can be found in **Attachment 1** of this report.

Date	Group	Summary of meeting
21 June 2018	Centennial Park and Moore Park Trust	<ul style="list-style-type: none"> • Discussion about public domain and through-site connections. • Discussion about strategies and solutions for security and hostile vehicle mitigation along Driver Avenue, with a view to a holistic 'precinct-wide' solution. • Establishing a working group. • Discussion about integrating the SFS project with the entire precinct and to construct appropriate lighting, some bicycle parking, waste management and pedestrian links to Albert Tibby Cotter Bridge and Light Rail stop as part of SFS project.
27 July 2018		<ul style="list-style-type: none"> • Project update. • Advancement of the working group to undertake design of works external to the project boundary • Agreement that a working group will be established to advance the designs.

Date	Group	Summary of meeting
21 June 2018	Trust Advisory Group of Sydney Cricket and Sports Ground Trust	<ul style="list-style-type: none"> Summary of consultation prior to lodgement of EIS. Discussion about content and tenant relocation. Discussion about SCG precinct master plan.
25 June 2018	Transport for NSW	<ul style="list-style-type: none"> Meeting with TfNSW terrorism and security officers to occur. Point to point to be addressed by Moore Park Transport working group. Further discussion around implementation and responsibilities for integrated ticketing. Discussion around further travel surveys to be undertaken (additional travel surveys occurred on Sunday 29 July and Saturday 4 August).
	Government Architect NSW	<ul style="list-style-type: none"> Desire for an integrated response to the stadium design through competition process. Desire to see broader connectivity shown. Would like the stadium internals integrated with the public domain. Importance of Aboriginal heritage. Would like to see art integrated into the new stadium.
27 June 2018	Aboriginal stakeholder meeting	<ul style="list-style-type: none"> Pleased to be involved in the process. Involved in the Light Rail project which found over 30,000 artefacts. There may be artefacts here too. Would like to be present during demolition. Noted there is no excavation proposed as part of Stage 1 application. Comment about history of Aboriginal people and connection to cricket and SCGT. The first Aboriginal cricket team went to England in the 1860's.
9 July 2018	Sydney Water	<ul style="list-style-type: none"> Explanation of current preferred diversion option sitting outside of stadium footprint. Sydney Water co-ordinator will be engaged to progress, but this will happen after contract award.
2 July 2018	City of Sydney Council	<ul style="list-style-type: none"> City of Sydney questioned the functionality stairs at Driver Avenue. Concern that Devonshire Street will not be sufficient for large pedestrian movements. Discussion around flora and fauna including desire to see green space protected and suggestion that figs be reinstated. Would like to see design competition entrants test the reference design. Would like to see the public art panel separated from the Competition Jury. Would like to see a case study about green travel initiatives of other stadia. Would like to see parking reduced in the whole precinct.
7 August 2018	Moore Park Events Operation Group	<ul style="list-style-type: none"> Presentation on Sydney Football Stadium project. The team is committed to returning to this group upon appointment of a contractor to update on commencing of works. Representatives included: <ul style="list-style-type: none"> Australian Turf Club Royal Randwick Botanic Gardens & Centennial Parklands Trust Entertainment Quarter Fox Studios Australia NSW Health NSW Police NSW Taxi Council Playbill Venues Randwick Council Sydney Cricket & Sports Ground Trust Transport for NSW - Sydney Coordination Office Transport Management Centre.

In addition, the Civil Aviation Safety Authority (CASA) has been contacted to provide details of the project and seek any feedback relevant to the Concept Proposal and Stage 1 Demolition Works. As the site is more than six kilometres from the airfield at Sydney Airport, CASA advised that the stadium is outside the radius to which lighting and glare requirements under the CASA manual of standards applies. CASA reiterated the need to ensure that approval is sought for crane operations to be in accordance with approval from Sydney Airport Corporation Limited (SACL). SACL was also contacted again to provide additional detail of crane operations during the demolition phase. All crane operation will occur beneath the applicable airspace protection level at the site of RL 156.00 AHD. Approval for the operation of cranes pursuant to section 183 of the *Airports (Protection of Airspace) Regulations 1996* will be required to be obtained by the appointed contractor once the detailed demolition methodology is established.

3.3 Aboriginal Community Consultation

As outlined in the Heritage Impact Assessment that formed Appendix L of the exhibited EIS, Aboriginal community consultation had commenced prior to the exhibition. As a result of advertising and letters to the relevant statutory bodies, a total of thirteen (13) Registered Aboriginal Parties (RAPs) have been identified for the SFS Redevelopment project.

A site inspection and initial meeting was held with RAPs on 27 June 2018. Of the 13 RAPs, 3 were in attendance. An Aboriginal cultural heritage assessment methodology was tabled at the meeting and attendees were asked to provide comment in relation to the methodology. The methodology was also either emailed or sent by post to RAPs that did not attend the initial meeting.

To date, two responses to the Aboriginal cultural heritage assessment methodology have been received and the project team continues to liaise with the remaining RAPs for comment.

3.4 Summary of Feedback Received from the Community

3.4.1 Emails and Phone Calls

Between 11 June and 14 July 2018, 28 interested residents contacted the project team. The following issues/questions were raised:

- Questions about the tender process for demolition and construction;
- Questions about how and where to find the EIS;
- Questions about how to lodge a submission to the Department;
- Concern about government investment decision to redevelop the stadium;
- Questions about members facilities;
- Questions about the future use of surrounding parkland facilities; and
- Procurement opportunities.

3.4.2 Doorknocking

The project team doorknocked 146 properties along Moore Park Road. A 'sorry we missed you' slip was left at the properties where nobody was home and explained the process of how to make a submission.

The majority of those who were home and willing to speak were pleased to see the project team being proactive and explaining the process. Most were aware of how to make a submission and suggested they would be doing so during the exhibition period.

4.0 Clarification, Additional Information and Further Assessment

The following section should be read in conjunction with Attachment 1 and Attachment 2 to this report, which provide more detailed responses to matters raised by public agencies and DP&E in response to the information and assessment provided in the EIS. The following sections address key aspects of those responses where additional information and/or assessment has been provided in support of the EIS.

4.1 Project description

There are no changes to the project description arising from the review or and response to submissions, however, additional mitigation measures have been identified and are outlined in **Section 5.0**. The final project description is as set out in Section 5.0 of the EIS and in the Final Urban Design Guidelines provided at **Attachment 4**.

4.2 Built Form

The following section outlines the key findings of further assessment of built form issues arising from the public exhibition period.

4.2.1 Final Urban Design Guidelines

The Urban Design Guidelines prepared by SJB Urban Design have been finalised based upon feedback received during the public exhibition period, and are provided at **Attachment 4**. In summary, the key amendments made to the Final Urban Design Guidelines entail:

- Clarifying that the future stadium design should not preclude the delivery of a future east-west connection from Moore Park East to Fox Studios/ Entertainment Quarter between the new stadium and the SCG (noting that due to SCG operational requirements this area is not currently available for public access during non-event days);
- Clarifying that the future stadium design should not preclude the delivery of a future north-south connection within the Entertainment Quarter and Fox Studios sites to Moore Park Road; and
- Providing additional information regarding event-day and non-event day activation of the new public domain proposed around the stadium.

Whilst the Final Urban Design Guidelines ensure that the new stadium does not preclude a future potential connection through to the Fox Studios site and the Entertainment Quarter, it is noted that the realisation of this linkage is beyond the scope of this project and dependent on future actions of a number of other parties. In particular, the link is dependent on the future actions of the parties involved in the management of the Entertainment Quarter and Fox Studios sites to make provision for this linkage. Furthermore, the existing design and functionality of the Sydney Cricket Ground precludes this connection being publicly accessible on a day-to-day basis. Notwithstanding this, the Concept Proposal ensures that the new stadium would not prevent this link being delivered in the future.

With regard to the non-event, or day-to-day, activation of the public domain will occur through a combination of passive urban and landscape design and the potential inclusion of some retail premises being provided within the ground floor of the future stadium building which are open on non-event days (being subject to the outcomes of the competitive design process and to be detailed in the future Stage 2 Development Application). These retail uses are intended to comprise a small number of small-scale ancillary facilities, for example, a café and a sports merchandise shop (similar to the existing store). The Final Urban Design Guidelines also note that there could be an opportunity for a use that supports the Moore Park Road cycleway, for example, a bike workshop. These uses would be able to trade during non-event periods and provide amenity for the surrounding community as well as activation and surveillance of the newly created public domain area surrounding the stadium. Due to the small-scale nature of these uses, it is not expected that there would be any adverse environmental impacts arising from these day-to-day uses in terms noise or visual privacy due to the separation distance and presence of Moore Park Road between the site and nearby dwellings.

Amendment to mitigation measures

One additional mitigation measure has been included at Section 5.0 as a result of the additional information and assessment outlined above:

- Commitment that the Stage 2 Development Application would include details of the proposed location, size and general operating parameters of any day-to-day commercial uses proposed to activate the public domain and that these parameters would be subject to approval and assessment as part of a separate future approval as necessary (Mitigation Measure CP-BF6).

4.2.2 Visual Impact Assessment

An Addendum Visual Impact Assessment has been prepared to provide analysis of a further ten public domain viewpoints taken from Moore Park Road, Moore Park East and within the Sydney Cricket Ground (**Attachment 12**). The locations from which further views were assessed is illustrated in **Figure 3**, and includes additional public domain views from along the northern footpath of Moore Park Road, from within Moore Park East, on Driver Avenue and from within the grandstands of the SCG. The additional views are as follows (numbering per **Figure 3**):

13. SCG forecourt to north-west of Member's Stand
14. SCG forecourt to the north of Member's Stand
15. Driver Avenue to north of Kippax Lake
16. Driver Avenue, to east of SCG Brewongle Stand
17. Gregory Avenue below Tibby Cotter Bridge
18. Footpath in front of 254-262 Moore Park Road
19. Footpath in front of 228 Moore Park Road
20. Footpath in front of 34 Moore Park Road
21. SCG Victor Trumper Stand
22. SCG Clive Churchill Stand

The additional viewpoints assessed do not alter the overall conclusions of the assessment of visual impacts which was provided at Appendix H of the EIS. Whilst the maximum building envelope that is proposed for the new stadium is larger than the existing stadium, and will accordingly be more prominent in the surrounding visual catchment particularly in near-range views from Driver Avenue and Moore Park Road, the stadium does not result in any significant loss of or detract from public domain views.

The visual effect of the proposed stadium envelope is considered to be appropriate and reasonable as the land is designated under the *Sydney Cricket and Sports Ground Act 1978* for the hosting of major sporting events (including the development of infrastructure to accommodate this), is zoned for Special Activities for major recreation facilities and is not subject to any maximum building height or floor space ratio control under the Sydney Local Environmental Plan 2012. The new stadium will, together with the SCG, continue to exist as part of a cluster of stadia at Moore Park as has been the case since the erection of the SFS in 1988. It is noted that the maximum building envelope represents the greatest physical extent of the potential future stadium, and the actual detailed design of the new stadium is unlikely to utilise the full envelope.

Accordingly, the visual effects of the stadium are likely to be less than those assessed in the Visual Impact Assessment provided at Appendix H of the EIS and Addendum Visual Impact Assessment provided at **Attachment 12**. Detailed design will also be guided by the Final Urban Design Guidelines (**Attachment 4**) and the competitive design process set out in Appendix D of the EIS, which will ensure that the architectural form and materiality of the new stadium is appropriate for the visual context of the site.

Having regard to the above, the visual effects of the proposed development are considered to be acceptable in light of the additional viewpoints assessed.

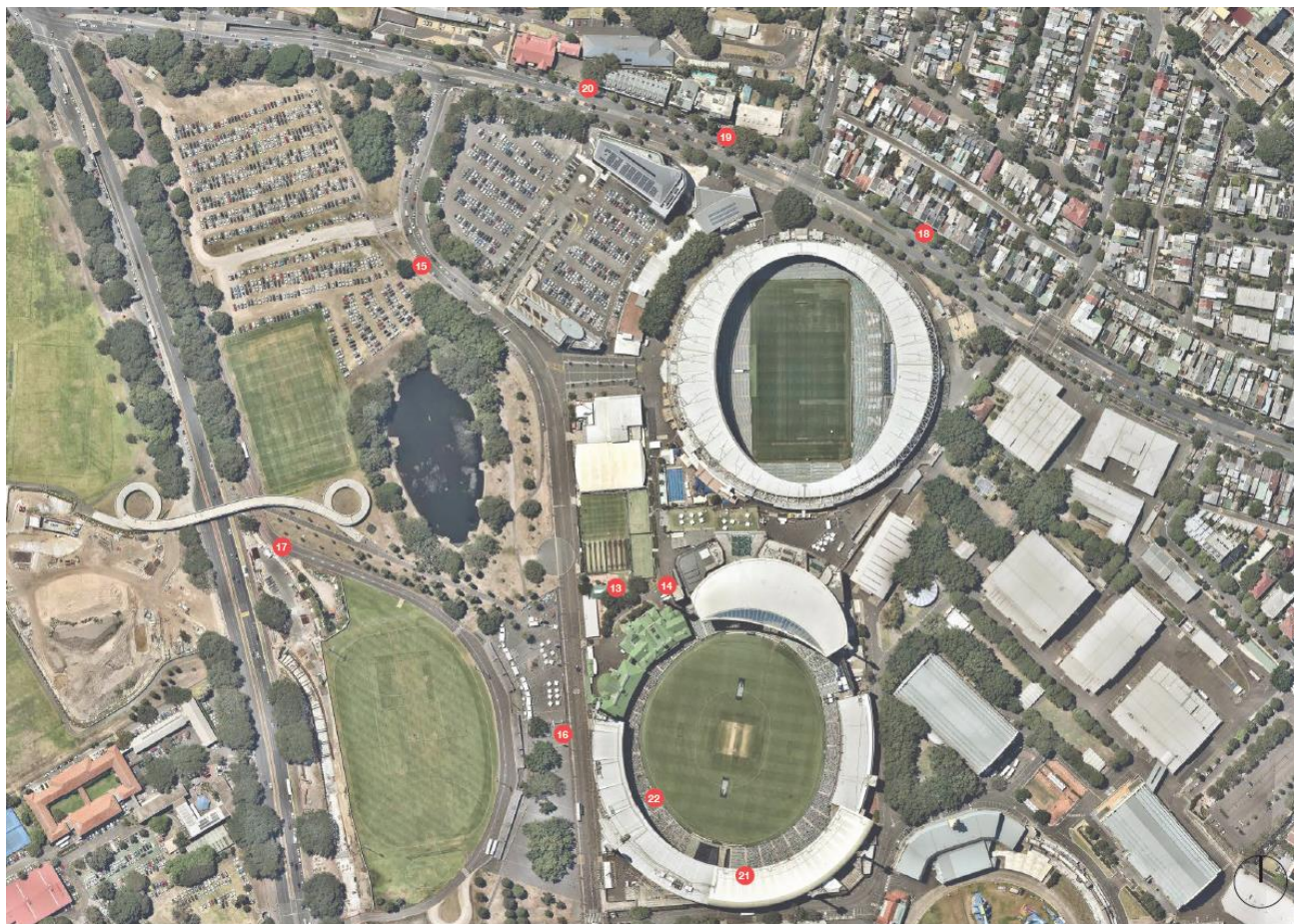


Figure 3 Location of additional views assessed in Addendum Visual Impact Assessment

Source: SJB

Amendment to mitigation measures

The additional information and assessment outlined above does not necessitate any changes to the mitigation measures outlined in Section 5.0. Specifically, Mitigation Measure CP-BF4 requires the Stage 2 Development Application to be accompanied by an updated Visual and View Assessment.

4.2.3 Private View Assessment

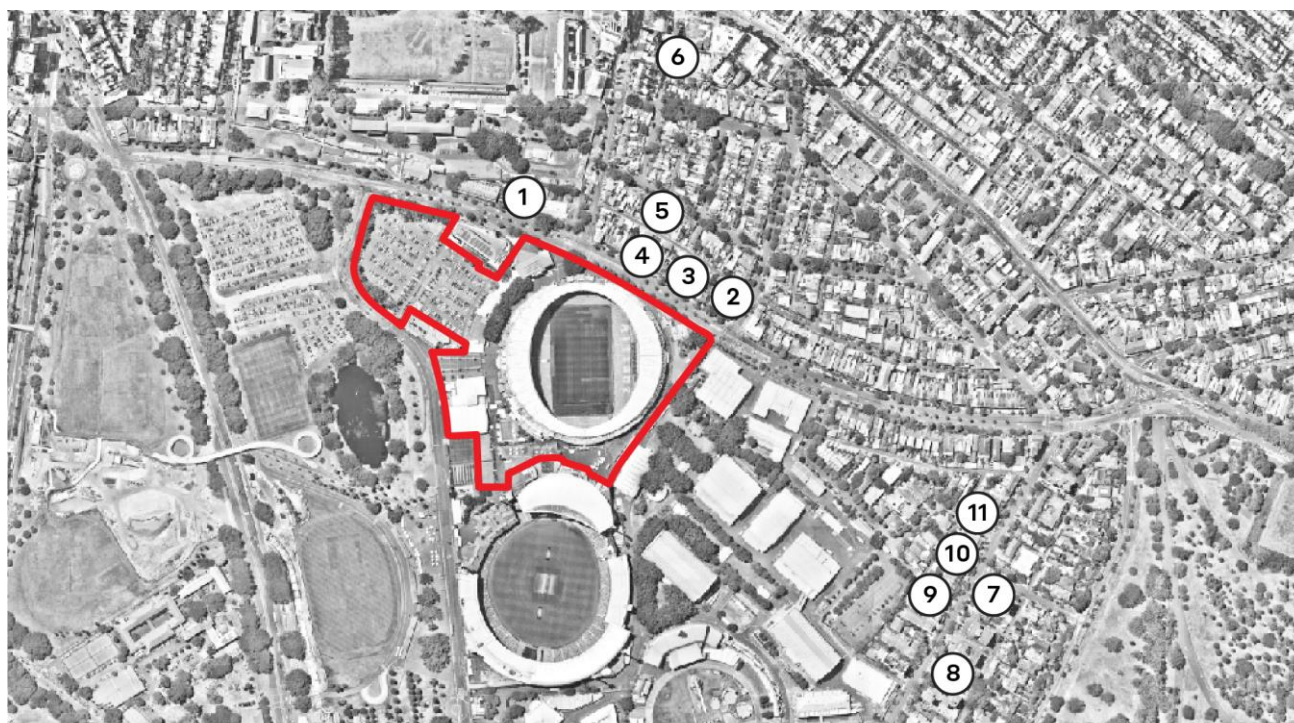
Further assessment of the impact of the proposed building envelope on private view impacts has been undertaken in accordance with the planning principles outlined in *Tenacity Consulting v Warringah Council* [2004] NSWLEC 140 (**Attachment 13**) to provide additional detail in support of the assessment provided at Section 6.5.1 of the EIS.

Private views were assessed using digital modelling of the existing and proposed development on the site, and of the surrounding urban context. A selection of viewpoints were assessed in order to provide a representative sample of the potential impact of the maximum building envelope on private views obtained from residential dwellings within the locality. As outlined in Section 6.5.1 of the EIS, the main private views with the potential to be impacted by the project are located within the Moore Park Road/ Paddington precinct to the north of the site, and the precinct located around Cook Road, Centennial Park to the east. Within these precincts, the following viewpoints have been modelled and assessed and are illustrated at **Figure 4**:

- Moore Park Road and Paddington
 - 220 Moore Park Road (Victoria Barracks Apartments)
 - 300 Moore Park Road;
 - 278 Moore Park Road;
 - 254 Moore Park Road;

- 25 Stewart Street; and
- 13 Oatley Road, Paddington Central Apartments
- Cook Road, Centennial Park
 - 39 – 41 Cook Road
 - 57 – 67 Cook Road
 - 60 – 62 Cook Road
 - 34 Cook Road
 - 24 Cook Road

The assessment finds that whilst the proposed maximum building envelope is larger than the existing stadium, and will consequently become more prominent within some private views, the impact on private views would range between minor and moderate, with no properties severely impacted. Importantly, the proposal that gives rise to the impacts on private views is reasonable given the consistency of the proposal with the applicable legislation and environmental planning instruments which designate the precinct for major recreation facilities, and the long history and ongoing use of the precinct as a major sporting precinct catering to national and international events.



Site Boundary

⊥ NOT TO SCALE

- | | |
|-----------------------|---------------------|
| ① 220 Moore Park Road | ⑦ 39 – 41 Cook Road |
| ② 300 Moore Park Road | ⑧ 57 – 67 Cook Road |
| ③ 278 Moore Park Road | ⑨ 60 – 62 Cook Road |
| ④ 254 Moore Park Road | ⑩ 34 Cook Road |
| ⑤ 25 Stewart Street | ⑪ 24 Cook Road |
| ⑥ 13 Oatley Road | |

Figure 4 Location of private views selected for further visual assessment

Source: Ethos Urban

Amendment to mitigation measures

The additional information and assessment outlined above does not necessitate any changes to the mitigation measures outlined in Section 5.0. Specifically, Mitigation Measure CP-BF4 requires the Stage 2 Development Application to be accompanied by an updated Visual and View Assessment.

4.2.4 Overshadowing

Additional detailed overshadowing diagrams have been provided for the maximum building envelope for which Concept Approval is sought at mid-winter (21 June) as part of the Final Urban Design Guidelines (**Attachment 4**). The diagrams provide additional detail and context regarding the surrounding land uses within the spaces adjoining the stadium. The key findings in relation to overshadowing impacts at mid-winter are as follows:

- Between 9am and 10am at mid-winter, there is some overshadowing of Moore Park East in the area between Driver Avenue and Kippax Lake. The lake would not be overshadowed during this period.
- At 10am, only a very small area of Moore Park East is overshadowed by the maximum envelope, being a slither of the park approximately 7 metres in depth from Driver Avenue. Between 10am and 11am, the shadow moves further to the east such that there is no overshadowing of Moore Park.
- Between 10am and 1pm the shadow is largely contained within the SCGST land, with some overshadowing of the Fox Studios site which is predominately limited to the roof of buildings and paved areas.
- At 2pm and 3pm there is additional overshadowing of the Fox Studios site, including some grassed areas. The majority of the grassed areas within the Fox Studios site would continue to receive sunlight.
- There is no overshadowing of the SCG playing field.

The overshadowing impacts outlined above are minor and are considered to be acceptable.

It must be noted that the maximum building envelope reflects a worst-case overshadowing impact, and that the detailed stadium design (subject to a future Stage 2 State Significant Development Application) is unlikely to cause the same extent of overshadowing.

Amendment to mitigation measures

The mitigation measures in the EIS require the preparation of further shadow diagrams to accompany the future Stage 2 Development Application (CP-BF5). The additional information and assessment outlined above does not necessitate any further changes to the mitigation measures outlined in **Section 5.0**.

4.3 Transport, traffic and parking

An Addendum Transport Report has been prepared by Arup which provides additional data and assessment in response to matters raised during the public exhibition period (**Attachment 5**). A detailed response to the matters raised by Transport for NSW and RMS in their submissions provided during the public exhibition phase is included in the Agency Response Table provided at **Attachment 1**.

Arup have undertaken supplementary travel surveys of patron travel behaviours at a series of further events at the SFS and SCG which were selected in consultation with TfNSW. The findings generally validate the mode share forecasts contained within the Transport Impact Assessment provided as Appendix J of the EIS. Patron travel behaviours vary significantly based upon a wide range of factors including event type, expected crowd, participant teams, event day and time and weather. Car usage is generally higher for events where the expected crowd is lower, reflecting expectations amongst patrons that car parking will be more readily available and accessible compared to events with larger crowds. In contrast, events with larger crowds indicate reduced car usage (as a percentage of all trips), with patrons planning travel by public transport or other modes in expectation that parking will be less available and less convenient within the precinct. The intention of this project is that the detailed design and operation of the new Sydney Football Stadium encourages patrons to make greater usage of public transport, walking and cycling in order to reduce the need for car travel to the precinct.

In addition, SIDRA modelling has been undertaken to include assessment of both pre- and post-event traffic scenarios. Traffic data was collected on Sunday 29 July for an NRL match with a crowd of approximately 20,000 and on the evening of Saturday 4 August 2018 when approximately 48,000 were within the precinct for an NRL/AFL

double-header. The traffic counts and SIDRA analysis for these events demonstrates that the pre-match traffic scenario is the most critical in terms of impacts on traffic volumes due to the higher background traffic levels and the occurrence of queuing within the designated event car parking areas. It is also noted that the intersections in the immediate vicinity of the stadium are closely managed by the Transport Management Centre during events in order to clear traffic from the area as quickly as possible. Table 3 presents the findings of Arup's SIDRA analysis for the two events considered. The analysis demonstrates that whilst the pre-event scenario is poorer than the post-event scenario, all local intersections perform at Level of Service C (Satisfactory) or better. Accordingly, the existing intersection arrangements are considered to be appropriate for existing and anticipated traffic demand arising from the stadium precinct. It is noted that the proposed redevelopment of the Sydney Football Stadium will seek to promote increased public transport usage, walking and cycling for events so as to reduce the levels of car usage for travel to the precinct.

Table 3 SIDRA intersection analysis for event scenarios

Date	Sunday 29 July (NRI – 20,000 crowd)				Saturday 4 August (NRL/AFL double header - 48,000 crowd)			
Scenario	Pre-event		Post-event		Pre-event		Post-event	
Performance measure	DoS	LoS	DoS	LoS	DoS	LoS	DoS	LoS
Moore Park Road & Driver Avenue	0.84	B	0.73	B	0.88	B	0.63	A
Moore Park Road & Regent Street	0.79	A	0.77	A	0.82	A	0.66	A
Anzac Parade, Cleveland Street & Lang Road	0.87	C	0.91	C	0.91	C	0.87	C
Lang Road & Driver Avenue	0.70	B	0.83	B	0.45	A	0.68	B

Source: Arup, Attachment 5 to Response to Submissions
DoS = Degree of Saturation; LoS = Level of Service

A number of submissions raised concern regarding the ongoing use of on-grass parking in Moore Park East for event day parking. Parking within Moore Park is the responsibility of the Centennial Parklands and Moore Park Trust, and provides significant recurrent revenue to sustain the Centennial Parkland and Moore Park Trust's activities. The Moore Park Master Plan 2040 identifies potential future opportunities for the Trust to transition event car parking away from Moore Park East, subject to alternative suitable satellite locations with associated transport arrangements. Infrastructure NSW will continue to work with the Centennial and Moore Park Trust through the Moore Park Working Group in order to explore options for alternatives to the existing on-grass parking arrangements.

In response to concerns raised in a number of submissions regarding the potential for impacts on on-street parking availability during the demolition phase, a new mitigation measure has been included which commits to ensuring that sufficient worker parking is provided on-site for the duration of the Stage 1 demolition works.

Amendment to mitigation measures

The additional information and assessment outlined above necessitates the following changes to the mitigation measures outlined in **Section 5.0**:

- Parking is to be provided within the site for staff and contractors during the Stage 1 demolition phase (Mitigation Measure S1-TA4).

4.4 Noise and vibration assessment

An Addendum Noise and Vibration Impact Assessment (ANVIA) has been prepared by Arup to respond to matters identified as requiring a response following the exhibition of the EIS (**Attachment 6**).

The ANVIA includes additional assessment of potential noise and vibration impacts of the Stage 1 demolition phase on sensitive receivers located within the SCSGT precinct, being the ARDC building which includes educational space associated with UTS (teaching spaces, research spaces and meeting rooms). This assessment concludes

that there will be some exceedances during the demolition phase, with exceedances of up to 4dB predicted during the loudest demolition activities such as concrete crushing, rockbreaking and loading/unloading of debris. The ANVIA recommends additional mitigation measures to minimise potential adverse effects to building occupants, including the location of loud stationary plant such as the concrete crusher at the south-western edge of the construction compound, enclosing the concrete crusher, the erection of hoarding around stationary plant where feasible, installation of unattended noise monitors at key sensitive receptors and ongoing consultation with building occupants throughout the works period to manage the scheduling of noisy activities.

The Noise and Vibration Assessment which was provided at K of the EIS provided an assessment of a double header scenario with 60,00 patrons attending events within the precinct, with an even split of patrons across the SCG and SFS. Since 2010, there have only been five double-header events where total attendance across the SFS and SCG has exceeded 50,000 patrons. Only one double-header event has exceeded 70,000 patrons. Accordingly, the assessment contained within the original assessment is considered to be representative of a typical worst-case double header. Notwithstanding this, the ANVIA includes a revised assessment that is based upon an absolute worst-case, being maximum attendance at the SFS and SCG (95,000 patrons). It is noted that concerts at SFS are not scheduled to coincide with sporting events at the SCG. The ANVIA concludes that a full capacity double-header would not result in any significant cumulative impacts beyond those considered in the previous assessment, primarily due to the low contribution of noise emanating from the SCG to the closest sensitive residential receivers.

Amendment to mitigation measures

The additional information and assessment outlined above necessitates changes to the mitigation measures outlined in **Section 5.0**, which generally comprise additional mitigation measures for noisy demolition activities, including concrete crushing, to minimise impacts to sensitive receivers (Mitigation Measures S1-NV1 – S1NV5).

4.5 Heritage

Protection of Busby's Bore State Heritage Item

A Methodology Statement has been prepared for demolition activities which may be undertaken in the vicinity of Busby's Bore in order to ensure that damage to the structure does not occur (**Attachment 8**). The statement has been prepared by Infrastructure NSW with input from Curio (heritage), Aver Consulting (construction management) and Arup (acoustics and vibration) in order to provide a holistic response to the protection of the State Heritage Item. The Methodology Statement sets out three principle actions to ensure that Busby's Bore is not impacted by demolition activities:

- Undertaking further investigations of the Bore to determine the condition of the existing known structure and, where possible, better identify the location of the tunnels which run through the site. These investigations will be subject to land owner's consent from Sydney Water (as the asset owner) and the preparation of a section 75(2) Heritage Exemption prepared by a qualified historical archaeologist and submitted to the NSW Heritage Division.
- Establishment of a physical exclusion zone around the existing known shafts, potential shaft locations, and the location of the Bore tunnels if identified during the investigative phase.
- Installation of vibration monitoring devices within the shafts of the Bore in a location agreed by the project archaeologist, structural engineer and acoustic consultant, with monitors calibrated to generate real-time alerts when a conservative vibration criteria of 3mm/s (on structural damage criterion for 'sensitive structures' in DIN 4150 – Part 31) is exceeded. Alerts will be sent to the site manager and trigger a cessation of works giving rise to the vibration exceedances, and require a review of the vibration criterion and demolition methodology to ensure that damage to the Bore does not occur.

The Methodology Statement will be reviewed and updated as necessary for submission with the future planning application for excavation and construction of the new stadium.

Heritage significance of existing Sydney Football Stadium

A number of public submissions received during the exhibition period stated that the existing Sydney Football Stadium should be retained for architectural or heritage reasons. The existing stadium is not subject to any statutory heritage listing. The submission by the NSW Heritage Council requested the preparation of a comparative analysis

of similar stadiums to determine the historical significance of the stadium. This comparative analysis has been prepared by Curio Projects together with Cox Architecture, the firm who were responsible for the design of the original stadium, and is provided within the Addendum Heritage Impact Statement provided at **Attachment 7**. The comparative analysis finds that the Sydney Football Stadium is currently the oldest Tier 1 stadium in Australia, which has not benefited from any significant investment since construction in 1988. Completed shortly before the Hillsborough Stadium disaster in the United Kingdom, the existing stadium is reflective of an older generation of stadia design that has not adapted to a 'fan first' approach to modern stadium developments within Australia and internationally. In Australia and internationally, numerous existing stadia have undergone redevelopment over recent years on the same site as previous stadia in order to adapt to modern sporting requirements.

Whilst the existing Sydney Football Stadium was one of a group of 'white steel structures' designed by Cox Architecture that were commissioned for the Australian Bicentennial, the common theme through the comparative analysis is that the Tier 1 Stadia around the world (including historical stadia and stadia built as recently as the 1990s-2000s) will continue to be modified, partially demolished or fully demolished and rebuilt numerous times over in order to adapt to stadium user needs. The comparative analysis demonstrates that worldwide, regardless of the individual architectural merits or age of an existing stadium building, the key significance of a Tier 1 Stadium site is to continue to provide the safest, most attractive venue possible in order to ensure ongoing use and demand. Cox Architecture have advised that they do not object to the redevelopment of the stadium, and are supportive of a new scheme that is of equal or greater merit than the original building (**Attachment 7**).

The Heritage Impact Statement provided at Appendix L of the EIS concluded that the primary significance of the Sydney Football Stadium relates to the subject site's continuity of use for more than 150 years for local, State, national and international sporting and recreational events, as opposed to any significance of the existing stadium structure that would warrant its retention and conservation. The Addendum Heritage Impact Statement provided at Attachment 7 maintains this view, and accordingly the stadium is not considered to warrant retention on heritage grounds. Notwithstanding this, archival recording of the existing stadium will be undertaken prior to demolition to create a record of the architectural, engineering and cultural aspects of the existing stadium.

Amendment to mitigation measures

The additional information and assessment outlined above necessitates the following changes to the mitigation measures, which are outlined in **Section 5.0**:

- Require that the Methodology Statement be complied with during the Stage 1 demolition phase (Mitigation Measures S1-CM1 and S1-HER4).
- Require that the Methodology Statement be reviewed and updated as required to address potential excavation and construction impacts for submission with future planning applications (Mitigation Measures CP-HER2 and CP-HER6).
- Include a new requirement that archival recording be undertaken as a record of the architecture, engineering and cultural aspects of the existing Sydney Football Stadium (Mitigation Measure S1-HER4).

4.6 Construction management

The RTS is accompanied by additional information regarding the proposed management of the site during demolition works:

- Detailed site layout plan for the demolition phase, showing the location of the site perimeter, site compound, location of material stockpiles and concrete crushing and other intrusive plant equipment (**Attachment 14**);
- Updated Erosion and Sediment Control Plan detailed measures to be employed specifically during the Stage 1 demolition phase to manage water quality and runoff (**Attachment 10**);
- Air Quality Impact Assessment to identify potential impacts on air quality, including dust, during the demolition phase (including concrete crushing) and mitigation measures to ensure that adverse impacts do not arise (**Attachment 11**); and
- Works Methodology Statement for the protection of Busby's Bore to establish practices to avoid and monitor for any potential impacts to the heritage item during the demolition phase (refer **Section 4.5** above and **Attachment 8**).

The following sections discuss the key aspects of this information in relation to the management of the site and potential environmental impacts.

Site Layout

The Site Layout Plan (**Attachment 14**) provides additional detail regarding the proposed management of the site during the Stage 1 demolition works. The plan shows the location of the site compound, materials storage and intrusive plant equipment (e.g. concrete crusher), which have been sited to as to minimise potential impacts to nearby sensitive receivers. The updated Erosion and Sediment Control has been based upon the Site Layout Plan and includes measures specific to the Stage 1 demolition works phase of the project.

Air Quality Assessment

An Air Quality Impact Assessment (AQIA) has been prepared for the Stage 1 demolition works by Wilkinson Murray (**Attachment 11**) in response to a request from the Department (refer to **Attachment 2**). The assessment is a qualitative assessment of the risk of potential dust impacts associated with the proposed demolition works, including potential on-site concrete crushing, in accordance with the methodology described in the *Guidance on the Assessment of Dust from Demolition and Construction* (IAQM 2014). The AQIA considers the types of works proposed on the site, proximity to sensitive receptors, existing local ambient air quality in order to determine the risk of dust impacts. The AQIA concludes that, subject to the implementation of mitigation measures, the residual effects of dust from the project are not expected to be significant and to have a low risk of generating unacceptable air quality impacts.

The AQIA notes that the Construction (Demolition) Management Plan prepared by Aver Consulting (Appendix E of EIS) has already provided mitigation measures that are consistent with the IAQM requirements. The AQIA recommends that, prior to the commencement of works, the full menu of mitigation measures outlined in the IAQM requirements be reviewed and, where practicable, be included in the DEMP. The AQIA also notes that the proposed installation of an enclosure around the concrete crusher will further minimise the likelihood of dust impacts associated with the works. Finally, the AQIA recommends the implementation of unattended dust monitoring to provide further ability to measure and monitor potential impacts and assist with inform the management procedures to be implemented.

Detailed Demolition Environmental Management Plan

We note that a detailed Demolition Environmental Management Plan (DEMP) would be prepared by the appointed contractor prior to the commencement of works based upon the Construction (Demolition) Management Plan prepared by Aver Consulting and provided at Appendix E of the EIS. The DEMP would address, but not be limited to, the following matters:

- Site notice(s);
- Hours of work;
- 24-hour contact details of the site manager;
- Protection of Busby's Bore in accordance with the Works Methodology prepared by Infrastructure NSW and provided at **Attachment 8**;
- Construction traffic and pedestrian management plan, generally in accordance with the Transport Impact Assessment prepared by Arup and provided at Appendix J of the EIS;
- Demolition noise and vibration management plan, generally in accordance with the Noise and Vibration Impact Assessment prepared by Arup and provided at Appendix K of the EIS, and the Addendum Noise and Vibration Impact Statement provided at **Attachment 6**;
- Management of dust and odour to protect the amenity of the neighbourhood, generally in accordance with the Air Quality Impact Assessment prepared by Wilkinson Murray and provided at **Attachment 11**;
- Erosion and sediment control, generally in accordance with the plans by Arup provided at **Attachment 10**;
- Measures to ensure that sediment and other materials are not tracked onto the roadway by vehicles leaving the site;
- Stormwater control and discharge;

- Site layout and management, generally in accordance with the Site Layout Plan prepared by Cox Architecture provided at **Attachment 14**;
- Waste storage and recycling control;
- Construction material storage;
- Litter control;
- Protocols for the management of incidents and emergencies within the site, including environmental incidents, including Trigger, Action and Response criteria and processes for each potential impact;
- Unexpected finds protocol;
- Site security, monitoring and surveillance; and
- External lighting.

A copy of the DEMP would be provided to DP&E and the City of Sydney Council prior to the commencement of works, and would be implemented for the duration of the Stage 1 works. A separate plan for the construction phase would be prepared in relation to the Stage 2 Development Application.

Environmental Performance Objectives

The Applicant has prepared environmental management objectives which are to inform the future DEMP in response to a request by the NSW Department of Planning and Environment (Attachment 2, DPE26). **Table 4** sets out the objectives for environmental performance during Stage 1 Demolition Works, a summary of the Applicant's response to these objectives and the mitigation measures identified to ensure that these objectives are achieved (where appropriate).

Table 4 Environmental Performance Objectives

Issue	Objectives	Response/ Mitigation Measure
Construction traffic	<ul style="list-style-type: none"> • Minimise disruptions to pedestrians, cyclists, buses and motorists. • Minimise heavy vehicle movements during peak traffic periods. • Reduce impacts of site workers on local parking. 	<ul style="list-style-type: none"> • Construction Traffic Management Plan to be prepared prior to commencement of works to manage interface issues to Moore Park Road and Driver Avenue (S1-TA1). • Provide on-site parking for demolition workers (S1-TA1) and ensure that trucks do not idle or queue on public roads (S1-NV1).
Noise and Vibration	<ul style="list-style-type: none"> • Minimise unreasonable noise and vibration impacts on residents and businesses. • Undertake active community consultation. • Maintain positive, cooperative relationships with schools, childcare centres, local residents and building owners. 	<ul style="list-style-type: none"> • Undertake preliminary assessment of potential noise and vibration impacts (Appendix K of EIS and Attachment 6). • Ensure works are only undertaken in defined hours (S1-NV1). • Prepare detailed Construction Noise and Vibration Management Plan as part of DEMP (S1-NV2). • Implement mitigation measures to minimise impacts through demolition phase (S1-NV1-S1NV5).
Air quality	<ul style="list-style-type: none"> • Minimise gaseous and particulate pollutant emissions from construction activities as far as feasible and reasonable. • Identify and control potential dust and air pollutant sources. 	<ul style="list-style-type: none"> • Undertake Air Quality Impact Assessment (Attachment 11) to identify risk of air quality impacts and mitigation measures. • Implement mitigation measures to control dust impacts through demolition phase (S1-CM1, S1-CM8, and S1-CM9).
Waste	<ul style="list-style-type: none"> • Minimise waste throughout the project life-cycle. • Reduce material use throughout the project life-cycle. • Identify materials with lower environmental footprint 	<ul style="list-style-type: none"> • Identify opportunities for waste diversion and on-site re-use during the demolition and construction phases (Appendix N of EIS). • Implement targets for waste diversion (S1-CM2).

Issue	Objectives	Response/ Mitigation Measure
		<ul style="list-style-type: none"> Ensure all waste is transported to appropriately licensed facilities (S1-CM3).
Water quality and disposal	<ul style="list-style-type: none"> Prevent pollution of surface water through appropriate erosion and sediment control. Maintain existing water quality of surrounding surface water bodies. 	<ul style="list-style-type: none"> Implement erosion and sediment control plan prepared in accordance with Landcom 'Blue Book' (S1-SF1).
Heritage	<ul style="list-style-type: none"> Avoid structural damage to buildings or heritage items as a result of construction vibration. Minimise impacts on items or places of heritage value. Avoid accidental impacts on heritage items. Maximise worker's awareness of indigenous and non-indigenous heritage. 	<ul style="list-style-type: none"> Identify known heritage items including built and potential archaeological heritage (Appendices L and M of EIS). Establish construction and monitoring methodologies to detect and avoid impacts on known heritage items (S1-CM1 and S1-HER3). No ground disturbance as part of scope of works.
Groundwater	<ul style="list-style-type: none"> Reduce the potential for drawdown of surrounding groundwater resources. Prevent the pollution of groundwater through appropriate controls. Reduce the potential impacts of groundwater dependant ecosystems. 	<ul style="list-style-type: none"> No ground disturbance as part of scope of works. Implement protocols for avoidance and management of potential spills of contaminants (S1-CM7).
Contamination	<ul style="list-style-type: none"> Avoid impacts of soil contamination on human health and the environment. 	<ul style="list-style-type: none"> No soil disturbance is proposed as part of the Stage 1 Demolition Works. Ensure existing petroleum storage tanks are not damaged by proposed works (S1-CM1).
Flora and fauna	<ul style="list-style-type: none"> Minimise impacts on flora and fauna Retain vegetation with aesthetic or ecological significance 	<ul style="list-style-type: none"> Undertake assessment of potential impacts on biodiversity (Appendix Q of EIS). Identify trees to be retained during demolition works (S1-BD1).

Amendment to mitigation measures

The additional information and assessment outlined above necessitates the following changes to the mitigation measures, which are outlined in **Section 5.0**:

- Amend the mitigation measures for Construction Management during the demolition phase to make reference to the additional information provided, and provide greater specificity regarding the matters to be addressed in the DEMP (Mitigation Measures S1-CM1).
- Amend the mitigation measures for Construction Management and Noise and Vibration during the demolition phase to accommodate real time measurable monitoring of potential noise and dust impacts at key surrounding sensitive receptors (Mitigation Measures S1-CM9 and NV5).
- Update the reference to the updated Erosion and Sediment Control Plan (Mitigation Measure S1-SF1).
- Include reference to the mitigation measures (including provision of an enclosure for the concrete crusher) recommended in the Air Quality Impact Assessment (Mitigation Measure S1-CM1 and S1-CM8).
- Include reference to the amended mitigation measures (including provision of an enclosure for the concrete crusher) identified within the Addendum Noise and Vibration Impact Assessment prepared by Arup (S1-CM1 and S1-NV4).

5.0 Final Mitigation Measures

The final list of measures required to mitigate the impacts associated with the Concept Proposal are detailed in **Table 5** whilst those measures required to mitigate the impacts associated with the Stage 1 Demolition works are detailed in **Table 6**. These mitigation measures are based upon those previously identified in Section 8.0 of the EIS, with revised and additional mitigation measures included to reflect additional information, clarification or response to submissions made during public exhibition. These measures represent the final and full series of mitigation measures proposed for the project pursuant to clause 7(d)(iv) of Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*.

5.1 Mitigation Measures – Concept Proposal

Table 5 Mitigation Measures – Concept Proposal

	Mitigation Measures
CP-BF	Built Form and Urban Design
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.
CP-BF2	Detailed design of the stadium should occur in accordance with the processes outlined in the Design Excellence Strategy (2018) prepared by Infrastructure NSW and endorsed by the NSW Government Architect.
CP-BF3	The detailed design of the new stadium should have regard to the recommendations of the Visual Impact Assessment prepared by Ethos Urban (June 2018).
CP-BF4	A Visual and View Impact Assessment is to be prepared to reflect the detailed design and submitted with the Stage 2 Development Application.
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.
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.
CP-BF7	Public domain design is to be coordinated with the design for the Moore Park Road separated cycleway.
CP-TA	Transport and Accessibility
CP-TA1	The Traffic and Transport Assessment (Arup 2018) is to be revised and resubmitted with the Stage 2 Development Application, outlining any changes to the traffic and transport management approach. The revised report is to detail any further information regarding integrated ticketing as a result of the Applicant's commitment to develop a plan with Transport for NSW. Details of the final parking provision within the reinstated MP1 car park are also to be included.
CP-TA2	The Stage 2 Development Application should include details of a preliminary signage and wayfinding strategy that has been prepared in consultation with the City of Sydney, Transport for NSW and the Centennial and Moore Park Trust.
CP-TA3	Details of operational vehicular servicing and loading activities are to be included in the Stage 2 Development Application.
CP-TA4	A Transport Access Guide is to be prepared prior to the commencement of operations for the new stadium to provide enhance information to visitors and patrons of the new stadium in relation to the range of travel modes and facilities provided at the stadium, with an emphasis on encouraging non-car travel modes.
CP-TA5	The Applicant is to consult with the Sydney Coordination Office during the preparation of the Construction Management Plan and Transport Assessment for the Stage 2 Development Application so as to manage and mitigate potential cumulative impacts associated with other development and infrastructure projects.
CP-TA6	The Applicant is to work with the Centennial Parklands and Moore Park Trust to facilitate improved pedestrian connectivity between the new stadium, the Tibby Cotter Bridge and the Sydney Light Rail stop prior to the completion of the new stadium.

	Mitigation Measures
CP-HER	Heritage
CP-HER1	A supplementary Heritage Impact Statement is to be submitted with the Stage 2 Development Application which assesses the detailed stadium design in relation to the potential for unforeseen impacts on those heritage items and heritage conservation areas assessed in the Heritage Impact Statement (Curio 2018) submitted with the current Development Application.
CP-HER2	Further investigative works should be undertaken to better determine the location of Busby's Bore in accordance with the processes outlined in the Methodology Statement - Working Near Busby's Bore (August 2018). An archaeological research design and excavation methodology should be prepared by a suitably qualified Excavation Director for review by the Heritage Council of NSW or its delegate for any works which will impact archaeological information or Busby's Bore.
CP-HER3	The design of the stadium, including any proposed excavation for basement and/or services infrastructure, is to avoid any physical impacts on Busby's Bore.
CP-HER4	A Heritage Interpretation Strategy is to be prepared by a qualified person(s) for submission with the Stage 2 Development Application.
CP-HER5	An Aboriginal Cultural Heritage Assessment Report is to be prepared in consultation with local Aboriginal stakeholders and be submitted with the Stage 2 Development Application.
CP-HER6	A Methodology Statement for the protection of Busby's Bore is to be submitted with the relevant future Development Application for excavation and construction of the new stadium.
CP-NV	Noise and Vibration
CP-NV1	A Noise and Vibration Assessment is to be prepared and submitted with the Stage 2 Development Application to assess the potential construction and operation noise and vibration impacts of the new stadium, having regard to the noise assessment framework and criteria outlined in the Noise and Vibration Assessment (Arup 2018) that accompanies this application.
CP-NV2	The Stage 2 Development Application is to identify a framework and methodology for the ongoing monitoring of noise from the stadium.
CP-NV3	The number of concerts at the stadium is not to exceed six (6) per calendar year.
CP-BD	Biodiversity
CP-BD1	An updated Arboricultural Impact Assessment is to be submitted with the Stage 2 Development Application confirming that the detailed design of the stadium, public realm and new landscaping is compatible with the retention of those trees identified in the Arboricultural Impact Assessment (TreeIQ 2018) that accompanies this application as being for retention.
CP-BD2	The Public Domain and Landscape Plan is to identify new tree planting and consider the implementation of the recommendations of the Biodiversity Development Assessment Report (Jacobs 2018) and Final Urban Design Guidelines (SJB 2018).
CP-BD3	Tree replanting is to be detailed in the Stage 2 Development Application at a minimum replanting ratio of 1.5 trees for every one tree removed with a variety of pot sizes.
CP-SF	Stormwater and Flooding
CP-SF1	A detailed Stormwater and Flooding Assessment is to be prepared and submitted with the Stage 2 Development Application taking into account the detailed design to the stadium and public domain, and outlining measures for rainwater capture and reuse within the site, piped and overland flow, on-site stormwater detention, water sensitive urban design, and include modelling of water quality and quantity for discharges from the site. Details of impacts upon local stormwater infrastructure and local flood conditions is to be included in the assessment.
CP-SF2	The Stage 2 Development Application is to contain details of water quality assessment and modelling undertaken to demonstrate that pollutant reduction targets are achieved.
CP-SF3	Targets for rainwater capture and re-use identified in the ESD Strategy prepared by Aurecon (May 2018) are to be adopted for the detailed design and identified in the Stage 2 Development Application.
CP-CG	Contamination and Geotechnical
CP-CG1	A Detailed Site Contamination Investigation (Phase 2) is to be prepared submitted with the Stage 2 Development Application, detailing identified and potential contamination. If recommended by the Phase 2 assessment, a Remedial Action Plan (RAP) must also be prepared and submitted with the Stage 2 Development Application.

	Mitigation Measures
CP-CG2	A Geotechnical Statement is to be prepared and submitted with the Stage 2 Development Application assessing the potential impacts of piling, excavation and construction on existing buildings and structures within the immediate vicinity of the site.
CP-UI	Utilities and Infrastructure
CP-UI1	An Infrastructure Servicing Strategy is to be prepared and submitted with the Stage 2 Development Application. Preparation of the strategy is to include consultation with all relevant utility authorities, including but not limited to those in respect of potable water, stormwater, sewage, electricity, gas, telecommunications
CP-WM	Waste Management
CP-WM1	The Construction Management Plan accompanying the Stage 2 Development Application should outline measures to avoid, minimise, reuse and recycle waste generated during the construction of the new stadium.
CP-WM2	An Operational Waste Management Plan is to be prepared and be submitted with the Stage 2 Development Application.
CP-WI	Wind Impacts
CP-WI1	A Pedestrian Wind Environment Study, including wind tunnel testing, is to be prepared based upon detailed stadium design and submitted with Stage 2 Development Application.
CP-WI2	The Noise and Vibration Assessment submitted with the Stage 2 Development Application is to include an assessment of the potential for the detailed stadium design to generate wind noise and any consequent impacts upon nearby sensitive noise receivers.
CP-CM	Construction Management
CP-CM1	A Construction Management Plan is to be prepared and submitted with the Stage 2 Development Application outlining the practices and strategies to be implemented during the construction phase in order to avoid, reduce and mitigate the environmental impacts of construction activities.
CP-SE	Communications, Community and Stakeholder Engagement
CP-SE1	Further community consultation is to be undertaken in relation to the detailed design, construction and operation of the new stadium prior to the lodgement of the Stage 2 Development Application and outlined in a Consultation Outcomes Report.
CP-SE2	The Stage 2 Development Application is to outline measures to provide for ongoing community consultation and engagement following the commencement of operations for the new stadium.
CP-SE3	The Applicant will liaise with the Centennial and Moore Park Trust, City of Sydney Council and Transport for NSW to promote awareness of and integration of the new Sydney Football Stadium with surrounding areas and key projects.
CP-SE4	The Applicant is to establish a working group with Centennial Park and Moore Park Trust to advance the design and delivery of: <ul style="list-style-type: none"> • connections to the light rail • connections to Tibby Cotter Bridge • security infrastructure for Driver Avenue • public realm treatment of the northern portion of Driver Avenue adjacent to the redeveloped SFS entry • cycle infrastructure within the precinct • security solutions
CP-SE5	The Applicant will participate in the Moore Park Working Group to ensure that the detailed design subject to the Stage 2 Development Application gives consideration to integration with the actions of other Working Group members.
CP-SEC	Safety and Security
CP-SEC1	A Crime Prevention Through Environmental Assessment Report is to be prepared by a qualified crime risk assessor based upon the detailed stadium, public domain and landscaping design and is to be submitted with the Stage 2 Development Application.
CP-SEC2	Security of the stadium during event and non-event periods is to be considered during the detailed design of the stadium in accordance with the Security Principles Report prepared by Intelligent Risks (May 2018).
CP-SEC3	The Applicant is to liaise with Transport for NSW and NSW Police and Counter Terrorism and an outline of security measures is to be included in the Stage 2 Development Application.

	Mitigation Measures
CP-GW	Groundwater
CP-GW1	An updated Groundwater Assessment Report is to be prepared and submitted with the Stage 2 Development Application. A Groundwater Management Plan is to be prepared prior to the commencement of construction works pursuant to any future Stage 2 Development Application.
CP-ESD	ESD
CP-ESD1	Detailed design of the new stadium is to target a minimum of a LEED Gold rating, or an equivalent rating under another recognised standard such as Green Star.
CP-ESD2	Prepare a Green Travel Plan for the stadium, highlighting public transport and active transport options for staff and visitors to the new stadium.

5.2 Mitigation Measures – Stage 1 Demolition

Table 6 Mitigation Measures – Stage 1 Demolition

	Mitigation Measures
S1-CM	Construction Management
S1-CM1	<p>A detailed Demolition and Environmental Management Plan (DEMP) is to be prepared by the appointed contractor prior to the commencement of works in accordance with the principles set out in, and addressing all issues covered by, the Construction Management Plan prepared by Aver Consulting (June 2018) and addressing the Environmental Performance Objectives contained in Section 4.6 of the Response to Submissions Report by Ethos Urban, and the following:</p> <ul style="list-style-type: none"> • Site notice(s); • Hours of work; • 24 hour contact details of the site manager; • Protection of Busby's Bore in accordance with the Methodology Statement - Working Near Busby's Bore (August 2018); • Construction traffic and pedestrian management plan, generally in accordance with the Transport Impact Assessment prepared by Arup (June 2018); • Demolition noise and vibration management plan, generally in accordance with the Noise and Vibration Impact Assessment and Addendum Noise and Vibration Impact Assessment prepared by Arup (June 2018, September 2018); • Management of dust and odour to protect the amenity of the neighbourhood, generally in accordance with the Air Quality Impact Assessment prepared by Wilkinson Murray (September 2018); • Erosion and sediment control, generally in accordance with the plans by Arup (August 2018); • Measures to ensure that sediment and other materials are not tracked onto the roadway by vehicles leaving the site; • Stormwater control and discharge; • Site layout and management, generally in accordance with the Site Layout Plan prepared by Cox Architecture (August 2018); • Waste storage and recycling control; • Construction material storage; • Litter control; • Protocols for the management of incidents and emergencies within the site, including environmental incidents, including Trigger, Action and Response criteria and processes for each potential impact; • Unexpected finds protocol; • Protection of existing underground petroleum storage tanks; • Management of events within and around the precinct (including but not limited to Mardi Gras and the Sydney Running Festival) • Site security, monitoring and surveillance; • Access to fire booster facilities off Moore Park Road and Paddington Lane or, should access not be achievable, consultation with Fire and Rescue NSW at least two (2) days prior to access being restricted; and • External lighting.

	Mitigation Measures
S1-CM2	<p>The Demolition and Environmental Management Plan is to include detailed measures to ensure that the 90% of demolition waste by weight will be diverted from landfill. The contractor is to ensure:</p> <ul style="list-style-type: none"> materials for re-use or recycling are stockpiled to avoid cross contamination by general and other waste such as hazardous materials and contaminated soil, the movement materials from stockpiles of waste materials for disposal and of materials for reuse or recycling is recorded, waste materials stockpiled for disposal and materials stockpiled for re-use or recycling are managed to ensure waste streams reach their intended final destinations, being premises legally able to accept those wastes and materials for re-use or recycling, only concrete proposed to be reused on site is to be crushed on site, arrangements for the disposal of waste from the premises is organised with the waste facility legally able to accept that waste rather than through a third party.
S1-CM3	<p>All waste vehicles accessing and egressing the site to be monitored as follows:</p> <ul style="list-style-type: none"> The Contractor will maintain a waste and transport log book which will record the licence plate and waste types of all vehicles accessing and egressing the site. The Contractor will be required to provide waste disposal receipts matching the time, date, licence plate and the type of waste being disposed. All waste dockets which confirm the receipt and weight of waste for disposal and/or recycling at a licenced facility must be retained by the Contractor and be provided to the Principal.
S1-CM4	<p>Waste monitoring</p> <ul style="list-style-type: none"> A database inventory would be used to record and report all waste streams, volumes and management measures for all waste streams arising through the demolition works. This database would be used to inform internal and external stakeholders on the type, volume and rate of waste being generated, re-used and recycled. A licenced waste management contractor would be used to remove waste from the Site for reuse, recycling or disposal. The Contractor will be experienced in removing and transporting waste from the Site and will dispose of the waste at an appropriate licenced facility.
S1-CM5	<p>Demolition and Environmental Management Plan is to address the requirements of the NSW Police submission, being:</p> <ul style="list-style-type: none"> The Notification of any road closures during demolition and construction work. Adequate lighting of the work site at night. The work site to be secured at night or during periods of inactivity. Security patrols of the work site by contracted licensed security guards. All engineers, workers, visitors, security guards, etc be vetted and to follow instructions and warnings as stipulated in a formal induction process. Police be offered a familiarisation tour of the work site prior to the commencement of works. Notification of any suspicious activity or objects in or around the work site during demolition and construction work.
S1-CM6	A list of key contacts on the work site provided to NSW Police prior to the commencement of works.
S1-CM7	<p>The following measures are to be included in the DEMP in order to avoid potential groundwater impacts:</p> <ul style="list-style-type: none"> All fuels and chemicals are to be stored in a secure, impervious bunded area at least 50 m from drainage receptors in the construction compound and in accordance with relevant Material Safety Data Sheets A Spill Response Procedure should be established for the project
S1-CM8	An enclosure shall be installed around the concrete crusher.
S1-CM9	Establishment of unattended dust monitors at key surrounding sensitive receivers. The data will be used to assess works and potential dust impacts against the project air quality goals (as established under the National Environment Protection Measures for Ambient Air Quality (NEPC, 1998)), and inform the contractor in adopting further management measures to maintain ambient Particulate Matter concentrations below the project criteria.
S1-NV	Noise and Vibration
S1-NV1	<p>All work on site will only occur between the following hours:</p> <ul style="list-style-type: none"> 7am and 6pm Monday to Friday; 8am and 1pm Saturday; No works on Sundays or public holidays; or unless otherwise approved in writing by the NSW Department of Planning and Environment due to extenuating circumstances (e.g. deliveries of over-sized plant and equipment).

	Mitigation Measures
S1-NV2	<p>The Demolition and Environmental Management Plan is to include a detailed Construction Noise and Vibration Management Plan to ensure that potential noise and vibration activities are managed in accordance with the Noise and Vibration Impact Assessment (Arup 2018). The DEMP is to implement all mitigation measures and comply with all recommendations of the Noise and Vibration Assessment Report (Arup 2018) that relate to the Stage 1 Demolition works, including:</p> <ul style="list-style-type: none"> • A noise management and vibration plan shall be prepared. This will specify the actual plant to be used and will include updated estimates of the likely levels of noise and the scheduling of activities. • A member of the site staff will act as the Responsible Person with respect to noise and vibration. The Responsible Person is to: <ul style="list-style-type: none"> – Regularly train workers and contractors (such as at toolbox talks) to use equipment in ways to minimise noise; – Ensuring good work practices are adopted to avoid issues such as noise from dropped items, noise from communication radios is kept as low as is practicable; – Ensure the use of radios or stereos outdoors is avoided; and – Ensure shouting, talking loudly and slamming vehicle doors is avoided. • Some construction activities proposed for use as part of the early works are identified as being potentially 'annoying' or intrusive to residents in Section 4.5 of the ICNG [2]. These activities include the use of chainsaws, mulchers, excavators and the concrete crusher, which are also identified as the noisiest equipment in Table 15 of the Noise and Vibration Impact Assessment (Arup, June 2018). Intrusive stationary equipment, such as the mulcher and concrete crusher, should be located to the south of the site as far from receivers as possible. Where possible stationary equipment should be located behind structures such as demountable buildings or stockpiles to maximise shielding to receivers. Intrusive activities should be: <ul style="list-style-type: none"> – undertaken after 8am. – only be undertaken over continuous periods not exceeding 3 hours with at least a 1-hour respite period in between. – not undertaken during designated 'rest' times for Kira Child Care Centre at 230 Moore Park Road, Paddington. • All vehicles, plant and equipment should be turned off when not in use. • The Responsible Person is to ensure that the condition of the powered equipment used on site is checked daily to ensure plant is properly maintained and that noise is kept as low as practicable. • The Responsible Person should keep the local community advised on expected activities and coordinates scheduling and locations of noisy works around any critical user events where practicable. This shall include face to face meetings with nearby receivers if requested and a letter box drop, and shall include close liaison with neighbours during construction, including Fox Studios, NRL and Rugby Australia. • Appropriate records are to be maintained of complaints to include timing, reported issues, actions taken and measures to be included for on-going works. The complaints log will need to be filed with the Responsible Person. • Consultation with stakeholders of surrounding receiver buildings, including the UTS, Rugby Australia, the NRL and Fox Studios, should be sought when developing a construction schedule, with particular focus on noise sensitive periods such as exam periods for UTS • Consider using electric / hydraulic equipment where possible, such as hydraulic pulverisers for demolition • Use 'quacker' style reversing alarms in lieu of tonal beeping alarms • Locate loud, stationary plant as far from noise sensitive receivers as possible. The ideal location is identified as the western most corner of the site compound along Driver Avenue, as shown in the Site Layout Plan by Cox Architecture (September 2018) • Erect hoarding around the stationary plant where feasible. Hoarding shall be erected such that the line of sight between the equipment and the nearest sensitive receivers is broken, cognisant of access requirements. •
S1-NV3	The arrival of deliveries to site and the idling of trucks on public roads shall not be permitted outside of standard hours of construction.
S1-NV4	An enclosure shall be installed around the concrete crusher. The enclosure shall be made of material with a density above 3 kg/m ³ and shall be lined internally with 25 to 50 mm absorbent material in accordance with AS 2436-2010.
S1-NV5	Establishment of unattended construction noise monitoring, with four (4) noise loggers set up surrounding the site. The noise trigger level is to be set at noise levels exceeding 75 dBA, indicating a 'highly affected' level in accordance with the Interim Construction Noise Guideline (DECC 2009). The data from the noise logger will be used to inform the Contractor on the noise levels being generated so that particularly noisy activities can be identified and practicable options investigated to reduce noise levels further, as well as indicate when consultation with surrounding occupants and residences may be required.
S1-TA	Transport and Accessibility

	Mitigation Measures
S1-TA1	A detailed Construction (Demolition) Traffic, Transport and Pedestrian Management Plan is to be prepared prior to the commencement of works which includes details of routes for heavy vehicle demolition traffic to avoid the use of local roads, instructions to be provided to staff and visitors in order to minimise on-street parking in local residential areas, pedestrian egress and protection in association with the ongoing use of the Sydney Cricket Ground, and the protection of pedestrians and cyclists along Moore Park Road and Driver Avenue.
S1-TA2	<p>A detailed Construction (Demolition) Traffic, Transport and Pedestrian Management is to include the following commitments:</p> <ul style="list-style-type: none"> • All trucks will be loaded to their prescribed weight limits, within the site boundary and be covered with a tarp (rubbish loads only) prior to exiting the Site. • All trucks are to be held within the construction site for the demolition works, with no queueing on public roads to occur. • Construction workers / tradespersons will be encouraged to utilise public transport and/or car pool with other construction workers. • All demolition vehicles are to be contained wholly within the site and vehicles must enter the site before stopping. A construction zone will not be permitted on surrounding public roads. • All materials would be delivered and spoil removed during standard construction hours • Establishment and enforcement of appropriate on-site vehicle speed limits (20km/h), which would be reviewed depending on weather conditions or safety requirements; • Neighbouring properties would be notified of construction Works and timing; • No vehicles will queue on public roadways including Moore Park Road • Deliveries would be planned to ensure a consistent and minimal number of trucks arriving at site at any one time. • Vehicles would arrive to the site in a staged manner during the standard construction hours that will prevent the need for queueing outside the site
S1-TA3	The Applicant is to ensure regular consultation between the demolition contractor and the Sydney Coordination Office so as to manage and mitigate potential cumulative impacts associated with other development and infrastructure projects.
S1-TA4	Parking is to be provided within the site for all staff and contractors for the duration of the Stage 1 demolition phase.
S1-HER	Heritage
S1-HER1	A qualified heritage specialist is to be appointed to provide advice regarding any special protection measures which are to be implemented during the demolition phase to avoid impacts to Busby's Bore. If necessary, an appropriately qualified heritage advisor should supervise sensitive demolition activities in close proximity to the known locations of the Busby Bore shafts within the site.
S1-HER2	The Demolition and Environmental Management Plan is to include details of site protection fencing/hoarding and any exclusions zones established in consultation with a qualified heritage consultant that are required to ensure that demolition equipment, plant and activities do not give rise to any physical impacts on the SCG Members and Ladies Stands.
S1-HER3	The Methodology Statement - Working Near Busby's Bore (August 2018) is to be adhered to for the duration of demolition phase. The contractor is to maintain a record of any vibration criteria exceedances at Busby's Bore for inspection upon request by the NSW Department of Planning and Environment, Sydney Water or the NSW Heritage Council.
S1-HER	Archival recording of the existing stadium is to be undertaken prior to the commencement of demolition activities to provide a record of the architectural, engineering and cultural aspects of the existing Sydney Football Stadium.
S1-BD	Biodiversity
S1-BD1	Tree retention and protection is to occur in accordance with the Arboricultural Impact Assessment prepared by TreelQ (May 2018).
S1-SF	Stormwater and Flooding
S1-SF1	The measures outlined in the Erosion and Sediment Control Plan (Arup, August 2018) are to be implemented during the Stage 1 Demolition phase.
S1-SE	Communications, Community and Stakeholder Engagement

	Mitigation Measures
S1-SE1	The Applicant is to provide regular updates via the project website and other means in order to inform the local community of key events during the demolition phase, including
S1-SE2	A dedicated phone number and email address is to be established and communicated to local residents and businesses as a point of information and contact throughout the demolition process. These contact details are to be displayed clearly at the site and made available via other communications channels including the project website.
CP-CG	Contamination and Geotechnical
S1-CG1	A Hazardous Materials Survey is to be undertaken for the existing stadium and ancillary structures prior to the commencement of demolition works. Any hazardous material identified are to be removed in accordance with the relevant legislation by an appropriately qualified contractor, and disposed of at an appropriate licensed waste facility.
S1-SEC	Safety and Security
S1-SEC1	The contractor is to make arrangements for regular security patrols and installation of site security monitoring equipment from the commencement of site establishment works in order to discourage crime and unauthorised site access.

6.0 Conclusion

The Applicant has reviewed each of the submissions made by members of the general public, community organisations, State Government agencies and the City of Sydney Council. In response to issues raised in these submissions, as well as matters identified by the NSW Department of Planning and Environment, the Applicant has undertaken further environmental assessment and provided clarification regarding the scope of the proposed development that is the subject of this planning application.

The redevelopment of the Sydney Football Stadium will deliver a significant piece of cultural and economic infrastructure to support Sydney's role as a world city and destination for national and international tourism in accordance with the NSW Stadia Strategy. The proposal will deliver a modern, globally competitive stadium that achieves the requirements for a Tier 1 stadium to meet the future sporting event needs of Sydney and NSW.

The State Significant Development Application for the Concept Proposal and Stage 1 Demolition Works, as supplemented by this Response to Submissions, addresses each of the matters identified by the Secretary's Environmental Assessment Requirements and those matters identified in the *Environmental Planning and Assessment Regulation 2000*. The environmental assessment concludes that, subject to the implementation of final mitigation measures outlined in Section 5.0 of this report and the preparation and planning assessment of the future Stage 2 Development Application, the proposed development would not result in any unacceptable impacts. Accordingly, we request that the NSW Department of Planning and Environment complete its assessment of the project and that the project be approved by the Minister for Planning.